James Cook University of North Queensland

Paul R. Amato

Prosocial Behaviour in Urban and Rural Environments: Field Studies Based Upon a Taxonomic Organisation of Helping Episodes

Doctor of Philosophy

Temporary Binding

Prosocial Behaviour in Urban and Rural Environments: Field Studies Based Upon a Taxonomic Organisation of Helping Episodes

Prosocial Behaviour in Urban and Rural Environments: Field Studies Based Upon a Taxonomic Organisation of Helping Episodes

Thesis submitted by

Paul R. AMATO BA(Hons) (Calif) MA (San Francisco)

in June 1982

for the degree of Doctor of Philosophy in the Department of Behavioural Sciences at James Cook University of North Queensland

I, the undersigned, the author of this thesis, understand that James Cook University of North Queensland will make it available for use within the University Library and, by microfilm or other photographic means, allow access to users in other approved libraries. All users consulting this thesis will have to sign the following statement:

> "In consulting this thesis I agree not to copy or closely paraphrase it in whole or in part without the written consent of the author; and to make proper written acknowledgement for any assistance which I have obtained from it."

Beyond this, I do not wish to place any restriction on access to this thesis.

28 June, 1982.

DECLARATION

I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

P R AMATO
28 June, 1982

Acknowledgements

I would like to thank my supervisor, Dr. Philip Pearce, for the care, effort, and time which he invested in this thesis. His comments, insights, and criticisms were not only useful in contributing to the completion of this particular project, but contributed substantially to my own intellectual development as well. Second, I would like to thank Professor George Kearney who was the Head of the Department of Behavioural Sciences during the period of my PhD candidature. In this capacity, he not only provided substantial encouragement, but was instrumental in helping to take many departmental responsibilities off of my shoulders during the critical writing stage of the thesis work. For this delicate piece of juggling I will always be grateful. Third, I would like to thank various members of the Department of Behavioural Sciences who provided both ideas and support during the last four years. Also, I am grateful to James Cook University of North Queensland for providing a special research grant in 1979 which helped to cover many of the expenses incurred in doing field work. I am also very grateful to Mr. Ian Ritchie who participated as a research assistant during the important data collecting stage of the field work. In this capacity he survived a long and gruelling research trip through some very strange (and often unhelpful) parts of Australia. Finally, a very special thank you goes to Ms. Sonia Partridge who contributed substantially to this thesis in a number of critical ways, including collecting, coding, and correcting much of the data, as well as proofreading the final manuscript.

This thesis is dedicated to Sonia Partridge.

Table of Contents

List of Tables

List of Figures

Abstract

This series of studies dealt with differences in rates of helping behaviour between people in urban and rural environments. A review of previous empirical work on this topic revealed the literature to be contradictory, with nine studies finding people in urban environments to be less helpful, four studies finding people in urban environments to be more helpful, and five studies finding no difference. A number of methodological problems in previous research are noted, including the fact that previous studies selected both individual subjects and communities for study on a nonrandom basis and gave little or no attention to the problem of the sampling of helping behaviours. In addition, previous studies generally used a limited conceptualisation of urbanism, often failed to study communities at intermediate levels of urbanism, and usually did not control for other sources of intercommunity variation. A review of relevant theoretical approaches (information overload theory, deindividuation theory, urban stress-pathology theories, social inhibition theory, the setting-mood perspective, the socio-structural perspective, and the in-group/out-group perspective) highlighted the fact that the theories generally have left unspecificed the ranges of helping forms for which they are meant to have relevance. Attention to this problem, along with consideration of the problem of the sampling of behaviours for study, suggested the importance of developing a taxonomy of helping. Accordingly, the first study dealt with the development of a cognitively-based taxonomy of helping episodes. A sample of 62 helping episodes derived from the social psychological literature on helping was presented to subjects who gave similarity ratings between pairs of episodes. Application of

multidimensional scaling procedures resulted in a stable three dimensional structure of helping. Regression procedures were used to interpret the dimensions, with the best fitting labels being spontaneous versus planned, serious versus nonserious, and giving versus doing.

The helping taxonomy was then used to systematically select a sample of six helping behaviours for study, one from the extreme ends of each of the three dimensions. The helping behaviours chosen were: complying with a request for a favorite colour from a student working on a class project, correcting inaccurate directions to a destination, helping a person who collapses on the sidewalk with a bandaged and bleeding leg, giving a donation to the Multiple Sclerosis Society, picking up dropped envelopes, and answering questions on the 1976 Australian census questionnaire. A random sample of 55 communities in Queensland and northern New South Wales, stratified on the basis of population size and geographical isolation, was also selected. Research teams collected behavioural data for each of the first five measures mentioned above in all 55 communities. Data on response rates to census questions were obtained from the Australian Bureau of Statistics.

With four of the six measures (colour request, inaccurate directions, hurt leg, and Multiple Sclerosis donation), population size was found to be negatively associated with helping rates. Associations were also generally found between population size and the quality of help-giving, with people in larger cities giving assistance which was less positive than the assistance provided by small town dwellers. With the dropped envelope measure of helping,

no relationship was found with population size, although size was again negatively associated with the quality of help-giving. However, with the census response measure, population size was positively associated with helping behaviour. The geographical isolation variable was negatively associated with helping in the colour request and the census response studies, and was negatively associated with the quality of help-giving in the inaccurate directions and the dropped envelopes studies. Community heterogeneity, as measured by the proportion of bilingual and foreign-born residents, was also negatively associated with helping in the colour request, inaccurate directions, and census response studies. No other variables in the six studies revealed substantial or consistent associations with helping.

Consideration of the pattern of results in relation to the two helping measures chosen to represent the planned-spontaneous dimension of the taxonomy suggests that people in large cities may be generally less helpful than people in small towns when the helping involved is spontaneous rather than planned. For helping which was planned and formal (census response) people in large cities were more helpful, a finding which may reflect the urban-dweller's greater familiarity with formal, institutional forms of compliance. The relationship of the present findings to the various theoretical perspectives is discussed, and it is argued that future research and theorizing should take into account the multidimensional nature of the urbanism/ruralism construct. Finally, the implications of the taxonomic approach adopted in this thesis for other areas of

helping behaviour research and for social psychology in general are discussed. It is argued that a taxonomic organisation of subject matter facilitates the establishing of relevancy domains for competing theories, provides guidelines for reconciling contradictions in the literature, and allows a more precise determination of the interaction between personal characteristics and characteristics of helping episodes.

Chapter One: Introduction and Literature Review

The image of the city has deteriorated considerably in recent decades. In an earlier age the city was seen as a centre of culture, learning, and sophistication. Today, however, the city is noted more for high crime rates, sex shops, ghettos, and pollution. Indeed, as Mercer (1975) has stated, "Nowadays...the most prominent analogy for the city is either a concrete jungle or a human zoo"(p. 13). A major component of this negative image of the city is the belief that people living in urban areas are alienated, uninvolved, unfriendly, and unhelpful. This view of the city dweller contrasts markedly with the popular image of the warm, civil, and helpful small town resident.

These stereotypes about urban and rural dwellers appear to be fairly widely held in our culture. A study by Krupat and Guild (1980) found that the "typical urbanite" was perceived by subjects as being untrusting and uninvolved with others. Similarly, life in big cities was seen as being competitive, impersonal, and anonymous. In contrast, rural life was described as involving more closely-knit human relationships. Furthermore, these perceptions did not vary substantially with subjects' backgrounds, suggesting a high degree of consensus in relation to these views. In another study, Schneider and Mockus (1974) reported that in a survey of university students, 79 percent believed that the likelihood of a person receiving help from a stranger was greater in a small town than in a large city.

This chapter will begin by briefly considering stereotypes about city dwellers and ruralites in relation to prosocial forms of behaviour, and the reflection of these stereotypes in both the popular media, the arts, and the early theoretical writings of some social scientists. While much of this material is either anecdotal in nature or based upon commonsense assumptions about city life, it serves a purpose in setting the general social context of the issues of interest to this thesis. Later in the chapter empirical evidence relevant to these stereotypes will be reviewed, and the relationship of this thesis to previous empirical work will be outlined.

First, stereotypes about people living in large cities and in small towns are often expressed, and reinforced, in the popular media. For example, an essay dealing with small town life in Time Magazine (Trippett, 1980) claimed:

> The small town...has always carried with it images of low-key living, easy friendships, neighborly neighbors, front-porch sociability, back-fence congeniality, downtown comaraderie. Small town - the phrase evokes an intimate sense of community, leafy serenity free of the sinister strangers who menace the cold, grimy canyons of the city (p. 71).

The media also reinforces these views through its coverage of the news. Frequent news items deal with the urbanite in desperate need of help who is refused assistance from passers-by. The most widely known, and influential, incident of this type was that of the

This chapter will begin by briefly considering stereotypes about city dwellers and ruralites in relation to prosocial forms of behaviour, and the reflection of these stereotypes in both the popular media, the arts, and the early theoretical writings of some social scientists. While much of this material is either anecdotal in nature or based upon commonsense assumptions about city life, it serves a purpose in setting the general social context of the issues of interest to this thesis. Later in the chapter empirical evidence relevant to these stereotypes will be reviewed, and the relationship of this thesis to previous empirical work will be outlined.

First, stereotypes about people living in large cities and in small towns are often expressed, and reinforced, in the popular media. For example, an essay dealing with small town life in Time Magazine (Trippett, 1980) claimed:

> The small town...has always carried with it images of low-key living, easy friendships, neighborly neighbors, front-porch sociability, back-fence congeniality, downtown comaraderie. Small town - the phrase evokes an intimate sense of community, leafy serenity free of the sinister strangers who menace the cold, grimy canyons of the city (p. 71).

The media also reinforces these views through its coverage of the news. Frequent news items deal with the urbanite in desperate need of help who is refused assistance from passers-by. The most widely known, and influential, incident of this type was that of the

Kitty Genovese murder in 1964. As Kitty Genovese was returning home one evening in New York City, she was repeatedly attacked, and eventually murdered, while 38 people witnessed all or part of the attack, yet failed to directly intervene or even notify the police. This event received widespread attention in the media, generated numerous articles such as the one by Milgram and Hollander (1964) printed in The Nation, and was the subject of a book by Rosenthal (1964) entitled Thirty-eight Witnesses. According to Rosenthal, explanations given for the Genovese incident by newpapers and commentators at the time referred to notions such as urban apathy, indifference, moral callousness, and dehumanization. However, it can be noted that stories such as these are frequently portrayed by the media because of the emotional impact they exert on the public, for much the same reason that the media emphasizes riots, crimes of violence and protests. Prosocial activities, in contrast, are usually not treated by the media as being particularly "news-worthy".

While the Genovese-type stories reported in the media suggest that many city dwellers are "pathologically" anti-social, other media items reinforce the view of the reserved and blasé urbanite in less serious, and even humorous ways. One example refers to an article published in the San Francisco Chronicle (Mandel, 1981) describing a jogger who boarded a crowded city bus. While standing in full view of nearly 50 people, the jogger proceeded to change all of his clothes. The most interesting thing about this incident is not the behaviour of the jogger, but the fact that none of the passengers on the bus paid the jogger even the slightest bit of attention (except for the reporter who happened to be on board). It

is difficult to imagine a similar incident occurring in a small country town without provoking some sort of reaction.

The arts have also frequently presented city dwellers in a negative light. For example, the novels of Dickens characteristically portray urban life in terms of vice and immorality. A more recent example is the film Midnight Cowboy in which a country boy goes to New York City to live the good life but instead finds the people there to be inhospitable, predatory, and alienated.

The view of the socially uninvolved and unresponsive urbanite has also been incorporated into a certain amount of early sociological thinking on the city. For example, Ferdinand Toennies in his discussion of Gemeinschaft and Gesellschaft (which can be roughly translated as small-scale community and large-scale society) speaks of intimacy and friendship in relation to Gemeinschaft but states "one goes into Gesellschaft as one goes into a strange country" (p. 194) and "there everybody is by himself and isolated and there exists a condition of tension against all others" (p. 197). Similar elements can also be found in Redfield's (1947) discussion of the folk-urban continuum. Georg Simmel (1950) also referred to city dwellers as exhibitng a certain reserve toward one another. According to Simmel:

> The inner aspect of this outer reserve is not only indifference but, more often than we are aware, it is a slight aversion, a mutual strangeness and repulsion, which will break into hatred and flight

at the moment of a closer contact (p. 416)

In addition, Louis Wirth (1957, first published 1938) commented on the lack of neighborliness in big cities and the impersonal, superficial, and anonymous nature of the social contacts there. In Wirth's view, the lack of social integration in large cities was responsible for the alienated, predatory, and anti-social forms of behaviour frequently seen there.

However, in spite of the fact that the perception of urban dwellers as being alienated, reserved, uninvolved, unfriendly, and unhelpful seems firmly established in the popular mind and among many social scientists, there exists an opposing stereotype which also has widespread support. This is the image of the small town resident as being suspicious and distrustful toward strangers, of closing ranks and rejecting the outsider. Big city inhabitants, on the other hand, are seen as being more open, accepting, and tolerant of outsiders and strangers. According to this view, people in large cities are used to dealing with strangers and with people from a variety of subcultural, ethnic, and even deviant groups.

This view of the "inhospitable" rural dweller has frequently been portrayed in the arts, for example in Nevil Shute's novel A Town Like Alice, and in the film Easy Rider, in which three men on motorcycles are harassed and eventually murdered by small town folk who feel threated by their nonconformist appearance and behaviour. In this context, Trippett (1980) has argued that small towns are friendly places as far as the people who live there are concerned, yet the very closeness of small town life is "oppressive" and "makes

most true small-towners more suspicious than city folk of strangers" (p. 72). The belief that small town people are petty, gossipy, and "nosey" has been shown to be widely held (Krupat & Guild, 1980) and the belief that large cities offer greater tolerance for diversity has been endorsed by many social scientists (Wirth, 1938; Simmel, 1950; Fischer, 1976).

A recent newpaper story (Horin, 1981) supportive of this view described the plight of an Aboriginal woman living in a small town in Victoria who took legal action to stop the building of a smelter on land containing Aboriginal relics. Because her activist stand was unpopular among the local people, shops refused to serve her, a car attempted to run her off the road, her house was vandalized, and her dog was poisoned. Eventually she was forced to leave town for fear of her life. The image of an entire community of people forcing an "outsider" from their midst is difficult to conceive of in a larger city.

A related view, favorable to the prosocial potential of the urbanite, has also been incorporated into more recent sociological thinking about the city. A number of writers (Fischer, 1976, 1978; Gans, 1962, 1968; Wayne, 1972; Wellman, 1972) have argued that city dwellers are not as uncaring and uninvolved as many people believe. Instead, it has been argued that urbanites have just as many friends and are as intimately involved in closely-knit social networks as are ruralites. Gans (1962, 1968) has argued that many city dwellers live in urban villages which form homogeneous communites in which primary group and kinship ties are very strong. Fischer (1976) has argued that large cities are capable of

supporting a number of specialized but cohesive subcultures. Within these subcultures, individuals are fully integrated and "protected" from the potentially disruptive forces of large-scale urban living. Safe within their social worlds, urban dwellers have no reason to experience the alienation, disengagement, and anti-social behaviour predicted by others. Indeed, as Fischer (1978) has argued, "There are no psychological consequences of urbanisation" (p. 142).

To summarize the preceeding material, two widely held yet contradictory views are frequently expressed by both the public and by social scientists regarding the characteristics and behaviour of urban and rural dwellers. The first view sees urbanites as basically unhelpful, uncaring, and unfriendly while small town people are seen as being helpful, concerned, and amiable. The second view sees urban dwellers as being fully integrated into warm and cohesive communities in which their prosocial tendencies are given full expression. On the other hand, this view acknowledges that rural people are capable of distrust, suspicion, hatred, and aggression toward outsiders, strangers, and those not accepted by the local in-group.

The topic with which this thesis is specifically concerned is that of differences in rates of helping behaviour between people in urban and rural environments. It is acknowledged that helping behaviours are only one aspect of a general prosocial category of human behaviours which could be studied in an urban-rural context, including friendliness and sociability, trust, honesty, caring, and intimacy. This volume, however, will directly address the question of whether people in urban environments are any less, or more,

helpful than people in rural enviroments. This question, of course, is an empirical one and not one which can be answered by an appeal to common sense or commonly held beliefs. Therefore, this volume will describe the collecting of observations of actual incidents of helping behaviour (and nonhelping behaviour) by people in urban and rural settings under a variety of circumstances.

Before presenting the details of this research, a review of prior empirical studies relevant to this topic will be presented. This material will constitute the bulk of the remainder of this chapter. Following this review, a discussion of the substantive limitations of present knowledge in this area will take place. In addition, a methodological criticism of past research will be presented, along with the outline of a strategy for improving upon some previous shortcomings. Finally, this introduction will conclude with a short account of subsequent chapters.

A survey or relevant theoretical approaches will be presented in Chapter Two. This will constitute a review of social psychological theories from which predictions have been (or can be) derived regarding differential rates of helping between urbanites and ruralites. It was decided to review the empirical material and the theoretical material separately since most of the studies conducted in this area have been explicitly atheoretical and have simply tried to establish whether a difference in rates of prosocial behaviour exists between urban and rural samples. Because these studies have been essentially descriptive, even those studies which claimed to test a prediction from a certain theory could just as easily have been testing predictions from a number of other theories

as well. Indeed, many of the theories to be reviewed in Chapter two make identical predictions about urban-rural differences in helping levels. Few studies have simultaneously tested alternative hypotheses derived from different theoretical perspectives.

Review of Previous Research

Empirical evidence for differences in helping behaviour between people in urban and rural environments comes from a number of sources. The most important source consists of a number of behavioural field studies in urban and rural areas set up to directly test for differences in helping rates. Supplementary evidence comes from three sources: laboratory and other studies dealing with prosocial behaviour which included a measure of the subjects' urban or rural background, field studies of urban-rural differences in other forms of prosocial behaviour, such as friendliness and affiliation, and child-developmental studies investigating the growth of cooperative and competitive orientations in rural and urban children. Each of these four areas of research will be reviewed in turn.

Field studies of urban-rural helping

A total of 18 field studies have been conducted, as of mid-1982, investigating urban-rural differences in helping (to the best of the author's knowledge). The usual procedure in this research has been to simulate a situation in both a large city and in one or more small towns in which passers-by have the choice of either helping or not helping a person in distress. Usually the

downtown commercial district is used for this purpose, although subjects have occasionally been contacted in their homes. The rate of helping in each setting is then tabulated and the two are statistically compared. Out of the 18 studies of this nature conducted thus far, nine have found people in urban environments to be significantly less helpful than people in rural environments (Amato, 1981a; House & Wolf, 1978; Korte & Ayvalioglu, 1981; Korte & Kerr, 1975; Levine, Vilena, Altman & Nadien, 1976; Merrens, 1973; Rushton, 1978; Takooshian, Haber & Lucido, 1977; Yinon, Sharon, Azgad & Barshir, 1981). To provide a clear picture of the nature of this research, these nine studies will now be briefly summarized (in alphabetical order of authors).

Amato (1981a) conducted the only cross-cultural study of urban-rural differences in helping behaviour (Australia and the United States). In this study, the investigator collapsed on the sidewalk, revealing a bandaged leg generously smeared with theatrical blood. The behaviour of passers-by was then recorded. The procedure was carried out in Sydney and San Francisco, as well as in a number of small towns of less than 10,000 people in both countries. The results were remarkably similar in both societies: urbanites were less likely to lend assistance than ruralites (22.5% versus 51.4% in Australia, 20.0% versus 43.4% in the United States). Chi-square analysis indicated that both differences were significant.

House and Wolf (1978) used an unusual and innovative measure of "unhelpfulness": refusal rates for national surveys conducted by the University of Michigan Survey Research Center between the years

1952 and 1972. As House and Wolf argued, surveys can generate behavioural as well as attitudinal data. In addition to the refusal rates, answers to a three-item trust scale served as a measure of trusting attitudes. While no significant associations were found between between trust and city size, urbanites were found to be significantly more likely to refuse interviews than were ruralites. Using multiple regression procedures, place of residence was found to account for 16.8 percent of the variance in refusal rates. However, the authors noted that the relationship between place of residence and refusal rate disappeared when crime rates were entered into the regression equation, suggesting that perception of crime was the mediating variable between urbanism and the inhibition of prosocial involvement.

In the only study to be carried out in a non-Western culture, Korte and Avyalioglu (1981) measured levels of helpfulness in cities, towns and urban squatter settlements in Turkey. Three measure were used: giving change, granting an interview, and helping to pick up a dropped package. Log-linear analysis of the results indicated that for all three helping measures, the city sample was less helpful than the city squatter sample or the town sample, with the latter two samples having a similar level of helpfulness. The authors concluded that the urban squatters behaved like "urban villagers" who had not yet adopted the more reserved behavioural characteristics of the "true" urbanites.

In an earlier study, Korte and Kerr(1975) used three measures of helping: a request for assistance by a phone caller reaching the wrong number, overpayment to a store clerk, and finding "lost"

postcards in public places. The first two measures, enacted in Boston and in a number of smaller towns in Massachusetts, revealed marginally significant findings in the direction of greater small town helpfulness. The third measure yielded a higher but nonsignificant return rate for the rural locales. Combining all three measures, however, yielded a significantly higher helping rate (78% versus 55%) for the small towns.

A study measuring "trust of the stranger" was carried out by Levine, Vilena, Altman, and Nadien (1976) in residential areas of Manhattan in New York City and in a number of small towns of between 1,000 and 5,000 people in New York State. In this study, male and female investigators knocked on the front doors of people's homes, claimed to be lost, and asked if they could come inside to use the telephone. While female investigators were allowed entry more often than the male investigators, investigators were allowed entry about twice as often in the small towns as they were in Manhattan. The authors indicated, however, that in a "large number of cases" in the urban areas some alternative form of assistance was offered, such as bringing a phone book to the investigator at the door. Hence, the authors concluded that their results revealed more about the trust of strangers than "helpfulness" as such.

A study by Merrens (1973) used four measures of nonemergency helping: asking for ten cents, asking for change for a 25 cent piece, asking directions to the post office, and asking for a pedestrian's name (the fourth measure is a questionable measure of "helping"). Merrens conducted his research in a midwestern city of about 100,000 people and in a number of Midwestern towns of less

than 10,000 people. The results were also compared with rates for similar procedures carried out in New York City by Latane and Darley (1970). The general trend across the four measures was for city size to be negatively associated with prosocial responsiveness. However, there were a number of contrasts which did not attain significance. For example, 75 percent of small towns subjects gave change for a 25 cent piece compared to 73 percent of subjects in New York City. Altogether, out of 12 possible contrasts, seven were significant using the chi-square test (not reported in the original paper).

A Canadian study conducted by Rushton (1978) measured helping rates in downtown Toronto, in a suburb of Toronto, and in a small town of 16,000 people approximately 25 miles from Toronto. Four measures were used: asking for the time, asking for directions, asking for change for a 25 cent piece, and asking for a pedestrian's name (again, the latter measure is a questionable measure of helpfulness). With three of the four measures (directions, change, and name) people in the small town were significantly more helpful than people in Toronto. Rates for the suburbs were intermediate for all four measures. For the fourth measure, the time request, no significant differences were found across the four settings. The rates for Toronto were also similar to the rates for New York City (Latane & Darley, 1970) on all four measures.

Another study indicating higher rates of helping for subjects in rural areas was conducted by Takooshian, Haber, and Lucido (1977). In this study, children aged six to ten years acted as confederates in a "lost child" situation. These children stood on

street corners and said "I'm lost. Can you call my home?" to passers-by. While 46 percent of the pedestrians approached in the big cities helped, the rate of helping for pedestrians in the small towns was 72 percent.

Finally, Yinon, Sharon, Azgad and Barshir (1981) wrote letters to people living in a large city in Israel, a Moshav (an agricultural village) and a Kibbutz asking to set up an appointment for an interview. Chi-square analysis revealed a significant difference in return rates between the three samples with Kibbutz residents being the most helpful (53%), Moshav residents helping at an intermediate level (42%) and city residents helping the least (35%).

These nine studies, conducted in five different countries (the United States, Australia, Canada, Israel, and Turkey) and using a variety of helping measures, suggest that there is some truth in the stereotype of the helpful ruralite and the unhelpful, uninvolved urbanite. However, a substantial number of studies have found contradictory results. Out of the remaining nine field studies not yet reviewed, five found no difference between people in urban and rural settings in rates of helping (Kammann, Thomson & Irwin, 1979; Korte, Ypma & Toppen, 1975; Krupat & Coury, 1975; Rotton, 1977; Schneider & Mockus, 1974). These five studies will now be briefly summarized.

The study by Kammann, Thomson, and Irwin (1979) was different from the other studies reviewed here in that population density, rather than size, was used as the criterion for defining urbanism. Three cities in New Zealand, all with similar population sizes but

with widely differing population densities were selected. "Lost" letters were distributed in the central business districts of each city. Two other archival forms of data were also analyzed: the number of lost items turned into police (as a ratio of the total number of lost items reported) and the number of well-intentioned false alarms recorded by the fire department. While the number of people passing the letter before it was picked up was significantly higher in the most densely populated city, the actual return rate (the better measure of helping) did not vary significantly across the three settings. While the number of lost items turned in to police did not vary significantly across the three cities, the number of well-intentioned false alarms was significantly lower in the most densely populated city. It was noted by the authors that while the first helping measure (number of people passing the letter before it was picked up) was associated with city density, immediate sidewalk density was a better predictor of helping behaviour. The authors concluded that immediate sidewalk density, rather than city density, was the only operating variable.

Another study, conducted in the Netherlands by Korte, Ympa and Toppen (1975) compared helping rates in communities differing in size. However, within each community, areas of high and low information rate were compared. Three helping measures were used: a request for an interview, dropping a key "accidentally" on the sidewalk, and an actor appearing to be lost and having a difficult time reading a map. No significant differences were found on any of the three measures between the city and town samples. Furthermore, no differences emerged between city neighborhoods with different reputations for helpfulness and friendliness. However, significant

differences were found between areas of high and low environmental input on the interview request and the map measure.

Krupat and Coury (1975) in an unpublished study, distributed lost letters in small towns in central New Jersey and in Manhattan. While return rates were higher in the small towns, this appeared to be largely due to immediate pedestrian density. With pedestrian density controlled for, no substantial effect remained for the urban-rural variable. (This study was unavailable. It is cited in Korte, 1978; Weiner, 1976, and Kammann, et al., 1979).

Rotton (1977) used the wrong number technique (claiming to have dialed a wrong number and requesting the subject answering to relay a message) as a measure of helping. The numbers called were located either in downtown Dayton, Ohio (population = 243,601) or in five suburbs of Dayton (with an average population of slightly more than 20,000 people). While female callers were helped more often than male callers, helping rates were approximately the same in the suburban and downtown areas. However, the number of subjects contacted in this study was rather small: 41 males and 53 females.

Finally, Schneider and Mockus (1974) studied helping behaviour in Toronto and in nine small towns in Ontario ranging in size from 1,000 to 5,000 people. Investigators in this study dropped five grocery items in the path of an oncoming pedestrian. While 44 percent of the urban subjects stopped to help pick up the fallen items, only 39 percent of the rural subjects helped, a difference which did not attain significance. The authors suggested that the "atmosphere" of a community may moderate the relationship between community size and helpfulness.

In contrast to the studies reviewed above, four remaining studies found urbanites to be significantly more helpful than ruralites (Amato, 1978; Forbes & Gromoll, 1971; Hansson & Sladè, 1977; Whitehead & Metzger, 1981). Amato (1978) conducted a study set in 11 cities and towns in Australia varying in size from less than 200 people to nearly one million people. The measure of helping used was assisting an investigator in picking up a large number of pencils which were dropped on the sidewalk. The percent of passers-by helping in this situation ranged from 8.9 percent in Brisbane (the largest city in the sample) to 3.7 percent in the smallest towns of less than 1,000 people. Although, the positive association between city size and helping was weak, it attained statisticial significance, even with the effect of immediate pedestrian density partialled out (beta weight = .19).

In a study conducted in the American Midwest, Forbes and Gromoll (1977) used the lost letter technique in cities at three levels of population size. In the first study, using stamped letters, no significant differences were found in the return rates for different areas. In the second study, using unstamped envelopes, more letters were returned from the large and medium sized communities than from the small communities (rates were 70%, 70%, and 51%). The difference attained statistical significance using the chi-square test when the cases for the large and medium sized communities were combined.

Hansson and Slade (1977) conducted a variation of the lost letter technique in which letters were addressed to either a "respectable" control destination or a "deviant" destination (for

example, Friends of the Communist Party). Letters were "lost" in a medium sized city and in 51 small towns in Oklahoma. In the control condition, return rates were only slightly higher in the small towns than in the city. However, in the deviant conditions, return rates were substantially higher in the larger city (for the Communist Party address: 25% versus 2.8%). These results indicated an interaction between city size and control versus deviant address. The authors suggested that the greater intolerance for deviance among small town residents overwhelmed their generally higher level of social responsibility. This study was later replicated by Whitehead and Metzger (1981) in Baltimore and a number of small towns in Maryland. Stamped envelopes addressed to a nondeviant or a homosexual address (Gay Pleasure Alliance) were returned at equal rates in the large city (53%). However, in the small towns, the deviant letters were returned significantly less often than the nondeviant letters (33% versus 80%).

To summarize the preceeding material, nine studies conducted in five different countries (the United States, Australia, Canada, and the Netherlands) and using a variety of helping measures did not support the notion of greater urban unhelpfulness. Thus, out of a total of 18 behavioural field studies, nine found urbanites to be significantly less helpful than ruralites, five found no difference, and four found urbanites to be significantly more helpful than ruralites. While the major trend in this research has been for urbanites to exhibit lower levels of helpfulness, the amount of contradictory evidence would appear to be sufficient to render this finding inconclusive. Possible reasons for the contradictory nature of these findings include the fact that these studies used different

subject populations, different sized cities and towns, and different measures of helping. However, before discussing these findings further, consideration will be given to other types of research which provide information relevant to the topic of urban and rural helping. These consist of laboratory and other studies of urban and rural subjects, field studies of related forms of prosocial behaviours, and developmental studies of urban and rural children.

Laboratory and other studies of urban and rural subjects

A small number of laboratory studies have investigated some aspect of helping behaviour and have included questions dealing with characteristics of the subjects in an attempt to locate personal correlates of helping. The first research to report this type of data was Darley and Latane's (1968) "lady in distress" study. In this study, subjects in an experiment were exposed to an apparent accident in which a woman in the next room fell over and hurt herself. Later, the subjects filled out personality and attitude scales and answered questions about their backgrounds. The speed with which subjects intervened in the simulated emergency was significantly negatively associated with the size of the subjects' childhood communities. Two other studies dealing with emergency intervention also included the subjects' urban or rural background as a variable (Schwartz & Clausen, 1970; Korte, 1970). However, both studies found no relationship between helping behaviour and the size of the subject's home community.

One other study, dealing with the reporting of shoplifters, supported the earlier finding of Darley and Latane. Gelfand, Hartman, Walder, and Page (1973) simulated a shoplifting incident in front of other customers in a liquor store. The shoplifting incident took place while the shopkeeper was in a back room, and reporting the shoplifter to the shopkeeper when he returned was used as the measure of helping. Subjects were later interviewed and asked, among other questions, to identify their place of residence as a child (large city, small town, or rural). The intervention rates for the three residence groups were, respectively, 30 percent, 63 percent, and 75 percent.

A questionnaire study conducted by Benson, Dehority, Garman, Hanson, Hochschwender, Lebold, Rohr, and Sullivan (1980) also found more helpful behaviour from rural as opposed to urban subjects. In this study, subjects listed the number of "nonspontaneous" forms of helping they had engaged in (such as volunteering time to charitable organisations) during the last year. The subject's hometown size during childhood was found to be negatively and significantly associated with the number of helping activities listed ($r = -.24$).

Other research, however, has indicated higher rather than lower rates of helping for urban subjects. For example, Hansson, Slade and Slade (1978) used a laboratory-based measure of helping: volunteering time to help work on a research project. Hansson, et al., tested two alternative hypotheses about the effect of modelling on the helping behaviour of urban and rural subjects. Their results indicated that in the helpful model condition subjects reared in an urban community (defined as being greater than 250,000 people)

helped significantly more often than subjects reared in small towns (defined as being less than 50,000 people). No significant differences were observed between groups in a no model and in an unhelpful model condition.

Finally, a study by Weiner (1976) used student subjects from either urban (cities greater than 500,000 people) or rural backgrounds (cities less than 10,000 people). Subjects were placed into either a high overload or a control condition (high overload being produced by simultaneous tasks and sensory bombardment) as part of a study purportedly dealing with sex differences in task performance. During the experimental task, a confederate entered the room and pretended to fall and hurt her ankle. Analysis of variance indicated a main effect for subject's residence on helping, with urban subjects being significantly more helpful than rural subjects. In addition, scores on Barron's (1953) cognitive complexity scale were positively correlated with both helping behaviour and urban-rural residence. With scores on the complexity scale partialled out in a covariance analysis, the main effect of residence disappeared. Weiner concluded that urban subjects, being more cognitively complex, had a more expansive in-group which they extended to the fellow student in distress. Rural subjects, being less cognitively complex, were less inclined to see the unfamiliar student as a member of the in-group, and hence, helped less frequently.

To summarize the preceeding material, out of seven studies reporting data on the urban-rural backgrounds of subjects, three studies found urban-reared subjects to be significantly less helpful

than rural-reared subjects, two studies found no difference, and two studies found urban-reared subjects to be significantly more helpful than rural-reared subjects. The results of this line of research, therefore, are also contradictory and inconclusive. It is unfortunate that a greater number of studies in the field of prosocial behaviour research have not included data dealing with the subject's urban-rural background since this information is extremely easy to collect in a laboratory setting.

One possible reason for the rather confused picture presented by this line of research may be the difficulty inherent in operationalising the concept of rural versus urban background. First, it is unclear whether the size of the community the subject grew up in or the size of the community the subject has been living in more recently should be the criterion used. The way in which this question has been decided has varied from study to study. Furthermore, many people's backgrounds are complex and involve living in a number of differently sized communities at various stages of the life cycle. Just how the size of the community, the length of time the person has lived there, and the period in the person's life during which this happened should be weighted has never been addressed by researchers. One way of avoiding this problem would be to restrict a study to subjects who have lived their entire lives in either small towns or large cities. However, no study adopting this strategy has been conducted yet.

Urban-rural differences in related prosocial behaviours

A small number of studies have investigated differences between people in urban and rural settings in other forms of behaviour which can be considered, in a broad sense, prosocial. While not directly testing the hypothesis of differences in helpfulness between people in urban and rural environments, these studies are nevertheless useful in shedding some light on the full range of interpersonal behaviours which might be related to the urban-rural variable.

First, Milgram (1977) described a class project in which 13 students were sent out into both New York City and a number of smaller towns to shake hands with total strangers. While 66.7 percent of the people approached in the small towns reciprocated the handshake, only 38.5 percent of the people in New York City responded in this way. This study can be interpreted to indicate a greater reserve on the part of urbanites (and a decreased desire to engage in interaction with a stranger). It might also indicate a greater mistrust about the student's intentions on the part of urbanites.

Another study designed to investigate people's desire to engage in communication with a stranger was carried out by Newman and McCauley (1977). In this study, the investigator initiated eye contact with pedestrians in three settings: downtown Philadelphia, a suburb of Philadelphia, and a small town. The percent of pedestrians returning eye contact was greatest in the small town and least in the city setting. Furthermore, the percent of people speaking to the investigator followed the same pattern. The authors interpreted these findings as supporting Milgram's (1970) theory of cognitive overload in urban environments (see Chapter two).

However, a competing explanation for the results of the Newman and McCauley study is that pedestrians on the more crowded city streets were simply less likely to notice the investigator giving eye contact. Hence, urban pedestrians may have failed to return eye contact not because of a decreased openness for communication, but because they were unaware that a communication channel was being opened. A similar study carried out in Australia (Amato, 1980) was designed to replicate these findings in another country (Australia) and rule out this competing explanation. In this study, investigators approached pedestrians in 11 cities and towns ranging in size from nearly one million people to less than 200 people. When pedestrians were about six feet away, the investigator would smile and say "hello". The behaviour of the pedestrian was then recorded by a confederate following closely behind. Results indicated that as city size increased, pedestrians were less likely to return eye contact (Kendall's Tau = -.20), to smile (Kendall's Tau = -.12), or to respond verbally (Kendall's Tau = -.45). The only way in which people in larger cities were more responsive was in nodding (Kendall's Tau = .11), arguably the form of response requiring the least involvement with the investigator. Altogether, counting any positive response other than eye contact (speaking, smiling, nodding), the percent responding ranged from 36 percent in the largest city to 86 percent in the smallest towns (Tau = -.36). To remove the confounding effect of immediate pedestrian density, the number of people standing within an approximate ten foot radius of the subject was recorded and later statistically partialled out in a covariance analysis. The significant inverse relationship between city size and responsiveness, although somewhat weakened,

still remained.

Another two studies of interest in this context were conducted by Lowin, Hottes, Sandler and Bornstein (1971) and Bornstein and Bornstein (1976). This research investigated the "pace of life" in large cities and in small towns. A number of measures were taken in urban and rural areas, including the time it took a pedestrian to walk 100 feet, the amount of time it took to fill an order at a post office, and the amount of time it took to be waited on at a service station. Generally, there was a consistent tendency in this research for activities to be carried out more rapidly in the urban settings. These findings are of interest because being in a hurry may lead to a lessened proclivity to engage in prosocial forms of behaviour (Darley & Batson, 1973). Furthermore, urban bank clerks were observed to make more frequent checks on the money paid in by customers than small town clerks, which may have indicated a greater suspiciousness of the customer.

To summarize this section, the available research indicates that urbanites are less likely than people in small towns to engage in communication with a stranger. This was true for returning a handshake, returning eye contact, and returning a friendly greeting from a stranger. However, it is important to point out that the behaviour of the investigators in these studies was somewhat unusual in that total strangers do not normally greet each other in city settings unless they are "thrown together" for some reason. Hence, it cannot be determined if urbanites behave in a less friendly fashion in more realistic situations, such as initiating a conversation in a waiting room or while standing in a queue.

Finally, research reviewed in this section suggests that urbanites may generally be in more of a hurry than ruralites, which may suggest a lessened likelihood of initiating prosocial forms of interaction with a stranger.

Child-developmental studies

The next area to be reviewed deals with developmental studies of prosocial traits in urban and nonurban children. This body of research, much of it cross-cultural, generally indicates that children growing up in more urbanized environments and cultures tend to behave less cooperatively and less nurturantly than children from nonurbanized environments and cultures.

A series of studies were carried out by Madsen and his associates comparing the behaviour of urban and rural children from a number of cultures. These studies involved different versions of a game-playing situation in which players could either exhibit competitive or cooperative moves. Madsen (1967, 1971) found in a study of game-playing behaviour that Mexican children reared in an urban area were more competitive than children reared in a rural area. Shapiro and Madsen (1969; 1974) compared children raised in an Israeli kibbutz with urban-reared children in America and Israel. In the game playing situation, the kibbutz children behaved more cooperatively and less competitively than the urban children from Israel and the United States. In a similar study (Madsen & Shapira, 1977) Kibbutz children were comared with urban-reared children in Israel, Germany, and Israel. Again, kibbutz children were the most cooperative and the least competitive of all four groups. Finally,

another study (Kagan & Madsen, 1971) compared rural Mexican children, urban Mexican-American children and urban Anglo-American children. In this study, rural Mexican children were the most cooperative and urban Anglo-American chldren were the least cooperative.

Further cross-cultural evidence for general behavioural differences between urban and rural children comes from research conducted by Whiting and Whiting (1975). According to the authors, a comparative analysis of six cultures revealed that children from simple, structurally undifferentiated cultures were higher in nurturance than children from more complex cultures. This difference was thought to have involved the mother's work role, for children in the simpler cultures were generally involved in providing child care, helping with food preparation, and other household activities. Urban children were generally given less responsibility.

To summarize this line of research, there is evidence that children raised in urban environments are less cooperative and less nurturant than children raised in nonurban environments. This suggestion is consistent with the findings of those studies reviewed earlier indicating lower levels of prosocial behviour among urbanites. Unfortunately, this line of research, while suggestive, is limited in a number of ways. First, no studies have compared levels of cooperativeness in both urban and rural children in a single Western culture. Second, these studies have generally used limited game-playing situations. Hence, it is not clear if children use similar cooperative and competitive strategies in other realms

of life. Finally, no studies of this nature have been conducted with adults, hence, it cannot be determined if these childhood differences in cooperative and competitive orientations persist into adulthood.

Summary of Empirical Work

The research reviewed in this chapter does not present a consistent picture. The behavioural studies conducted in urban and rural field settings give weak support to the notion of urban unhelpfulness: out of a total of 18 studies, nine (50%) found helping rates to be significantly lower in urban settings, four (22%) found rates of helping to be higher in urban settings, and five (28%) found no difference. Even greater caution, however, should be exercised when one considers the number of studies which may have found no difference between urban and rural samples but were never published (given the preference of most journals to publish only studies which report statistically significant results). This has been referred to as the "file drawer problem" by Rosenthal (1980) who suggested a method for calculating the number of unpublished studies with null results. Consideration of this problem suggests that the total number of studies conducted is likely to be larger than 18, thus decreasing the proportion of studies reporting lower rates of helping for urbanites.

Results of laboratory studies investigating personal correlates of helping are also unclear, with three finding lower levels of helpfulness among urban subjects, two finding lower levels of helping among rural subjects, and two finding no difference. Again,

however, the number of studies which may have included information on the subjects' residential background but did not report it because it was not found to be related to the particular measure of helping employed may be higher than reported here.

The studies of urban-rural differences in other forms of prosocial behaviour other than helping yield more consistent results. It appears that people in small towns are more likely to return a handshake, engage in eye contact, smile, and speak to a stranger than are people in large cities. Furthermore, people in small towns appear to be in less of a hurry and to spend more time providing services to others than people in large cities. However, the number of studies in this area is small (three dealing with interaction, two dealing with time) and more research may produce a more complex picture.

Finally, the child-developmental literature suggests a picture of greater cooperativeness and nurturance in rural children. Taken together with the previous material, the larger part of the evidence suggests greater prosocial responsiveness on the part of people living in nonurban areas when compared to people in urban areas. This is the conclusion reached by Korte (1978, 1980) in his discussions of helping behaviour. However, it must be stressed that the limited nature of much of this research and the large number of contradictory findings requires that the notion of greater rural prosocial responsiveness remain highly tentative. Furthermore, two important substantive qualifications must be made concerning the range of phenomena to which the presumed urban-rural effect may be relevant.

These limitations deal with the nature of the relationship between the helper and the recipient, and the range of settings in which these behavioural differences may occur. More specifically, these concern whether the differential levels of prosocial involvement concern strangers only or whether this tendency applies to friends and relatives as well, and whether differences in prosocial behaviour are due to personal characteristics of urbanites and ruralites which generalize across a variety of settings or whether they are due to situational characteristics of urban and rural settings which generalize across a variety of personal backgrounds. Each of these will be discussed in turn.

Helping friends and relatives versus helping strangers

The nature of the relationship between the person in need and the person giving assistance is an important variable not often addressed in the field of helping behaviour research. Some writers, such as Wirth (1957) have argued that the conditons of city life adversely affect all urban social relationships, including those with relatives and friends, as well as with strangers. This view of the reserved, isolated and lonely urbanite is undoubtedly held by many lay people as well. Other writers, however, such as Fischer (1976) have argued that while the style of city life may affect relations with strangers, relations with friends and relatives usually remain essentially intact (see Korte, 1980, for a comparison of the predictions of different theorists). However, all of the behavioural data available to date and reviewed above (except for the anthropological data) deal exclusively with prosocial interactions between strangers.

Nevertheless, it is possible to comment briefly on the nature of social relationships between family and friends in urban and rural settings since a number of interview and questionnaire studies have been conducted on this topic. With regard to relatives, studies comparing the degree of social contact between relatives in urban and rural environments generally indicate no difference between the two. Reiss (1959) found no difference between urban and rural families in the amount of time reportedly spent with other family members, and Key (1968) and Glenn and Hill (1977) found no difference between urbanites and ruralites in the frequency with which they reported visiting relatives. Furthermore, studies which have shown differences have failed to maintain these differences once the geographical distance of relatives was statistically controlled for (Bultena, 1969; Koyama, 1970).

Similarly, most interview and questionnaire studies of friendships have uncovered little evidence of urban-rural differences. Indeed, it appears to be the case the urban dwellers have just as many friends, see them as often, and are as intimate with them as are small town residents (Reiss, 1959; Key, 1968; Sutcliffe & Crabbe, 1963; Kasarda & Janowitz, 1974; Glenn & HIll, 1977; Wayne, 1972; Wellman, 1972, Franck, 1980). For example, Franck (1980) conducted a longitudinal study of students moving either to New York City or to a rural area in New York State. At the end of two months, the rural group reported having made more friends in the new environment than the urban group, suggesting that it may be more difficult to make friends in a large city. However, by the time eight months had gone by, there was virtually no difference between the two groups in the number of friends reported.

Furthermore, both the urban and the rural group reported seeing their friends just as frequently, reported being equally satisfied with ther friendships, and reported inviting their friends over to their homes just as often.

On the basis of this evidence it appears that urban-rural differences in interpersonal behaviour are limited to relationships with strangers. In this context, Korte (1980) has said

> In the realm of personal relationships, relatives and friends would be regarded as central and of considerably greater importance than relationships with neighbors and strangers. What seems to be the case is that city living alters the character of social relationships of the more peripheral, unimportant and less intimate kind (p. 43).

It must be noted, however, that none of the studies of family and friend contacts mentioned above examined actual incidents of helping behaviour between friends or between relatives. Some interview data does suggest, however, that typical families- even those in very large cities - are regularly called upon to provide substantial assistance in times of serious need (Adams, 1967; Bott, 1971). However, because these observations do not involve behavioural data, it is not possible to conclude at this time whether the actual level of assistance given to family and friends is the same in urban areas as it is in rural areas.

Urban unhelpfulness: Dispositional or Situational?

In all of the empirical studies dealing with urban-rural differences in helping behaviour, no attempt has been made to establish whether any observed differences in behaviour are due to long-term differences in personality, attitudes, beliefs or values or to short-term stimulus characteristics of urban and rural environments. Previous research has, in fact, consistently confounded situational and personal variables, that is, urbanites have been studied in urban environments and ruralites have been studied in rural environments. Unfortunately, designing a behavioural study to separate the effects of these two sets of variables would be extremely difficult, which is undoubtedly why it has never been attempted. Various theoretical perspectives, to be reviewed in Chapter two, attempt to provide an answer to this question. However, there is little empirical evidence allowing a tentative answer one way or the other.

This issue was raised by Holahan (1977) who conducted a questionnaire study to examine people's perceptions of social norms of helping. In this study, subjects read accounts of people in need in either a large city or a small town setting and rated the appropriateness of giving assistance in each setting. The size of the subjects' former community of residence was also recorded. Holahan found no differences in the rated appropriateness of altruistic responses between subjects from large cities, intermediate cities, or rural areas. A significant main effect did emerge for the city size variable, with altruistic responses being judged more appropriate in the small town setting than in the city setting. An interaction was also observed with the three subject groups giving similar high ratings in the small town condition, but

the urban subjects giving more altruistic responses than the other subjects in the big city condition. Urban subjects also reported feeling less fear for their safety in big cities than subjects with medium sized city or small town backgrounds, suggesting that fear of personal risk was a mediating varible. On the basis of these data, Holahan argued that research showing lower levels of helpfulness among urban residents is "related to characteristics of the urban setting, and does not reflect an internalized norm of response generalized across all situation" (p. 382). Of course, this study dealt with the perceived appropriateness of behaviour and did not observe behaviour itself. Many writers have pointed out the difficulty in generalising from what people say they will do to what they actually do in real life situations (eg. Latane & Darley, 1970).

Further light could be cast upon this issue by studies comparing urban and nonurban subjects on some laboratory measure of helping. With environmental setting a constant, any observed differences between urban and rural samples would support a stable, dispositional view of the behaviour under study. Unfortunately, as discussed above, the evidence of past research is not consistent: of the six laboratory studies conducted for which this type of data is available, two found higher rates of helping for urban subjects (Darley & Latane, 1968; Gelfand, et al., 1973), two found higher rates of helping for urban subjects (Hansson, Slade & Slade, 1976; Weiner, 1976) and two found no difference between urban and rural subjects (Schwartz & Clausen, 1970; Korte, 1970). As pointed out earlier, one possible reason for this rather confused picture may be the rather inconsistent and arbitrary way in which urban-rural

background has been operationalised in these studies. Thus, at times home community has been defined as the community the subject grew up in and at other times it has been defined as the community the subject lives in presently. Further research, adopting a more rigorous approach to the conceptualisation and measurement of this variable may yield more conclusive results.

Another way of approaching this issue is to examine differences between different stimulus environments within the same community. In this case, the personal variable (in terms of current residence) is held constant while environmental conditions of greater or lesser "urbanness" are allowed to vary. However, because stimulus environments are more homogeneous in small communities, this type of research is essentially limited to medium sized and large cities. In one study of this nature, Korte, Ypma and Toppen (1975) found that people in urban areas of low environmental input in the Netherlands behaved more prosocially on a variety of measures than did people in urban areas of high environmental input. Furthermore, Korte, et al. found no differences between subjects in large cities and medium sized towns (of about 20,000 people) once they controlled for environmental input level. This study suggested that urban-rural differences are mainly due to situational variables rather than stable personal characteristics. However, this finding was not replicated in an Australian study conducted by Amato (1981b) which found no difference in the level of prosocial behaviour of subjects in areas of high and low environmental complexity in the same city. Another study (Amato & McInnes, 1981) looked at affiliative behaviour in a single city in districts at four levels of environmental complexity and found an inverted U-shaped

relationship between environmental complexity and affiliation. Thus, the results of this line of research are also complex and contradictory.

The question of whether observed urban-rural differences in helping behaviour are due to stable dispositional differences between urbanites and ruralites which will be expressed across a variety of environmental settings, or whether they are due to situational characteristics of urban and rural environments which affect different people in similar ways, regardless of their backgrounds, cannot be answered on the basis of the studies conducted thus far. The present evidence is meagre and somewhat contradictory. Of course, it is quite possible that behavioural differences are due to a combination of personal and environmental variables.

To summarize the preceeding material, it can be suggested on the basis of data from a number of research areas that urbanites are less prosocially responsive than ruralites. However, the available evidence accumulated thus far does not allow a determination of whether this difference applies to all people with whom the urbanite interacts, including friends and relatives, or whether it applies only to strangers (the majority of the evidence suggests that it may apply to just the latter group). Also, from the available data it is not clear whether these differences are due to personal characteristics of urban and rural dwellers or whether they are due to situational charactersitics of urban and rural environments.

Methodological criticisms of previous research

In addition to the substantive limitations of previous research discussed above, the field research on differences in rates of helping between urbanites and small town dwellers can be criticised on a number of methodological grounds. These criticisms will be restricted to the field studies of helping behaviour as these studies are the ones most relevant to the issue of urban-rural differences in helping and form the body of work of direct concern to this thesis. These criticisms include: (1) The sampling of cities and towns (2) The sampling of subjects (3) The sampling of helping behaviours (4) The failure to include cities of intermediate size (5) The reliance upon size as the sole index of urbanism (6) The failure to include measures of major population characteristics. These six criticisms will be briefly expanded below.

First, previous studies have relied almost exclusively upon convenience samples of larger cities and small towns. This results in a number of problems, for it cannot be determined to what extent the communities studied are representative of a larger population of communities and to what extent the results can be generalised to other communites. Furthermore, it is difficult to "add up" or compare studies since the communities sampled lie along different ranges of the urban-rural continuum. Examination of these studies reveals that the typical "small town" studied has ranged in size from two hundred people to over 20,000 people, and the "large city" studied has ranged in size from 250,000 people (Dayton, Ohio) to nearly ten million people (New York City).

Second, the selection of subjects within each community studied has been nonrandom (see House & Wolf, 1978, for an exception). Thus, it is not clear to what extent the people sampled are representative of the community studied and to what extent their behaviour can be generalised to others in the same community.

Third, no attention has been given in previous research to the sampling of behaviours. Clearly, the measures used in past research have consisted of convenience samples of helping behaviours. Thus, it is not clear to what extent the helping measures used in previous research are representative of a large population of helping behaviours and to what extent the findings based upon these measures can be generalised to other forms of helping. Comparisons between studies are also difficult to make because of the reliance on possibly qualitatively different forms of helping.

Fourth, the failure of most studies to include data from communities of intermediate population sizes means that it is impossible to determine the shape of the relationship between urbanism and helping behaviour. While previous research has assummed that the underlying relationship is linear, with only two data points it is impossible to determine whether an observed difference represents a linear or a nonlinear relationship. While some studies have included "suburbs" as an intermediate step between the big city and the small town (eg. Rushton, 1978), it is not clear whether a suburb is the functional equivalent of an intermediate sized city or town. It seems more likely that suburbs are qualitatively different enough to be considered a separate category of community.

Fifth, the reliance upon city size as the sole defining index of urbanism in past studies poses certain problems in that a variety of structural and population characteristics are known to vary with city size (Fischer, 1976; Duncan, 1957). Therefore, finding a behavioural difference between people in areas of high and low population does not necessarily mean that size itself is the cause of the difference. Furthermore, the concept of urbanism itself is most likely multidimensional. Cities of identical size may vary considerably in their degree of "urbanism", for example, in their density, heterogeneity, and geographical isolation. Most research has ignored these other dimensions of urbanism (for an exception, see House & Wolf, 1978).

Sixth, the failure to include measures of other population charactersitics, such as ethnicity and social class, means that possibly important souces of intercommunity variation are left unexplored. These other unmeasured sources of variance in helping rates may either obscure or exaggerate differences between communities differing in population size. This problem can be especially salient when only a small number of communities are studied.

Due to these serious problems, the research reviewed earlier in this chapter should be treated with caution. It is argued here that the suggestion made by Korte (1978, 1980) that urbanites are indeed less helpful than ruralites, at least in their behaviour toward strangers, is premature. Previous research generally suffers from considerable sampling problems, a limited conception of urbanism, and the absence of multivariate analyses. Furthermore,

contradictory evidence concerning urban-rural effects is abundant. In light of these problems, it is concluded that the existence of differences in prosocial involvement between people in urban and rural settings has not been sufficiently documented. Further research addressing the problems outlined above could contribute substantially to the knowledge in this area.

Contribution of the Present Research

The research to be described in this thesis has attempted to deal with most of the criticisms outlined above. This has involved (1) a random sample of urban and nonurban communities (2) A systematic sampling of helping behaviours guided by a taxonomy of helping (3) The inclusion of communities at a variety of points along an urban-rural continuum (4) Consideration of two major dimensions of urbanism: population size and geographical isolation (5) The inclusion of data on a variety of community characteristics including heterogeneity, social class, tourism, and community instability. The one major methodological problem which this thesis has not been able to address is the problem of the nonrandom selection of subjects. As it will be argued in Chapter four, a nonrandom selection of subjects is probably inevitable if the intention of research is to study behaviour in public places. (A detailed description of the sampling procedures and the procedures used for selecting and gathering data on community variables is presented in Chapter four.)

The problem which this volume addresses most directly is that of the sampling of helping behaviours for study. The problem of sampling behaviours pervades most research on helping, as well as research in many other areas of social psychology. While experimental manipulations to fool the subject into misperceiving the aim of the study are often elaborate and ingenious, little attention is typically given to the actual measure of helping employed. In most research differences between conditions or samples are observed for a specific measures, such as picking up fallen books, and generalisations are then made about helping behaviour as such. Yet, the actual range of helping forms to which the effect may generalise remain unspecified. Intuitively, it is apparent that donating to a charity, intervening in an emergency, listening to a friend with a personal problem, and doing a small favor for a stranger are all different kinds of activities. Thus, it is quite probable that the situational or personal characteristics which affect one type of helping in a particular way may have a different effect, or no effect at all, on another type of helping. This situation exacerbates the general problem of "non-cumulative" research in this, as well as in other areas of social psychology. This issue has been raised by Lau and Blake (1976) and Staub (1978) and has been given extensive treatment by Smithson, Amato, and Pearce (in press).

From the helping studies reviewed earlier it can be determined that helping forms revealing significantly higher helping rates for small town residents have included helping a pedestrian with a hurt leg, granting an interview, giving change, picking up a dropped package, assisting a wrong-number caller, returning an overpayment

in a shop, allowing a person to use a home telephone, giving someone 10 cents, giving directions, and helping a lost child on the street. While it might be argued that these helping activities cover a broad range of types, they are nevertheless all quite similar in a number of seemingly important respects. For example, they all involve spontaneously given, informal, short-term, impersonal forms of assistance. Furthermore, although some are more serious than others, no true emergency situation is present on the list. Thus, it is not clear whether urban-rural differences exist with respect to the full range of helping activities or whether differences are restricted to only certain kinds of helping.

Consideration of this problem led to the decision to include for study a variety of helping measures spanning a wide range of helping types. This required the use of a taxonomic classification of helping behaviours. However, a classificatory scheme or taxonomy suitable for the present purpose had not yet been developed. Therefore, the first study to be reported in this volume will describe the development of an empirically based taxonomy of helping. This taxonomy was later used to generate a sample of six helping measures for subsequent use in field research. This strategy was deemed to be useful for two reasons. First, it ensured that in selecting behaviours for study there ould be minimal overlap in the characteristics of each, thus allowing a broader test of the hypothesis of urban-rural differences than has been possible in previous research.

Second, because the major defining characteristics which differentiated the helping measures were known ahead of time, a

useful basis existed for accounting for observed differences between helping measures. The existence of such a taxonomy, however, has implications which go beyond the present research on urban and rural helping. Such a taxonomy could be useful to other researchers in facilitating the comparison of separate studies, indicating the limits of empirical generalisations, and allowing the selection of helping behaviours for general research in this area. Some of the further implications of this taxonomic approach will be discussed in the final chapter of this volume.

In summary, the basic outline of this research may be presented as follows. First, it will attempt to provide basic descriptive data on the behavioural differences of people in urban and rural environments in relation to helping. The basic descriptive data, based upon a random selection of communities covering a wide geographical area and involving a systematic selection of minimally overlapping helping measures, should provide a general picture of the extent to which helping responses vary across diverse communities. This research will also present an illustration of how a taxonomic approach to a behavioural domain (such as helping) can be a useful strategy for researchers in social psychology. This research, however, will not allow a major theoretical synthesis or advancement in relation to the topics of helping behaviour or urban-rural differences in behaviour. It has been argued (Smithson, Amato, & Pearce, in press) that many areas of social psychology have advanced prematurely to the stage of testing theoretically derived hypotheses and have neglected the earlier but necessary stages of description and taxonomic classification. The contribution of this volume, therefore, will largely be pretheoretical.

However, although this work is largely descriptive and has not been principally concerned with testing theoretical predictions, theoretical linkages have been made at a number of places in this thesis. First, a number of theoretical perspectives have been advanced to account for behavioural differences between urban and rural dwellers, and these are reviewed in Chapter Two. These theoretical perspectives are then employed in Chapter Four to guide the selection of variables for study. This was done to allow the data collected in this research to have some relevance to a number of theoretical areas, albeit in a general way. Finally, in Chapter Eleven, the implications of the results for the various theoretical perspectives are more fully drawn out. Thus, while theoretical considerations are of secondary importance in this volume, the research conducted here still speaks to a number of theoretical issues and offers occasional clarifications. Finally, it must be pointed out that the present descriptive work is not intended to compete with other more theoretically oriented approaches. It is intended primarily to serve as an illustration of how a pretheoretical treatment of an area might provide a useful organising function to guide later theoretically based research. The remainder of this chapter will consist of a brief outline of the contents of the eleven chapters in this volume.

Chapter 1: This chapter has discussed the existence of two opposing stereotypes in our culture. One contrasts the unfriendly and unhelpful urbanite with the friendly and helpful small town dweller. The other contrasts the intolerant and suspicious small town resident with the more accepting and tolerant urbanite. Empirical evidence was reviewed from 18 field studies of helping

behaviour. Supplementary data were also considered from laboratory experiments, field studies of related forms of prosocial behaviour, and child-developmental studies. The overall weight of the data tentatively suggested a greater prosocial orientation on the part of rural dwellers (but with a considerable number of contradictory findings). Limitations of the existing research include a focus on helping behaviour between strangers rather than between friends and family and have not considered whether observed differences are due to personal characteristics of city dwellers and ruralites or to environmental variables. Metholodological criticisms of previous research were also presented, along with the outline of a strategy for dealing with these criticisms.

Chapter 2: This chapter reviews a number of theoretical areas relevant to the topic of prosocial behaviour in urban and rural environments. The areas reviewed are information overload theory, deindividuation theory, urban stress-pathology theory, social inhibition theory, the setting-mood perspective, the social-structural perspective, and the in-group/out-group perspective. Data relevant to each perspective are briefly reviewed and comments are made regarding the fit between each perspective and the evidence presented in Chapter One. It is noted that each perspective fits only limited sections of the existing research findings. This chapter concludes with a comparison of all theoretical areas on a number of dimensions, including the cause of differential rates of helping, the mechanisms linking environment to behaviour, and whether behavioural differences are seen as being generalised responses or situation-specific responses.

Chapter 3: In this chapter, the procedures used for creating an empirically-based taxonomy of helping are described. This chapter begins with a discussion of possible strategies for creating a taxonomy and argues that an emic taxonomy based upon people's perceptions of similarities and differences between helping episodes is useful for present purposes. The collection of a sample of helping episodes is described, along with procedures for obtaining similarity ratings from subjects. Multidimensional scaling procedures are then used to generate a three-dimensional model of helping. The resulting model is discussed briefly in light of previous research on helping behaviour.

Chapter 4: Chapter four describes the procedures which were used to generate a sample of six helping behaviours for study using the helping taxonomy developed in the previous chapter. Procedures are then described for selecting a stratified random sample of 55 communities in Queensland and New South Wales for field work purposes. Supplementary data are also collected on a number of community characteristics and these are factor analyzed to produce factor scores for use in subsequent analyses of intercommunity variation in levels of prosocial involvement.

Chapters 5 through 10: These chapters present six behavioural studies of urban-rural differences in helping behaviour. Study one (Chapter 5) is based upon an episode involving a request for a pedestrian to write his or her favorite colour for a student working on a class project. Study two (Chapter 6) is based upon an episode involving correcting inaccurate directions given to a person by a confederate. Study three (Chapter 7) is based upon an episode in

which a victim with a bloody and bandaged leg collapses on the sidewalk. Study four (Chapter 8) is based upon an episode in which workers for the Multiple Sclerosis society sell packets of greeting cards to pedestrians. Study five (Chapter 9) is based upon an episode in which envelopes are "accidentally" spilled on the sidewalk. Study six (Chapter 10) is based upon nonresponse rates to questions on the 1976 Australian census. In this study, nonresponse rates are conceptualized as unhelpful or uncooperative behaviour toward the federal government.

Chapter 11: The final chapter in this volume begins with a summary of the results of the six behavioural studies. General trends in the data are highlighted and these are presented in a number of summary figures and tables. The relationship of these data to the theoretical perspectives reviewed in Chapter two is briefly discussed. Differences between the results generated by different helping measures are interpreted in light of the helping taxonomy. The implications of these studies for future research on the prosocial responsiveness of urbanites and ruralites are considered. Finally, the general usefulness of the taxonomic approach adopted in the present research for research and theory in social psychology is discussed.

Chapter Two: Theoretical Perspectives

In this chapter, theoretical areas directly relevant to the topic of urban-rural differences in prosocial behaviour will be reviewed. While some of these areas involve a single formal theory, others consist of a collection of closely-knit points of view. Each in its own way, however, is concerned with the way in which urban and rural environments affect human social behaviour. Some of the perspectives to be reviewed in this chapter have been used by researchers to derive testable hypotheses about helping behaviour or have been used to explain research findings in an after the fact fashion. Other perspectives have potential relevance for this area of inquiry but have only rarely been referred to in the helping literature. Nevertheless, they are included here for the sake of thoroughness and logical completeness. The theoretical areas to be reviewed include information overload theory, deindividuation theory, urban stress-pathology theories, social inhibition theory, the setting-mood perspective, the socio-structural perspective, and the in-group/out-group perspective. A number of other areas, such as cognitive-developmental theory and social learning theory, could be discussed in this context. However, they are of somewhat less relevance than other perspectives in accounting for urban-rural differences in behaviour and have therefore been omitted from the present discussion because of space constraints.

It will become apparent to the reader that there is a substantial degree of overlap between many of the perspectives reviewed here. In certain cases, the point-of-view of a particular theorist could legitimately be discussed in relation to two or even

more of the above theoretical categories. Nevertheless, it is hoped that this "compartmentalization" of perspectives, while resulting in occasional oversimplifications, will highlight the main points of each so that differences in emphasis between the various perspectives will become clearer.

Unlike in many other social psychological theses, this theoretical material will not directly lead to hypotheses to be tested in subsequent chapters. Instead, the material reviewed here will serve to place the later empirical material in the general context of current social psychological thought on urban-rural environments. As argued in Chapter One, a great deal of pretheoretical, descriptive work has not yet been carried out in this, as in many other areas of social psychology. The primary purpose of this volume will lie in the development of a taxonomic classification of helping forms and the employment of this taxonomy in studying a systematic sample of helping behaviours in a randomly selected sample of communities. This descriptive account of behavioural differences across a variety of helping forms should allow a more precise understanding of the nature of urban-rural differences in prosocial behaviour. Once these descriptive data are available, the various theoretical perspectives can then be reviewed to see how well each is able to account for the results obtained. However, in many cases the theoretical perspectives make identical or nearly identical predictions about differences in helping, suggesting that no simple "critical test" of competing explanations may be possible. Indeed, as argued later in this chapter, many of these perspectives can be seen as complementary rather than competing explations for the prosocial responsiveness of people in

large cities and country areas.

The discussion of each theoretical area will begin with an outline of the main points and a discussion of the relevance of the perspective to the topic of urban-rural differences in helpfulness. A brief review of general empirical evidence supporting and not supporting the perspective will follow, along with comments regarding the fit between the perspective and the empirical evidence reviewed in Chapter One. After discussing all of the theoretical areas, this chapter will conclude with a comparison of the various perspectives on a number of relevant dimensions, including the cause of differential helping levels, the mechanisms linking environment to behaviour, and the presumed generality of the behaviour of urbanites and ruralites.

Information Overload Theory

The earliest formulation of this theory was by Simmel (1950) in an essay entitled "The metropolis and mental life". Simmel noted that urbanites tend to exhibit a "reserve", an "indifference" and even an "aversion" to one another. In contrast, rural life was described by Simmel as being warm and personal. To account for this typical mental attitude of reserve on the part of the urbanite, Simmel stated

> The psychological basis of the metropolitan type of individual consists in the intensification of nervous stimulation which results from the swift and uninterrupted change of outer and inner stimuli (p.

410).

According to this view, the rapidly changing and compressed quantity of stimulation in a large city exhausts the individual and decreases his or her ability to react strongly. To protect him/herself from a depletion of mental energy, the urbanite is forced to withdraw from social contact. He does this by adopting a more intellectual, impersonal attitude toward others.

This aloof attitude is strongly reinforced, according to Simmel, by the existence of a money economy which comes to produce a calculating attitude on the part of city dwellers, both toward things and toward other people. This urban emphasis upon strict reciprocity and the pursuit of self-interest was seen as being fundamentally different from the rural attitude which produces a "warmer tone of behaviour, a behaviour which is beyond a mere objective balancing of service and return" (p. 411).

Simmel's argument was adopted and extended by Milgram (1973, first published 1970) who introduced the concept of overload. Deriving the notion from system theory, Milgram defined overload as "a system's inability to process inputs from the environment because there are too many inputs for the system to cope with, or because successive inputs come so fast that A cannot be processed when input B is presented" (p. 2). When a system is overloaded, some sort of adaptation occurs. Systems typically adapt to these conditions by setting priorities and making choices about which inputs to process.

According to Milgram, the excessive demands of urban living produce a condition of "overload" in the individual. The overloaded urbanite adapts to this situation in a number of ways. First, less time is allocated by the urbanite to each input. Thus, a sales person in a large city store may spend less time on casual conversation and prefer to get down to business quickly as a strategy for coping with large numbers of customers. Second, low priority inputs are disregarded, as when an individual avoids talking to strangers in public places like buses or in queues. Third, boundaries are redrawn so that responsibilities are shifted to others. Thus, in many cities bus drivers no longer make change for their clients and insist, instead, that passengers have the correct change when boarding. Fourth, reception is blocked off so that inputs never reach the individual. An example of this would be the city dweller who prefers to have an unlisted telephone number to minimize the number of unwanted contacts. Fifth, the intensity of inputs is diminished by filtering devices, such that only superficial forms of involvement occur. Sixth, specialized agencies evolve to absorb excess inputs (such as police departments and welfare agencies), thus taking the onus off of the individual to respond.

One of the most important aspects of overload is a general decrease in the level of social and moral involvement among urban dwellers. On one level, this may involve adopting "an unfriendly countenance, which discourages others from initiating contact" (p. 3). On another level, it may mean that the urbanite comes to "totally disregard the needs, interests, and demands of those whom one does not define as relevant to the satisfaction of personal

needs" (p. 4). According to Milgram, this decreased level of social involvement is reflected in lower rates of bystander intervention in large cities.

Milgram argued that this decreased level of helpfulness in large cities is not due to any underlying pathology among urbanites. Instead, the contrast between city and country people reflects the responses of basically similar people to very different environments. However, because of the more or less constantly high level of stimulation present in large cities, norms of noninvolvement are developed over time. Indeed, according to Milgram adaptation to overload is a "gradual evolution of norms of behaviour" (p. 8). These norms, or generalised modes of response, were seen by Milgram as playing a positive role in helping the urban individual function in an otherwise frustrating environment, for without norms of noninvolvement to regulate behaviour between strangers, the urban dweller would be constantly distracted and exhausted by the sheer number of potential contacts and demands present in the urban environment.

The notion of overload was further developed and articulated by Cohen (1978). While Milgram's analysis focused mainly on the effects of long-term exposure to high levels of social stimulation on the evolution of norms of noninvolvement, Cohen's analysis exten ed the theory to include both short and long term exposure to stimuli of both a social and nonsocial nature. Furthermore, Cohen focused less upon norms of behaviour than the individual's short-term response to overload conditions. Cohen's formulation contained four major propositions. These were

1. Humans have a limited attentional capacity.

2. When the demands of the environment exceed capacity, attention is focused upon those inputs deemed most relevant to the task at hand.

3. The individual engages in a monitoring of stimuli to evaluate their significance and the appropriateness of various responses. Stimuli which are unpredictable and/or uncontrollable require a greater allocation of attention.

4. Prolonged expenditure of attention results in a temporary depletion of attentional capacity (fatigue). Recovery of capacity occurs after a period of rest.

Cohen used this model to account for a large number of studies, most dealing with task performance under a variety of laboratory conditions (such as noise and crowding). Because unpredictable and uncontrollable inputs require a substantial amount of attention to monitor and process, urban stressors such as noise and crowding were seen by Cohen as being especially demanding. Cohen argued that under conditions of overload an urban dweller may not perceive or be aware of environmental cues (either physical or social) which are deemed to be irrelevant to the current activity. As he stated, "interpersonal behaviour can be adversely affected when another's subtle (and sometimes gross) social cues are not processed" (p. 4). People in highly distracting urban environments1 therefore have less capacity to expend upon peripheral inputs which often include paying attention to and interacting with others.

According to this model, the effects of overload on helping behaviour can be profound and may occur in a number of ways. First, the urbanite may simply not notice that another person is in distress. Proposition three is particularly relevant here, since an unusual event (such as a person in distress) will require extra attentional capacity to process. Alternately, having noticed that something is unusual, due to a lack of available attention, the urbanite may be unable to properly evaluate the significance of the event, thus misperceiving the situation as one not requiring intervention. Finally the urbanite may correctly evaluate another's distress but be too fatigued to deal with it. In short, the attentional demands of intense, unpredictable and uncontrollable urban environments can lead to a (temporary) decrease in the level of prosocial responsiveness among urbanites.

A number of studies provide support for this theory. Cohen and Lezak (1977) conducted a study dealing with attention to social cues under conditons of noise. In this study, subjects were presented with pairs of slides, one containing a nonsense syllable and the other containing a social scene (half of which portrayed a person in distress). Subjects attempted to memorize the nonsense syllables under conditons of quiet or unpredictable noise. The results indicated that the nonsyllables (relevant task cues) were recalled equally well under noisy or quiet conditions. However, the content of the social slides (task irrelevant cues) was remembered less well in the noisy conditon than in the quiet conditon. Thus, the presence of the unpredictable noise was held to have decreased attentional capacity to the point where perception of irrelevant social cues (such as a person in distress) was impaired.

Further support for this notion was provided in a study by Korte and Grant (1980) which tested the hypothesis that an increase in environmental input level would lead to a lower awareness of objects and events in the environment. Subjects in this study were pedestrians walking along a city sidewalk during a high environmental load period (high traffic noise) or a low environmental load period (low traffic noise). Randomly selected pedestrians were interviewed for their awareness of certain persons and objects that were in the stretch of street they had just passed through. For this purpose, several novel objects had been placed along this route, including a group of balloons tied to a tree and a woman holding a teddy bear. Results indicated that under conditons of traffic noise, pedestrians noticed significantly fewer of the novel objects than under conditions of low traffic noise (35% versus 56%). Furthermore, during the noisy periods pedestrians were found to walk faster and to engage in more straight-ahead gazing than during the less noisy periods.

Consistent with these findings are the results of a number of studies indicating lower rates of helping behaviour under overload conditions. For example, two field studies found lower rates of helping under exposure to loud noise (Mathews & Canon, 1975; Page, 1977). In the Mathews and Canon study, noise provided by a nearby lawnmower decreased the amount of helping provided by pedestrians to a person dropping a pile of books. Furthermore, when the person in need wore a cast on his arm, helping responses increased in the low noise condition but did not increase in the high noise condition. This is consistent with Cohen's (1978) notion that under distracting conditions, subtle social cues such as an arm cast are unlikely to

be perceived, evaluated, and acted upon.

Two other field studies are of interest here. One study (briefly reviewed in Chapter One) conducted by Korte, Ypma and Toppen (1975) compared urban areas of high and low input level in the Netherlands. Environmental input level was determined by sound level, traffic density, pedestrian density, and the number of establishments in the area catering to the public. Three measures of helping were used: granting a short interview, picking up a dropped object, and giving directions to an apparently lost person. For the interview and directions measures, significantly higher helping rates were observed in the low environmental areas than in the areas of high environmental input. In another study (Cohen & Spacapan, 1978; cited in Cohen, 1978), subjects engaged in a complex or a simple shopping task under crowded or uncrowded conditions. Later subjects were exposed to a confederate who dropped a contact lens in a corridor. Those subjects exposed to the high load shopping task under crowded conditions helped least while those subjects exposed to the low load shopping task under uncrowded condition helped the most. The authors suggested that the lower rate of helping was due to the cognitive fatigue and depletion of attentional capacity resulting from the overload condition.

Further evidence for a link between overload and helping behaviour was provided in a laboratory study by Sherrod and Downs (1974). In this study, subjects engaged in a proofreading task while simultaneously monitoring a tape-recorded series of spoken random numbers. In the nooverload condition, the sounds of a seashore were played along with the numbers. In the overload

condition, Dixieland jazz and a man's voice reading prose were played. In a third condition, subjects were exposed to the same overload condition but were told that they could terminate the distracting sound effects whenever they wished. After the session, subjects were asked by a second experimenter for further assistance in pretesting some materials. Results indicated that subjects in the nooverload condition were the most helpful, subjects in the overload condition (without control) were the least helpful, and subjects in the overload conditon (with control) helped at an intermediate level. The authors concluded that even brief exposure to overload conditions can result in detriments in helping behaviour. Furthermore, they argued that perceived control mediated the negative effects of the overloaded setting. This finding also supports Cohen's (1978) contention that uncontrollable stimuli produce greater demands upon the individual's attentional capacity.

To summarize the material presented in this section, present research supports the idea that conditions of stimulus overload (multiple tasks, noise, high densities of people, etc.) inhibit helping behaviour. The overload perspective, with its image of the "overloaded" and therefore uninvolved urbanite is generally consistent with those studies reviewed in Chapter One of this volume indicating lower rates of helping behaviour among pedestrians in urban as opposed to nonurban environments. While Cohen's perspective, with its emphasis upon negative but short term reactions to overlaod, is most relevant to those studies measuring helping rates in the crowded, noisy downtown areas of large cities, Milgram's concept of generalized norms of noninvolvement may account more adequately for those studies finding lower helping levels among

urbanites contacted in their own homes (eg. House & Wolf, 1978; Levine, et al., 1976). Presumably, urbanites contacted in the privacy of their own homes are no more overloaded by stimulation than are rural dwellers. Hence, the concept of a generalized norm of noninvolvement appears to be a necessary supplement to Cohen's discussion of the short-term effects of overload in accounting for all of the studies reviewed earlier. Furthermore, the overlaod perspective is also consistent with those studies finding lower levels of affiliation among people in urban areas (eg., Newman & McCauley, 1977). The overload perspective, however, cannot account for those studies finding higher rates of helping for urban subjects or for those studies finding no difference between urban and rural samples. These divergent findings may be accounted for, however, by suggesting that in these studies helping rates in urban areas were measured at times, or in areas of, low environmental load (for example, after business hours or in residential areas). Such a situation might have occurred, for example, with the lost letter technique (Forbes & Gromoll, 1977) in which letters might not have been picked up during periods of high pedestrian density and noise but might have been picked up later under less crowded, quieter conditions. Finally, the information overload perspective cannot account very well for those studies finding a greater cooperative orientation on the part of rural-reared children.

Deindividuation Theory

The concept of deindividuation was introduced by Festinger, Pepitone, and Newcomb (1952) to describe a condition in which an individual's identity is temporarily submerged into a group. During

this time, the normal inner constraints regulating behaviour were seen to be relaxed and counter-norm behaviour expressed more easily. A later study by Singer, Brush, and Lublin (1965) also used the deindividuation concept. They conducted an experiment in which subjects in a low identifiability condition used obscene language more often than subjects in a high identifiability condition. Singer, et al. argued that the loss of a sense of distinctiveness (deindividuation) brought about by the condition of low identifiability resulted in the manifestation of normally inhibited behaviours (such as obscene language).

The deindividuation concept was further developed by Zimbardo (1969), and it is Zimbardo's formulation which the present discussion is largely based upon. According to Zimbardo

> Deindividuation is a complex hypothesized process in which a series of antecedent social conditions lead to changes in perception of self and others and thereby to a lowered threshold of normally restrained behaviour. Under appropriate conditions what results is the "release" of behaviour in violation of established norms of appropriateness (p. 208).

Zimbardo's social learning analysis suggested that inherently pleasurable, but disruptive, behaviours are normally restrained by both internalized social norms and external social sanctions. However, affect associated with these anti-social urges persists and builds up over time. It can be released when the internal or

external controls (or both) are temporarily weakened (disinhibition). Once deindividuated behaviour is initiated, it tends to be self-maintaining because it is rewarding. However, it can be terminated by changes in the environment or in the state of the individual.

Zimbardo argued that some of the behaviours associated with deindividuation could be positive, such as the open expression of love for others. However, the majority of deindividuated behaviours were regarded as being selfish, irrational, regressive, highly emotional, and destructive.

According to Zimbardo, certain conditions facilitate the state of deindividuation. These include anonymity, diffusion of responsibility, a high level of arousal, the presence of a group, changes in temporal perspective, intense sensory stimulation, novel or unstructured situations, and altered states of consciousness. These conditons minimize both self-observation and self-evaluation, as well as the individual's concern with how others are evaluating him or her. With the normal controls of guilt, fear, and commitment to personally held standards weakened in these ways, the expression of normally inhibited behaviour becomes possible.

Inspection of the conditions listed by Zimbardo which are favorable to deindividuated behaviours reveals that many of these conditions are typically encountered in large urban areas. In cities, large numbers of people are likely to be present, and intense sensory stimulation in the form of unpredictable noise, complex visual arrays, and movement is common. These conditions are likely to generate high levels of arousal in urbanites (Mehrabian &

Russell, 1974). Furthermore, the large number of people, and the large scale of the urban environment, is likely to foster feelings of anonymity (Milgram, 1970; Wirth, 1957) and decreased personal responsibility (Latane & Darley, 1970).

Zimbardo's discussion is clearly consistent with this conclusion. In fact, as part of a demonstration of deindividuated behaviour, Zimbardo had an "abandoned" automobile left on a street in the Bronx area of New York City and a similar automobile left in a suburb of Palo Alto, California. Within three days the automobile in New York City was stripped and totally destroyed. The automobile in Palo Alto, however, was left untouched (except for a passer-by who lowered the hood so rain could not get in). According to Zimbardo

> We might conclude from these preliminary studies that to initiate such acts of destructive vandalism, the necessary ingredients are the acquired feelings of anonymity provided by the life in a city like New York, along with some minimal releaser cues (p. 224).

It can be argued that a state of deindividuation will not only lead to the exhibition of anti-social, selfish forms of behaviour, as Zimbardo and others have argued, but to the inhibition of prosocial forms of behaviour as well. Both personal norms and external rewards have been posited to motivate prosocial forms of behaviour (Rushton, 1980). If a deindividuated individual responds less to both internal standards and external controls, then

altruistic forms of behaviour should generally be less likely to be exhibited. Furthermore, the state of deindividuation (involving a heightened level of arousal, concentrated time perspective, and perhaps an altered state of consciousness) might interfere with the conditions necessary for a state of empathy to be experienced by a potential helper.

A different aspect of deindividuation, and one relevant to the present argument, was proposed by Baron and Rodin (1978). They argued that deindividuation can also involve the attempt to deindividuate others. This can happen when an individual is in an overcrowded situation or one of social stimulus overload. Baron and Rodin argued that one strategy for regaining some measure of control over these situations is to treat other people as if they are objects, a strategy which simplifies a complex environment and makes it easier to deal with. Because crowding due to physical objects is less stressful than crowding due to the presence of other people, the individual experiences less stress in the "deindividuated" environment.

It is apparent that if urban dwellers use this strategy to deindividuate (or dehumanize) others into mere objects, the likelihood of sympathetic prosocial involvement with others is lessened considerably. An individual confronted by a person in distress who has been redefined as an object would be unlikely to feel any moral obligation to lend assistance. Furthermore, little empathy is likely to be generated by observation of a deindividuated victim's suffering.

Unfortunately, no attempts have been made to directly demonstrate that a state of deindividuation results in a lower level of prosocial behaviour. However, previous research has indicated that conditions fostering a state of deindividuation are associated wtih the exhibition of anti-social forms of interpersonal behaviour. For example, Jorgenson and Dukes (1976) observed university students in a cafeteria under crowded and uncrowded conditions. Students in the high anonymity periods were found to be less inhibited about breaking cafeteria rules than students in less anonymous periods. In another study conducted by Mann, Newton and Innes (1982) subjects were led to believe that they were administering potentially painful noise to two confederates wearing earphones as part of an experiment on the effect of noise on interpersonal interaction. Subjects administered the noise under either anonymous or identifiable conditions. Results indicated that subjects under anonymous conditions administered higher levels of aversive sound than subjects under identifiable conditions. Furthermore, when a group norm to inflict low levels of aversive noise was seen to be in effect (as indicated by a panel revealing the average level of noise administered by all subjects), anonymous subjects used just as much noise as when a more severe group norm appeared to be in effect, suggesting that the condition of anonymity was more important that the appearance of a group norm in affecting behaviour. In addition, mood ratings of subjects suggested that a psychological state of deindividuation mediated the effects of anonymity.

In a study dealing with the effect of anonymity on helping behaviour, Solomon, Solomon, Arnone, Maur, Reda, and Roth (1981) found rates of helping to be higher when subjects were more

identifiable. In one study, subjects about to enter an elevator in a department store were exposed to a confederate who gave eye contact and smiled. A second confederate approached and said that she had lost her glasses and could not read the store directory to find the floor she wanted. Subjects who were given eye contact and a smile (and presumably felt less anonymous) helped significantly more often than subjects who were not given eye contact and a smile (70% versus 35%). In a similar study, subjects who were approached by a confederate pretending to mistake them for an acquaintance later helped more than subjects who were not approached in this manner. In a third study, a confederate dropped a contact lens either near people sitting in the stands at a sports event or near people standing in a nearby corridor. It was assumed that people in the stands, who were season ticket holders, would feel more identifiable than people in the corridors. Results indicated that people in the identifiable seats helped significantly more than people in the "anonymous" corridors (45% versus 73%). Therefore, available research suggests that conditions of anonymity or low identifiability lead to a greater likelihood that anti-social forms of behaviour will be exhibited and a lesser likelihood that prosocial forms of behaviour will be exhibited.

The deindividuation perspective is consistent with the results of a number of field studies of urban-rural helpfulness reviewed in Chapter One of this volume. Deindividuation theory predicts that people in large urban settings, especially when they are "isolated" in large crowds, will behave in ways which are more selfish and aggressive than are typical of their behaviour under other circumstances. Thus, deindividuation theory suggests that urban

unhelpfulness, as well as other more extreme forms of behaviour such as mob violence, may be the product of certain environmental conditions which are more likely to be encountered in large urban areas than in rural settings. Deindividuation theory thus suggests that urban unhelpfulness is a transitory, situational phenomena, and not a personality characteristic or generalised mode of response on the part of urban dwellers. Thus, field studies showing lower rates of helping behaviour in urban downtown areas when compared to rural areas (eg., Amato, 1981; Merrens, 1973; Rushton, 1978) are consistent with this perspective. However, those studies showing lower rates of helping behaviour among urban subjects contacted within their own homes either for an interview (House & Wolf, 1978) to make a telephone call (Levine, et al., 1976) or to assist a wrong number caller (Korte & Kerr, 1975) are difficult to explain from this perspective, for it is unlikely that urban dwellers would be deindividuated within their own homes. This perspective, of course, also cannot account for those studies reviewed earlier which found higher rates of helping for urban subjects than rural subjects, or for those child-developmental studies indicating urban-rural differences in cooperative and competitive orientations. Furthermore, it is not clear whether deindividuation theory can account for those studies reviewed in Chapter One indicating lower levels of affiliative behaviour in urban settings, for the deindividuated individual, although less altruistic, may not necessarily be less affiliative. Indeed, mob behaviour, said by Zimbardo to be a form of deindividuated behaviour, suggests that affiliative behaviour is still characteristic of the deindividuated urbanite.

Urban Stress-Pathology Theories

The perspectives reviewed in this section can be seen as similar in that they see urban environments as creating stress for the individual. An accumulation of stressors over time is said to have detrimental effects on the personality, health, and social behaviour of the urbanite. These perspectives, therefore, would interpret urban unhelpfulness as a pathological side-effect of life in large cities. The term "pathological" is used here in two senses. First, it is used in the strict sense that social behaviour is the product of a disordered or disturbed personality. Alternately, the term is used here in the sense that the behaviour in question is maladaptive, maladjusted, regressive, or abnormal. In both senses, the individual is seen as being unable to cope adequately with a stressful environment, the result being a long-term detriment in both psychological and social functioning.

It is well known that a large number of "social pathologies" are more common in cities than in country areas. These include rates of violent crime such as assault and rape, juvenile delinquency, burglary and robbery, drug addiction, alcoholism, and divorce (Mckee & Robertson, 1975). While explanations for these phenomena have made reference to variables such as poverty, racial discrimination, and unemployment, explanations based upon concepts of environmentally induced stress are of special interest here. Stress has been defined as affective, behavioural and physiological reponse to aversive stimuli (Applev & Trumbull, 1967). Sources of urban stress include crowding, exposure to loud and unpredictable noise, litter, air pollution, the hectic pace of life,

discrimination, and bureaucratic regulation. Furthermore, the side-effects of stress may also, in turn, act as stressors. Particularly, the simple awareness that they exist may be stressful to urban residents. However, of all the urban stressors which can be enumerated, crowding has undoubtedly received the most attention from both theorists and researchers. It will be the first urban stressor discussed here.

The effects of crowding

The basic model underlying much of the work on crowding is that high densities of people can result in a psychological experience of crowding, aspects of which involve a lack of privacy (Altman, 1975), interference with freedom of choice and goal attainment (Proshansky, Ittelson & Rivlin, 1976), lack of control over the initiation and termination of interaction (Baron & Rodin, 1978), high levels of arousal (Mehrabian & Russell, 1974) and intrusion into personal space (Hall, 1969). Crowding leads to coping behaviour on the part of the individual which, if unsuccesful, produces stress. Stress uses up the individual's psychological and physiological resources and, over time, produces behavioural and psychological impairments (see Stokols, 1978 for a discussion of the crowding concept).

Early attention was focussed upon the stressful effects of crowding by animal research conducted by Calhoun (1962). In these studies, Norway rats were kept in large cages in which they were given sufficient amounts of food and water. However, the number of rats in the confined areas was allowed to increase until population densities became extremely high. The resulting situation was

described by Calhoun as a "behavioural sink" in which all of the normally occurring pathologies in the group were aggravated: levels of aggressive behaviour increased, nest-building was disrupted, females neglected their offspring, fertility rates decreased, mortality rates increased, and many rats exhibited a complete withdrawal from group activities. According to Calhoun, the high population densities in the cages restricted the amount of space or territory available to each animal leading to a disruption of the normal social functions of the group, social disorganisation and eventual population collapse. Supporting research, involving Sika deer on an island off the coast of Maryland, indicated that when population densitites became high (up to one deer per acre) mortality rates increased dramatically and population size collapsed. Examination of animal carcasses revealed grossly enlarged adrenal glands, suggesting that the deer had been subjected to high levels of crowding-induced stress (Christian, 1963, cited in Hall, 1969).

These concerns led to a substantial amount of research being conducted on the effects of high population densities in human populations. Methodologically, two types of research can be distinguished: sociological studies using correlational techniques to relate rates of social pathologies to human densities and laboratory simulations investigating the effects of temporary high density conditions on human performance, affect, and interpersonal behaviour. It is not possible here to review this voluminous literature; reviews have been provided by Sundstrom (1978) Shopler and Stokols (1976) Kirmeyer (1978) and Altman (1975). A few brief examples of these studies, however, will be presented to illustrate

the major trends in this research.

Correlational research has relied upon a number of indices of density, including the number of people per acre or square mile and the mean number of people per room per household. In one influential study based upon data from 75 districts in Chicago, Galle, Gove and Mcpherson (1972) found a number of density measures to be positively related to mortality rates, low fertility rates, admissions to mental hospitals, and rates of juvenile delinquency. In spite of a problem with multicollinearity in the data (social class was associated with both density and pathology measures) the authors concluded that high population density was at least partially responsible for the high social pathology rates. In another study of this nature, Booth (1976) correlated indices of population density with rates of homicides and riots in 65 nations. The density measures were found to be significantly and positively associated with both homicides and riots. Booth argued that the heightened level of interaction under high density conditions produces frustration which leads to violence. In another study, Schmitt (1957) found that areas of high population density in Honolulu tended to have higher rates of adult crime and juvenile delinquency. Finally, Faris and Dunham (1965) found that rates of mental illness were higher in more densely populated inner city areas than in less densely populated outer suburban areas.

Laboratory studies have also frequently reported negative effects of high density conditions. Griffit and Veitch (1971) had subjects evaluate a stranger while in either small or large groups in either a comfortably cool or an uncomfortably warm setting.

Results indicated that subjects liked the stranger more in the cool, uncrowded setting and reported more negative feelings in the hot, crowded room. Valins and Baum (1973) studied subjects from dormitories who lived either in crowded corridor rooms or uncrowded suites. In this study, subjects sat in a waiting room with a confederate while they were unobtrusively observed. Results indicated that subjects from the crowded rooms sat further away from the confederate, spent less time looking at him, and talked with him less than did the subjects from uncrowded rooms. Additional research has found high-density situations to be associated with high blood pressure (D'Atri, 1975) and higher levels of adrenaline excretion in urine samples, suggesting higher levels of stress (Singer & Lundberg, 1978). Furthermore, children in high-density play groups have been observed to be both more aggressive and more withdrawn (Hutt & Vaizey, 1966).

Finally, one study indicated that living under high density conditions can affect subsequent levels of helping behaviour. Bickman, et al. (1973) distributed "lost" letters in university dormitories of either high, medium or low population densities. The return rates for the three dormitories were, respectively, 63%, 87% and 100%. Questionnaires dealing with prosocial involvement were also filled out by residents of each dormitory. The results indicated a higher prosocial inclination on the part of residents of the least crowded dormitory while residents of the high-density dormitory generally responded in the least prosocial manner.

To summarize the above material, high density conditions have been found to be associated with social pathologies such as crime rates and admissions to mental hospitals, negative affect, decreased liking for others, socially withdrawn behaviour, physiological symptoms of stress, aggressive behaviour, and decreased helping behaviour. It can be assumed from the crowding perspective that while the high population densities of large cities may result in severe maladjustment problems for some people, crowding may affect the majority of urbanites in important but less debilitating ways. These stress-related behaviours may not reflect an extreme pathological condition, but may nevertheless involve irritability, withdrawal, and a decrease in the level of prosocial involvement with others. Furthermore, these affective and behavioural correlates of crowding may involve relatively long-term changes in the urbanite's orientation toward others. Of course, most of the research on crowding has been done in American settings. It is not clear to what extent these findings may be cross-culturally generalisable.

Furthermore, not all research on crowding has revealed negative effects. For example, Freedman, Klevansky and Ehrlich (1971) found no decrements in task performance under crowded conditions when subjects worked on either simple or complex tasks such as crossing out letters from texts, forming words from letters, identifying uses for objects, and engaging in a group discussion. Other studies of performance on various psychomotor tasks revealed no negative effects of crowding (Rawls, Trego, McGraffy & Rawls, 1972). In some cases, the presence of others has even produced positive "audience" effects (cf. Zajonc, 1969), particularly for well rehearsed

behaviours. In a series of correlational studies, Freedman and his associates (Freedman, 1975; Freedman, Heshka & Levy, 1973) examined the relationship between density and crime rates. In one study of 97 metropolitan areas in the United States, density was found to be unrelated to crime once other variables such as ethnicity and poverty were partialled out. In a second study, data from 338 health areas in New York City were analyzed. While density measures were found to be correlated with a number of pathology measures such as psychiatric admissions and juvenile delinquency, income and ethnicity yielded much higher correlations. Furthermore, density accounted for little of the variance once income and ethnicity were partialled out. In another study based upon data from 243 American cities, Dye (1975) found little evidence for a density-pathology link. Instead, for every measure of social pathology, demographic variables such as ethnicity and social class accounted for substantially more of the variance. Finally, Mitchell (1971) found that rates of pathologies in Hong Kong, the most densely populated city in the world, were quite low in comparison to many Western cities.

Another problem for the urban density-pathology model concerns one of the frequently used measures of density: the number of people per room. This measure is actually negatively correlated with city size, indicating that rural areas typcially have the highest levels of residential density (kirmeyer, 1978). Thus, even if people living under more crowded residential conditions are more inclined toward various pathologies, this cannot explain the higher rate of social pathologies in urban areas. The substantial number of counter findings, and problems such as the one just noted, have

led a number of writers to conclude that there are few or no negative effects associated with high population densities in urban areas (Freedman, 1975; Kirmeyer, 1978).

The effects of noise

Another major source of urban stress is loud and unpredictable noise. Glass and Singer (1972, 1977) argued that uncontrollable and unpredictable noise create substantial stress for the individual. They hypothesized that exposure to uncontrollable and unpredictable noise (as well as other urban stressors) produces a "behavioural deficit" which does not wane with repeated exposure. This deficit results from the fact that individuals must expend "psychic energy" in coping with stress. In the short-term this behavioural deficit was said to involve decreased task performance, a higher level of frustration, a decreased tolerance for further frustration, aggressiveness, exploitive behaviour, decreased liking for others, and general irritability in interpersonal behaviour. Laboratory studies conducted by Glass and Singer (1972) indicated that subjects exposed to loud and unpredictable noise for 25 minutes exhibited a number of negative after-effects, including poor task performance and decreased tolerance for post-noise frustration. These after-effects occurred in spite of the fact that physiological indices (such as GSR) indicated that habituation, or adaptation, had occurred (assumming, of course, that adaptation has a physiological basis). Glass and Singer argued that humans are capable of adapting to stress in a number of ways. However, in spite of the fact that adaptation occurs, prolonged exposure to noxious stimuli eventually takes its toll on the organism. Long-term effects associated with

urban stress were said to include physical disease, psychosomatic disorders, performance and learning deficits, and general social-emotional maladjustment.

A number of other studies have indicated negative effects of exposure to loud noise. For example, Jansen (1961) reported that steelworkers in the noisiest work settings had a higher frequency of social conflict at home and at work. McLean and Tarnopolsky (1977) found that people living within three miles of Los Angeles airport had a 29% higher rate of nervous disorders than people living six miles away. Similarly, people living near London's Heathrow airport had a 31% higher rate of nervous disorders. Research reviewed by Cohen and Weinstean (1981) generally indicates that exposure to noise under laboratory conditions has been found to be associated with poor task performance and higher levels of aggressiveness. Field research has also shown lower academic achievement and ability among children living in noisy residential areas or attending schools in noisy areas. Furthermore, admission rates to mental hospitals have been found to be slightly higher in noisy areas, and people living under or working under noisy conditions have been found to have a higher than average number of health problems.

Of particular interest here is the finding that noise has been demonstrated to have generally negative effects on prosocial behaviour as well. Appleyard and Lintell (1972) studied social behaviour on three city streets in San Francisco, one with light, one with moderate, and one with heavy traffic noise. The findings indicated that substantially more casual social interaction took place on the street with the lighest traffic noise. Furthermore,

people living on the heavy traffic street reported it as being a "lonely" place to live. Mathews and Canon (1975) and Page (1977) both found that subjects exposed to high levels of noise in a field setting subsequently engaged in less helping behaviour toward a confederate than subjects not exposed to the noise. In addition, Pearce and Promnitz (1982) found that noisier road side areas along highways were liked less and users reported a desire to rest in these environments for shorter periods of time and interact with fewer fellow highway users.

Glass and Singer also argued that unpredictable noise (or any unpredictable stressor) is more aversive because it induces a feeling of helplessness in an individual who is not able to predict or control its onset. They were able to demonstrate that giving experimental subjects control over the noise source reduced both the aversiveness of the noise and its negative after effects. According to Glass and Singer, the anxiety associated with being unable to control a source of stress places even further demands upon the individual's defenses. Other researchers have also argued that control mediates the negative effects of urban stressors. Baron and Rodin (1978) argued that crowding can result in an undermining of feelings of choice and general control over social outcomes. According to this position, crowding is only stressful to the extent that it interfere's with perceived control. Sherrod and Downs (1974) also emphasized the importance of perceived control in mediating the effects of stimulus overload. In their study (reviewed earlier in this chapter), subjects working in an "overloaded" setting subsequently helped a confederate less than did subjects working in a non-overloaded setting. However, subjects in

the overloaded setting who were given control over the termination of stimuli did not exhibit a subsequent decrease in helping behaviour.

As Glass and Singer (1972) noted, their position is similar to Seligman's (1975) notion of learned helplessness. Over time, an individual may come to believe that his responses do not affect his or her outcomes. An individual who believes that events cannot be controlled will be less likely to learn new ways of affecting events and thus determine future outcomes. It can be argued from this perspective that urbanites exposed to high levels of noise, crowding, and other stressors might adopt a fatalistic attitude toward the urban environment. An individual suffering from learned helplessness may be unresponsive to an emergency in which intervention is required because he or she may believe that intervention is futile. Other forms of helping, such as donating to charities, may also be inhibited because the individual believes that little good can really be accomplished. Such behaviour is clearly maladaptive because by failing to act, the individual never has the opportunity to learn that what he or she does can make a difference. Instead, the individual's extreme passivity, lack of control, and impotence become self-fulfilling and self-perpetuating.

Other sources of urban stress

Detrimental effects of crowding and noise may be reinforced by other urban stressors, such as pollution. Evidence reviewed by Evans and Jacobs (1981) indicates that exposure to air pollution has been found to be associated with decreased task performance,

decreased sensorimotor coordination, decrements in memory, decreased work capacity, irritability, aggression, negative mood states, and lower levels of attraction for both similar and dissimilar others. In addition, a study by Cunningham (1979) indicated that subjects exposed to heightened levels of sulpher dioxide were less willing to fill out a questionnaire than subjects in a control condition. Many of the negative effects which have been documented have occurred when levels of pollutants are so low as to be below sensory thresholds. Thus, the effects of air pollution on human behaviour in cities such as Los Angeles and New York City, where pollution levels are often extremely high, may be profound.

Another souce of urban stress may be the extent of bureaucratic regulation in metropolitan areas. Research conducted by Shaban and Welling (cited in Glass & singer, 1972) simulated an experience with a frustrating bureaucracy. Results indicated a post-frustration decrease in cognitive efficiency as measured by a proofreading task. Furthermore, subjects in this study who attributed their difficulty to a larger system over which they had little control behaved more passively during the experimental session, while subjects who attributed their trouble to a specific bureaucrat behaved in a more reactive and negative fashion.

The autonomy-withdrawal syndrome

Before concluding this discussion of urban stressors, a general theory of urban behaviour which relied heavily on the notion of urban stress will be briefly reviewed. This is the automony-withdrawal theory of Alexander (1973). According to

Alexander, intimacy is necessary for normal and healthy psychological functioning. However, before intimacy can be achieved, people need to see each other frequently, perhaps daily, and they must see each under under informal conditions. In an earlier age, intimate contacts were provided through frequent interaction in primary groups. However, in recent times, the family has decreased in size and influence and the local neighborhood has largely disappeared. Instead of primary groups, life in modern urban areas in largely based upon secondary contacts, making it difficult to both establish and maintain intimate relationships.

According to Alexander, the breakdown of intimacy, the disruption of the primary group, the rise of individualism, and withdrawal from the stress of urban living produce a syndrome called the "autonomy-withdrawal" syndrome. Because of the stress present in large urban environments, urbanites are forced to retreat to the privacy of their homes where they are buffered from the larger world. As Alexander stated

> The man who lives in modern urban society is exposed to innumerable stresses: danger, noise, too many stressors, too much information, and above all, the need to make decisions about the complexities of personal life without the help of traditional mores. These stresses are often too much to bear, so he withdraws from them. He draws a cloak of impenetrability around him, to ward off the too many strangers he meets in the street; he locks his door; he lives buried beneath a system of

> elaborated social and behavioural defences against unwelcome and unbidden intrusions from outside...In its extreme form, this withdrawal turns into schizophrenia (p. 253).

One of the characteristics which most differentiates urbanites from ruralites, according to this view, is the extreme individualism of the former group, a trait which Alexander describes as "a pathological overbelief in the self-sufficiency and independence of the individual" (p. 254). Thus, the individual, deprived of the intimate contacts needed for support and forced by the stresses of urban life to withdraw into him/herself, suffers from loneliness and alienation. In its extreme form, the autonomy-withdrawal syndrome is responsible for the social pathologies associated with urban areas, such as mental disorders and juvenile delinquency. To support this contention, Alexander reviewed studies indicating that rates of schizophrenia and other mental disorders are highest among "unattached" people who have few or no close friends, and are higher among single, widowed or divorced people than among married people.

Although not referred to by Alexander, another supporting line of work is Barker's (1968) ecological psychology. According to research conducted by Barker and his asscciates, people living in small towns occupy a larger number of social roles than do people in large cities. However, Barker did not suggest that this restriction of social roles among city dwellers had pathological implications.

This view of the alienated and withdrawn urbanite is undoubtedly shared by many lay people. Generally, the perspectives presented in this section describing the stressed, frustrated, and

anti-social urbanite are consistent with those studies reviewed in Chapter One of this thesis indicating lower rates of helping behaviour and lower levels of affiliation among urban subjects. However, this picture of the "pathological" urbanite has been contested by a number of writers. In contrast to Alexander, Wayne (1972) has argued that the present evidence suggests that urbanites are no more lonely, isolated, or friendless than their rural counterparts. Writers such as Mercer (1975) and Fischer (1978) have argued that the notion of the urbanite being constantly bombarded by noise, crowds, and excessive demands is essentially an atypical picture. They argue that the urban dweller only immerses him/herself in the crowded, highly stimulating, and stressful areas of the city for relatively short periods, the majority of time being spent in more private and quiet circumstances. As Fischer (1978) has argued.

> The subway-at-rush-hour image of urban life is not typical; rather it is atypical of reality. It ignores so much of city life, including the housewife alone at home in a residential district, the communters who drive their own cars to spacious offices, and pensioners in their own apartments on deserted side streets. Quiet, residential avenues are more typical of even our largest metropolitan areas than is 42nd street in Manhattan (p. 135).

However, it should be noted that the majority of field studies reviewed in Chapter One which found less helping behaviour among urban samples in comparison to rural samples were conducted in the

downtown commercial districts of large cities. As such, these would be among the most stressful areas of cities in terms of both crowding, noise, and pollution. According to Fischer's argument, these areas would be rather atypical and so might give a misleading impression of the actual level of urban helpfulness and involvement with others. Nevertheless, a number of studies have found that urbanites contacted in their own homes (where presumable, levels of immediate stress are lower) still exhibited lower levels of helpfulness than did ruralites (House & Wolf, 1978; Levine, et al. 1976; Korte & Kerr, 1975). Therefore, it can still be argued from the urban stress-pathology perspective that urban dwellers suffer from long-term decriments in social behaviour due to repeated exposure to uncontrollable and unpredictable stressful environments. However, many aspects of the urban stress-pathology perspective remain rather speculative, and a considerable amount of counter-evidence exists in relation to certain urban stressors such as crowding. Furthermore, the extreme nature of this perspective's view of urban social behaviour suggests that its conclusions should be treated cautiously.

Social Inhibition Theory

The social inhibition perspective derives from the work of Latané and Darley (1970). Their classic work on bystander intervention was prompted by the Kitty Genovese murder in New York City and the massive public attention which this incident aroused. The large public outcry following this story was not so much a reaction to the murder itself but to the fact that 38 witnesses observed the attack from their apartment windows, yet not one

directly intervened or even called the police until the attack was over. Media commentators, psychiatrists, and others blamed the incident on urban apathy, cynicism, or dehumanisation. As Latané and Darley (1970) noted

> explanations for similar incidents suggest that people have grown increasingly alienated from the norms and institutions of our Judaeo-Christian society. They imply the emergence of a new kind of man "homo urbanis", who has adapted to the pressures caused by the increasing urbanisation of life by turning other people into objects, by loosing human feeling for them, and by rejecting the moral imperative to help another in distress (p. 4).

However, Latané and Darley took issue with these types of pathology, personality-based explanations and argued instead that cases of bystander nonintervention can be explained more adequately by situational variables such as the number of bystanders present at the scene of an emergency. They hypothesized that the greater the number of people present at an emergency (or other situation in which helping is required), the smaller the likelihood that any particular bystander will intervene. The presence of crowds, therefore, rather than providing "strength in numbers" as common sense suggests, can actually inhibit intervening and helping behaviours.

According to Latané and Darley (1970) before intervention will occur, a number of steps in a decision-making process must be carried out by the bystander. These steps are

1. The individual must notice that something unusual is occurring.

2. The individual must define the event as an emergency.

3. The individual must define the situation as one requiring his intervention, that is, the bystander must perceive that he has a responsibility to act.

4. The individual must decide what type of help is required.

5. The individual must decide how to implement his decision to help.

The wrong decision at any step in this process can mean that successful intervention will not occur. The presence of other people can influence the individual at all five steps in the process, but the first three are the most critical since they determine if any help form of help will be given or not.

The first step, noticing that something out of the ordinary is happening, can be affected by the distracting influence of large crowds. As Latané and Darley (1970) argued

> A person pays only selective attention to his environment. Car horns honk, breaks squeal, steam billows from manholes, and the average city dweller

> walks on obliviously. As a person continues to live in any environment, he adapts to it and learns to block out certain aspects of it. In so doing he may block out attention to things that signal emergencies (p. 32).

Thus, the urbanite walking along a crowded city street may simply not notice the body lying in the alley or the smoke emerging from a window (in this sense, Latané and Darley's perspective is very similar to the perspective of information overload theory).

Once an individaul notices that something unusual is occurring, he or she must define it as an emergency. If a number of people are together, each may look around to see how others are reacting. However, people are often afraid to show strong emotions in public and may be concerned that they will look foolish if they perceive the situation incorrectly. Thus, a state of "pluralistic ignorance" can develop in which each bystander waits for someone else to be the first to act. Because no one behaves as if an emergency is occurring, each bystander may come to define the situation as a nonemergency not requiring intervention. The result can be that no one helps.

This notion received support from two studies. In one (Latané & Darley, 1968) smoke entered a room while subjects worked on questionnaires. Two dependent variables were measured: whether the subject reported the smoke to someone and the latency of reporting. While the smoke was usually quickly reported by most subjects working alone, the smoke was reported considerably less frequently

and speedily when three naive subjects worked together. Further, the presence of two unresponsive confederates reduced the frequency and speed of reporting even more. In a second study (Latané & Rodin, 1969) subjects worked on a questionnaire either alone, with a friend, with a second naive subject, or with a passive confederate. A woman running the session who was pretending to be working in the next room suddenly screamed and shouted for help. Prerecorded sounds simulated the fall of a chair, a body, and books. Subjects who were alone helped 70 percent of the time, compared to 40 percent for the pairs of naive subjects and only 7 percent for the subjects with a nonresponsive confederate. Subjects waiting with a friend helped less often than expected when compared to single subjects, but helped more often that the pairs of naive subjects. Thus, the presence of a friend decreased helping less than the presence of a stranger, presumably because subjects were not so inhibited about reacting to the situation in front of a friend. (These findings also have relevance to the deindividuation perspective, since subjects waiting with a friend were more identifiable than subjects waiting with strangers.).

The third step in the decision-making process requires that bystanders not only define the situation as an emergency but also accept personal responsibility for acting. Latané and Darley argued that when only a single person is present, the person will feel a strong obligation to intervene because he or she is the only person capable of responding. However, when there is a group of people present, responsibility may get diffused among all the potential helpers. Each person may feel that with so many other people available to help, there is little reason for him or her to be the

one to intervene. Thus, a situation can emerge in which no one accepts the responsibility for acting.

Support for this notion was provided by Darley and Latané (1968) in which subjects sat in a cubicle connected to others by an intercom. During a discussion, the subject heard another subject (actually a confederate speaking on a pre-recorded tape) appear to have an epileptic seizure. When subjects believed they were alone with the victim, the frequency of intervention was quite high. However, when the subject was led to believe that other subjects were also hearing the victim, rates of intervention were much lower. Presumably, subjects in the latter condition, although concerned about the victim, were inhibited from helping by the belief that other people should have (or might have) assisted him.

These studies, and others, led Latané and Darley to conclude

> The presence of other peple serves to inhibit the impulse to help. If each member of a group of bystanders is aware that other people are also present, each will be less likely to notice the emergency, less likely to decide that it is an emergency, and less likely to act even if he thinks there is an emergency. These effects are due to the fact that each person can both see and be seen by others (p. 38).

Latané and Darley therefore argued that rates of bystander intervention are lower in large cities, not because of any inherent

personality differences between urbanites and ruralites, but because emergencies and accidents in urban areas are more likely to be witnessed by large crowds. Presumably, if urbanites are in a situation in which they notice that something is wrong, are not fooled by the hesitancy of other bystanders, and have no other people nearby to whom they can diffuse resposibility, then they will help as frequently as small town people. While Latané and Darley's model was mainly developed to account for bystander intervention in emergencies, the diffusion of responsibility notion appears to be relevant to non-emergency forms of intervention as well (Latané & Dabbs, 1975).

This mode is consistent with a number of field studies reviewed earlier in this chapter which found higher rates of helping behaviour for people in small towns when compared to people in large cities (eg., Amato, 1981a; Merrens, 1973; Rushton, 1976). Furthermore, two of these studies (Kammann, Thomson, & Irwin, 1970; Krupat & Coury, 1975) suggested that immediate pedestrian density, rather than city size, was the major operating variable. Supporting data is also found in other research as well. Latané and Dabbs (1975) found that investigators who "accidentally" spilled pencils in elevators were helped less often under crowded conditions than under uncrowded conditions. Similarly, research by Amato (1981c) found higher rates of helping in a city mall when the area was uncrowded than when the area was crowded. Each of these studies indicated that when a greater number of bystanders were present, help was less likely to be given.

However, the results of a number of field studies are not explicable within the framework of Latané and Darley's model. For example, in the study by Korte and Kerr (1975) a wrong number caller who had just used his last dime asked the person answering the telephone to relay a message. In spite of the fact that responsibility could not be diffused in this situaiton, rates of helping were still lower in urban areas than in nonurban areas. Similar results were reported by House and Wolf (1978) and Levine, et al. (1976). Furthermore, the child-developmental studies reviewed in Chapter One indicating more cooperative game playing behaviour on the part of rural children and more competitive game playing behaviour on the part of urban children cannot be explained within the framework of Latané and Darley's model. Therefore, this perspective appears to be somewhat limited in the range of data to which it applies.

Setting-Mood Explanations

Theories reviewed in this section deal with the effects of urban and rural (and other) environments on the emotional states of individuals. Affect is then used as a mediating variable to account for differences in levels of prosocial behaviour in these environments. The first perspective to be considered here is based upon the notion of environmental pleasantness. The argument here is that people will behave more prosocially in environments which make them feel good.

A considerable number of studies have documented the fact that people help more when they are in a good mood. Some studies have generated good (or bad) moods in subjects by allowing them to succeed (or fail) at a task. For example, Kazdin and Bryan (1971) had subjects engage in either a task related to physical ability or a task related to creativity. Subjects were then told that their performance was either exceptionally good or only average. Later subjects were asked by a nurse to donate blood in an uncoming blood drive on campus. Those subjects who had been told that their performance was extremely good helped more often than other subjects, regardless of the task. Furthermore, subjects in the "high competence" group reported feeling happier after the experiment than the subjects in the average competence group. In another study, Isen (1970) had subjects work on a perceptual motor-skills task. Those subjects who were informed that they had done very well later donated more money to a collection box than subjects who were told that they had done poorly. In a second study (Isen, 1970) subjects who believed that they had done very well on a perceptual motor-skills task later helped a confederate who had dropped a book more frequently than subjects who believed they had done poorly. However, this positive mood work can also be related to work on expectancies for sucess or failure in subsequent tasks. It is possible that a reduction in achievement anxiety (fear of failure) lies behind some of these findings.

Other studies have achieved similar results by generating good moods by giving things to people. For example, Isen and Levin (1972) gave cookies to college students studying in a library. Later these students, and others, were asked by a confederate to

volunteer time to an experiment on creativity. Those students who received cookies volunteered more often than students who had not received cookies. In another study, Isen and Levin (91972) left ten cent coins in public telephones. Subjects who found the coin subsequently helped more frequently by mailing a "lost" letter than subjects in a control condition. Isen, Clark and Schwartz (1976) delivered free packets of stationery to people's homes. Later a wrong-number caller asked subjects to relay a message. Results indicated that subjects from homes which had received stationery helped more often than subjects from a control condition. However, this effect only lasted for about 16 minutes: when subjects were called after 20 minutes had elapsed, helping rates were the same as in the control condition. (These studies, however, can also be interpreted from an equity perspective.)

Another manipulation of mood was achieved by Moore, Underwood and Rosenhan (1973) who had children reminisce about happy and sad experiences. Children who thought about happy experiences subsequently donated more rewards to children who could not participate in the procedure than did children in a control group. Children who thought about sad experiences subsequently donated fewer rewards than the children in the control group. Finally, Underwood, Berenson, Berenson, Cheng, Wilson, Kulik, Moore, and Wenzel (1977) found that subjects who viewed a film which was sad in content subsequently donated less money to a charitable appeal than subjects who viewed a neutral film.

Staub (1978) has argued that being in a good mood or a bad mood affects preoccupation with the self and self-concern. Negative experiences, according to this view, lead the individual's attention inward. Self-concern and preoccupation are then likely to interfere with the individual's level of concern for others and his or her ability to respond to the needs of others. Positive experiences, however, lead the individual to feel less concened with his or her own worth and to be more responsive to the needs of others.

Clearly environments are capable of affecting a person's mood. People have been found to have clear preferences for certain types of environments (Kaplan, 1974, Kaplan & Kaplan, 1972) and, not surprisingly, have reported feeling more pleasure in some environments than in others (Mehrabian & Russell, 1974). Therefore, people in pleasant, enjoyable environments, because they feel good, should be more likely to engage in prosocial forms of behaviour than people in unpleasant, aversive environments. Direct support for this connection was provided in a study by Amato (1981c). Levels of helping behaviour (picking up spilled pencils) and affiliation (returning a friendly greeting from a stranger) were measured in the downtown area of a medium sized city before and after construction of a downtown pedestrian mall. Results indicated that both helping behaviour and affiliative behaviour increased significantly after construction of the mall. Furthermore, subjects viewing slides of the two settings rated the mall as being significantly more pleasurable to be in than the pre-mall environment. Subjects also reported anticipating feeling more friendly and helpful in the mall. However, a second study which measured levels of prosocial behaviour in pleasant and unpleasant settings within the same city did not

replicate this result (Amato, 1981b).

Although this effect has not been directly tested in an urban-rural context, it is possible that rates of prosocial behaviour are lower in urban areas because urban environments are experienced as less pleasant by the people in them. Urban areas, especially downtown districts, are often crowded, noisy, dirty. and possibly unsafe. Small town settings, on the other hand, are likely to be less crowded, quieter, more relaxed, and are more likely to have trees, lawns, and gardens. Poeple in large cities who feel crowded, hurried, pressured, fatigued or stressed by an aversive environment may be less prosocially oriented because their negative mood state leads them to be concened more with their own distress than with the distress of others. Furthermore, people may wish to leave the environment quickly, making affiliation and helping more costly. Research indicating that people exposed to aversive noise are less likely to engage in helping (Mathews & Canon, 1975; Page, 1977) can thus be interpreted from this perspective.

This model, linking urban-rural environments, moods, and behavioural outcomes, was incorporated into a theory developed by Mehrabian and Russell (1974). According to Mehrabian and Russell, environments affect people primarily in terms of the emotions they elicit. Three major dimensions of affect were proposed which cut across the various sense modalities: pleasure-pain, arousal-nonarousal, and dominance-submissiveness. These three dimensions of emotion were based upon the three dimensions of the semantic differential: evaluation, activity, and potency. According to Mehrabian and Russell, a person's feelings at any time

can by characterized by the dimensions in this framework. These feelings are a function of personality, temporary conditions, and environmental stimuli. The resulting emotional state largely determines the individual's behaviour in the situation.

Mehrabian and Russell argued that the amount of pleasure experienced in an environment is positively associated with "approach" behaviours, including affiliation (and presumably, helping). Approach behaviours are also maximized at intermediate levels of environmental arousal, with environments generating very high or very low levels of arousal generally being avoided by people. This proposal is consistent with previous findings that people prefer intermediate levels of stimulation (Berlyne, 1960). In addition, an interaction was posited to exist between environmental pleasure and arousal, such that increasing the level of arousal in a pleasurable environment increases approach behaviour while increasing the level of arousal in an unpleasant environment decreases approach behaviour.

These theoretical predictions were tested in a questionnaire study (Russell & Mehrabian, 1978) in which subjects rated their anticipated feeling of affiliativeness in a variety of settings. The results generally supported the predictions of the model. Another study by Amato and McInnes (1981) tested Mehrabian and Russell's model in a field setting. In this study, investigators gave a friendly greeting to pedestrians in twelve different settings within the same city. Colour slides were also taken of each setting and these slides were later rated by subjects on scales of perceived environmental pleasure, arousal, and dominance (Mehranian & Russell,

1974). The results indicated that subjects in the settings described as being more pleasant were more likely to reciprocate the greeting than were subjects in the settings perceived as being less pleasant. An inverted U-shaped relationship was found with perceived environmental arousal such that subjects were most likely to reciprocate the greeting in the settings described as being moderately arousing. Finally, an interaction was found between environmental pleasure and arousal such that subjects in the arousing-pleasant settings were the most responsive while subjects in the arousing-unpleasant settings were the least responsive.

Mehrabian and Russell's theory has direct relevance to the topic of urban-rural differences in prosocial beheaviour. An important concept in this context is that of information rate. According to Mehrabian and Russell (1974) the arousal-eliciting potential of an environment is a direct result of its information rate (the amount of information present in an environment). They argued that settings which have high information rates can be described as being large, crowded, heterogeneous, noisy, and unpredictable, all of which are characteristic of urban environments. The presence of large numbers of strangers was seen as being especially arousing since people are highly salient stimuli and strangers are both unfamiliar and unpredictable. Therefore, urban environments, as distinct from rural environments, have higher information rates and produce higher levels of arousal in people who frequent them. Because large city environments are experienced as being unpleasant by many people, they represent a type of environment (unpleasant and highly arousing) which is least conducive to the expression of affiliative and prosocial behaviours.

In fact, Mehrabian and Russell (1974) found that subjects in a questionnaire study reported feeling high levels of hostility toward others in unpleasant-arousing environments. According to Mehrabian and Russell

> Present-day environments, then, tend to be excessively arousing...This is especially true in the case of urban areas where a high concentration of varied physical and social stimuli constantly impinge on the individual...Persons in crowded and unpleasant places indiscriminately generalize the negative feelings from the setting to the others who are present (pp. 204-205).

Feelings of dominance-submissiveness, the third dimension of the model, are also relevant to the present discussion. Although Russell (1980) later downgraded the importance of the dominance dimension, feelings of dominance can be linked empirically to the literature on prosocial behaviour. A number of studies have indicated that people who feel competent, in control, or potent in a given situation are more likely to give assistance to others (Midlarsky, 1971; Midlarsky & Midlarsky, 1973, 1976; Huston, Ruggiero, Conner & Geis, 1981). It is likely, therefore, that environments which make the individual feel in control and capable of making a difference should facilitate the exhibiton of helping responses. It is apparent that large urban environments are more likely to inspire feelings of submissivensss, awe, weakness and not being in control, while rural environments are more likely to inspire feelings of dominance, potency, and being in control.

Clearly, the larger the scale of the setting, the less impact any single person can have upon it. Therefore, urban environments may be less conducive than rural environments to those feelings of dominance, potency and control which facilitate prosocial behaviours.

Before concluding this discussion, one more aspect of Mehrabian and Russell's model will be presented. Mehrabian and Russell (1974) argued that both very high and very low levels of arousal will be avoided by the organism. It can be argued on the basis of this assumption that understimulating rural environments, as well as overstimulating urban environments, can be aversive. Indeed, complaints about living in rural areas frequently include the comments that life is boring, that there is little to do, and that nothing ever happens. Thus, while the urbanite may withdraw from social contact as a way of decreasing an excessive level of arousal, the ruralite may seek out social interaction as a way of increasing a chronically low level of arousal. Hence, the "underaroused" ruralite may be more friendly and helpful toward strangers because he or she enjoys the extra sensation provided by meeting and interacting with new people.

This argument is consistent with current views of the human as an information- or sensation-seeker (Zuckerman, 1971). It is also consistent with research on sensory deprivation (Zubek, 1969) which suggests that the individaul has a need for a minimum amount of sensory/environmental stimulation. Failure to achieve an adequate level of sensory stimulation has been shown to have severe detrimental effects on the individual.

The perspectives discussed in this section are all generally consistent with those field studies reviewed in Chapter One indicating higher rates of helping behaviour among rural as opposed to samples (eg., Amato, 1981a; Merrens, 1973; Rushton, 1976). However, this perspective, with its emphasis upon the emotion-eliciting characteristics of environments, suggests that urban unhelpfulness is a short-term phenomenon. It therefore cannot account for the findings from those studies indicating lower helping rates for urban subjects contacted within their own homes (House & Wolf, 1978, Levine, et al., 1976; Korte & Kerr, 1975). Presumably, people in the privacy of their own homes are protected from the negative affective impact of overly arousing and unpleasant environments. Furthermore, this perspective cannot account for those child-developmental studies indicating higher levels of cooperative behaviour among rural children and higher levels of competitive behaviour among urban children. Again, the perspective reviewed has been shown to have some explanatory power for some previous research findings. However, it is limited in its ability to account for all of the relevant data. The range of convenience of a theory, a concept outlined by Kelly (1955) would appear to be at issue here. This will be discussed in more detail at the end of this chapter.

The Socio-Structural Approach

Unlike the more psychologically oriented theories such as stimulus overload theory and deindividuation theory, the socio-structural perspective does not begin with the urban/rural environment as perceived and experienced by the individual as the

starting point of its analysis. Instead, this analysis of city life is based upon a macro-sociological approach involving such supra-individual concepts as the degree of structural differentiation and the ratio of secondary to primary role relationships. From this perspective, the behaviour and experience of the individual is derived from the structural characteristics which differentiate urban from rural communities. Psychological assumptions are implicit in this type of analysis, although they are of secondary importance and often are not explicitly elaborated.

Urban sociologists have documented the large number of structural characteristics which differentiate modern urban society from traditional folk society. An early account was provided by Sorokin and Zimmerman (1929) who listed a number of these including:

1. The greater population heterogeneity of cities, as reflected in language, belief, and behaviour.

2. The more highly differentiated division of labour and stratification system present in cities.

3. Differences in the system of interaction (the interaction system of the urbanite, compared to the rural dweller, is made up of a greater number of social contacts, with each contact being of shorter duration and involving less of the total personality of the interactants).

From these observations, it is clear that the urbanite interacts frequently, but for short periods of time, with large numbers of

people who vary greatly in terms of occupation, social class, attitudes, and cultural background. According to Sorokin and Zimmerman, the existence of these highly complex interaction networks means that urban contacts are necessarily more impersonal, casual, and superficial. In contrast, the contacts of ruralites are "deeper, less superficial, and involve the whole personalities of the interactors" (p. 53).

In the following passage, Sorokin and Zimmerman described the way in which the typical urbanite comes to see his or her fellow urban dwellers:

> As a rule, they are not human personalities, but only clerks, physicians, mailmen...in brief, kinds of good or poor "robots" with whom he interacts as with a particular specialized "mechanism" (p. 52).

Although it would appear on the basis of the above passage that city life was viewed as "dehumanising", Sorokin and Zimmerman stopped short of developing their analysis further along these lines. The direct effects of the structural characteristics of city life on the behaviour of the individual were not addressed in their work, presumably because they wished to stay with a macrosociological level of analysis. While similar analyses of city-rural differences have been presented by other writers such as Toennies (1961) and Redfield (1947), it was the Chicago school of sociologists, and Louis Wirth in particular, who most fully developed the psychological implications inherent in this perspective. Because Wirth's theoretical analysis of city life is widely known, it will

serve here as the best representative of the socio-structural approach.

In an influential article entitled "Urbanism as a way of life", Wirth (1938) argued that three characteristics of cities, size, density and heterogeneity, defined the way of life of its inhabitants. According to Wirth, the size, density, and heterogeneity of large cities work together to erode the traditional bonds based upon kinship, neighbourliness, and the sentiments which grow out of living together in smaller communities. This occurs in a number of ways. First, migration from the country to the city disrupts old social ties and ensures that individuals are distant from their kin (and hence, from sources of social support). In the city itself, individuals find it difficult to establish new intimacies because the frequency of moving in urban areas disrupts the formation of neighbourhood networks. This is reinforced by the extreme social heterogeneity of cities. It is commonly known that friends are generally chosen on the basis of a similarity of attitudes, interests and life styles. Yet, urbanites have little in common with the vast majority of people they meet. Furthermore, when urbanites do meet each other, it is generally in highly transitory, segmental roles. The large proportion of secondary, as opposed to primary contacts, means that urban encounters generally involve superficiality and anonymity. The result of this situation is described by Wirth in the following passage:

> Frequent close physical contact, coupled with great social distance, accentuates the reserve of unattached individuals toward one another, and

> unless compensated for by other opportunities for response, gives rise to loneliness. The necessary frequent movement of great numbers of individuals in a congested habitat gives occasion to friction and irritation. Nervous tensions which derive from such personal frustrations are accentuated by the rapid tempo and the complicated technology under which life in dense areas must be lived (p. 56).

Thus, the social heterogeneity, the predominance of secondary role relationships, and the breaking up of primary groups results in a condition of weak social integration, the psychological consequences of which include loneliness, anonymity, depersonalisation, aloofness, tension, frustration, and exploitive and aberrant behaviour.

The decline in the importance of the primary group in urban areas is replaced by an increased reliance on impersonal structures, with many of the functions previously filled by primary groups being taken over by government agencies (such as welfare offices) or service industries (such as restaurants). In addition, formal control mechanisms (such as police departments) come to replace the bonds of solidarity which existed in folk society. Furthermore, the rise of a money economy leads to the replacing of primary relationships as the basis of association with the "purchasability of services" (p. 58). This usurping of the traditional role of primary groups by urban institutions serves to further weaken the primary group ties which remain.

While Wirth was clear about the negative social consequences of urbanism as a way of life, he did not discuss prosocial forms of behaviour as such. Nevertheless, it is apparent from his analysis that the isolated and frustrated urbanite is unlikely to engage in altruistic forms of behaviour toward strangers or even toward family members. It can be argued from Wirth's model that urban dwellers will exhibit a gnerally lower level of helping behaviour toward others than will rural dwellers. Hence, the research reviewed in Chapter One of this volume indicating lower rates of helping and affiliative behaviour among urbanites (eg., Amato, 1981a; Merrens, 1973; Rushton, 1976, Newman & McCauley, 1977) is consistent with Wirth's analysis. Furthermore, Wirth's perspective suggests that urban unhelpfulness is a generalized tendency across both time and situation. This is because the urbanite is seen as being primarily affected, not so much by temporary situational characteristics of urban environments such as the degree of stimulus overload, but by the more or less permanent structural characteristics of cities (both spatial and social). Hence, Wirth's perspective is consistent with those studies finding lower rates of helpfulness among urbanites contacted within their own homes (House & Wolf, 1978; Levine, et al., 1967; Korte & Kerr, 1975). Wirth's position is also broadly consistent with the findings from child-developmental research indicating a more cooperative orientation on the part of rural children and a more competitive orientation on the part of urban children. It can be argued from Wirth's analysis that the absence of strong primary group ties combined with the influence of living in a money economy would lead to the development of self-centered, acquisitive, competitive personality traits. This is

similar to Simmel's (1950) analysis of the effect of the money economy in which money was held to produce a "calculating" attitude on the part of the urbanite toward others such that other people become useful only to the extent that they can satisfy personal needs. While the connection is somewhat speculative, such a personality difference could conceivably be manifested in even young children raised under such conditions.

Nevertheless, Wirth's theoretical analysis of city life has been criticised by a number of writers (Gans, 1962, 1968; Fischer, 1976; Jacobs, 1961). Gans (1962, 1968) argued that social interaction is affected by sociological factors such as age, social class, and ethnicity, but that these are largely independent of the city variables of size, density and heterogeneity. Observed social psychological differences between urbanites and ruralites were said by Gans to be spurious associations due to their mutual relationship with these other more potent social variables. According to Gans, the transitory and impersonal nature of some urban contacts is due more to the residential instability of inner city areas. However, because residential instability is also characteristic of many small towns (such as mining towns), it cannot be considered a purely urban characteristic. Fischer (1976) has argued that large cities allow the formation of many subcultures based upon a similarity of beliefs, interests or life-styles. Because of this "fragmentation", there is little community wide consensus or integration, yet individuals are generally as fully integrated into these subcultures as are people in rural communities. According to Fischer, these social worlds of urban dwellers are strong enough and cohesive enough to resist the possibly disruptive effects of urban size,

density, and heterogeneity.

A considerable amount of empirical evidence also contradicts certain aspects of Wirth's analysis. As mentioned in Chapter One, studies have indicated that urbanites have just as many friends, see them as often, and are as intimate with them as are ruralites (Reiss, 1959; Key, 1968; Sutcliffe & Crabbe, 1963; Kasarda & Janowitz, 1974; Glenn & Hill, 1977; Wayne, 1972; Wellman, 1972). Consistent with the argument of Fischer (1976) these friends, in the majority of cases, have been found to be located outside the immediate neighbourhood of the respondents. This despacialisation of friendship networks in large cities suggests that urbanites do seek out others who are similar to themselves and that the city offers a large pool of people from which to choose. Wirth's assertion that family ties are weakened in cities is also not supported by research indicating that most urbanites still maintain close and regular contact with relatives (Reiss, 1959; Key, 1968; Glenn & Hill, 1977).

Nevertheless, certain aspects of Wirth's theoretical analysis may still deserve serious consideration, for it may be that outside of the networks of friends and relatives which exist in cities, urbanites do exhibit many of the traits Wirth postulated. For example, Wirth's emphasis upon the social heterogeneity of large cities may be useful. All of the theoretical perspectives reviewed in this chapter are mainly concerned with the effects of population size and density on social behaviour. However, a considerable amount of research indicates that people are more likely to help those who are perceived as being similar to themselves. Field

research conducted by Karabenick, Lerner, and Beecher (1973) and by Suedfeld, Bochner, and Wneck (1972) indicated that perceived attitude similarity between an observer and a victim leads to increased helping. In addition, a study by Krebs (1975) indicated that perceived similarity of attitudes was associated with both empathic arousal (as measured by physiological indices) and later prosocial behaviour. Similar results have been obtained for racial similarity (Piliavin, Piliavin & Rodin, 1969; Bryan & Test, 1967; Gaertner & Bickman, 1971; West, Whitney, & Schneider, 1975). For example, in the study by West, et al., black and white drivers in the United States appeared to be having trouble with their cars. Results indicated that black drivers were helped significanly more often in black neighbourhoods and white drivers were helped significantly more often in white neighbourhoods.

If similar others are more likely to receive help and if dissimilar others are less likely to receive help, and if typical social encounters in large cities are between people who are highly dissimilar to each other in terms of attitudes, social class, appearance, and ethnicity, then it follows that rates of helping will be lower in urban areas than in more homogeneous rural communities. Of course, this perspective also suggests differences between heterogeneous and homogeneous rural communities as well. Unfortunately, no studies have as yet tested the hypothesis that helping rates are lower in heterogeneous communities than in homogeneous communites. This important aspect of Wirth's theory, however, would appear to deserve attention from future research, and will play a role in the research to be described in subsequent chapters in this thesis.

The In-Group/Out-Group Perspective

The in-group/out-group perspective is based upon the tendency of people to categorize others on the basis of whether they are members of an "in-group" (to which the categorizor also belongs) or to the "out-group". According to Tajfel(1969) the effect of this distinction is to minimize perceived differences between members of the in-group and to maximize perceived differences between group members and nonmembers. Social categorisation is also useful to the individual in helping him or her to achieve a positive identity through group membership (Tajfel, 1978). Of interest in the present context is the finding that people tend to engage in considerable favoritism toward other in-group members, and correspondingly, to engage in considerable discrimination against members of the out-group. Furthermore, this discrimination has been shown to occur even when groups are formed on the basis of arbitrary and trivial criteria.

In one experiment (Tajfel, Flammont, & Bundy, 1971), subjects were divided into two groups on the basis of their preference for either Klee or Kandinsky. Results indicated that subjects divided rewards in favor of in-group members at the expense of out-group members. A similar result was obtained in another study (Tajfel, 1970) in which groups were formed on the basis of an underestimation or overestimation of the number of dots in a picture. In both studies, in-group/out-group discrimination occured even though the experimenters stated to subjects that the basis for forming groups was arbitrary and done merely for the sake of convenience. The existence of group discrimination with "minimal" groups in the

absence of any conflict or previous hostility between groups supports the contention of Tajfel, et al. (1971) of a general social norm which obliges people to favor in-group members.

In another study, Billig & Tajfel (1973) hypothesized that discrimination is due to in-group members believing that they are more similar to other in-group members in terms of beliefs than they are to members of the out-group. Subjects were told that they were formed into groups either randomly or on the basis of their preference for paintings. While similarity of preferences was associated with favoritism, in-group/out-group discrimination persisted even in the randomly formed gorups. In a similar piece of research, Allen and Wilder (1975) formed groups on the basis of preferences for Klee or Kandinski and also measured subjects opinions on a variety of topics. Within each preference group, subjects were made aware of which group members were similar to them in opinions and which group members were dissimilar. Again, in-group favoritism occurred in relation to the Klee and Kandinsky groups. However, belief similarity increased discrimination in favor of in-group members, while the degree of belief similarity did not affect the degree of discrimination against members of the out-group. In relation to these findings, Billig (1976) has argued that even though randomly formed groups, or groups formed on trivial and arbitrary bases, will exhibit in-group bias, the more characteristics the groups possess which are normally associated with naturally occurring groups (such as attitude similarity, anticipation of future interactions, etc.) the greater the degree of in-group favoritism which will occur.

Writers have offered different explanations for the occurrence of in-group/out-group categorisation and discrimination. Campbell (1965) argued that this tendency is biologically based. According to Campbell, in the evolutionary past, survival often depended upon a group's ability to acquire scarce resources in the face of competition from other groups. In such a situation, in-group sharing and self-sacrifice had strong survival value for members of the group. Tajfel (1978) and Turner (1975; 1978) suggested a social-psychological explanation, arguing that in-group/out-group distinctions are based upon the individual's need to establish and maintain a positive identity. This can be achieved by contrasting the group to which the individual belongs with an out-group, thus ensuring that positively valued in-group similarities will be made salient and differences between the in-group and other groups will be maximized. According to this view, an in-group contributes to the individual's social identity to the extent that it allows a sense of positively valued distinctiveness from other social groups. As Turner (1975, 1978) has argued, in-group favoritism is actually a mechanism for maintaining the distinction between the in- and the out-group.

A different explanation was provided by Staub (1978) who suggested that this tendency has its origin in early childhood experiences. Because of the extreme dependency of young children, they develop a strong identification with those who are close to them and who protect them. Thus, the first in-group/out-group distinction is between the family and all other people. The extent to which future distinctions are made, and the extent to which the individual needs to identify with an in-group, are influenced by

both the extent of the individual's subsequent contact with a broad range of groups and the extent to which the culture emphasizes distinctions between groups of people. Staub suggested that negative evaluations of out-group members and discrimination against them can be overcome through increasing the amount of information people have about the out-group and by emphasizing concepts of "shared humanness" between people (pp. 327-328).

The in-group/out-group distinction has occasionally been used in helping behaviour research. A study by Feldman (1968) used a variety of helping measures (including overpaying a taxi driver, asking for directions, and requesting a pedestrian to mail a letter) to measure in-group/out-group helping in three cultures. Data were collected in Boston, Paris, and Athens by both compatriots and foreigners. The overall trend of the results was for the Americans and French subjects to help compatriots more than foreigners but for the Greek subjects to help foreigners more than compatriots. Feldman suggested, however, that the Athenians may still have favored the in-group. Greeks have been found to include family, friends, friends of friends, and tourists in their in-groups, with other Greeks falling into the out-group (Triandis, Vasilou & Nassiakou, 1968). Hence, the behaviour of the Greek subjects in this study was consistent with the notion of in-group favoritism. In addition to Feldman's study, a number of other studies have indicated that rates of helping are generally higher when the person in need is perceived by the potential helper as being similar in terms of beliefs and attitudes (Karabenick, Lerner & Bochner, 1973; Suedfeld, et al., 1972; Krebs, 1975). To the extent that similar others are perceived as being members of an in-group, these findings

are consistent with in-group/out-group principles.

The in-group/out-group perspective makes a prediction about urban-rural differences in prosocial behaviour which is different from those of the other perspectives discussed in this chapter. It can be argued that people living in small rural communities are likely to form closely-knit in-groups due to their proximity, familiarity, homogeneity, and shared circumstances. Therefore, levels of helping behaviour should be fairly high within the community itself. However, because of this very closeness, travellers, newcomers, and other strangers to small towns are likely to stand out as being highly conspicuous. If defined by small town residents as "outsiders", they may be discriminated against in a variety of ways, involving suspiciousness, distrust, aloofness, and possibly a lower level of prosocial involvement. Furthermore, the homogeneity of rural communities means that many rural people, especially in isolated areas, may not be used to dealing with people of diverse backgrounds and appearance. This "strangeness" of the outsider may increase the costs of helping and other forms of involvement. In addition, rural areas tend to be fairly conservative in a variety of ways. Thus, outsiders of an unusual or deviant nature may arouse considerable "rejection" on the part of the ruralite.

On the other hand, the large number of people in large cities guarantees that urbanites virtually live in a world of strangers. Because of the large number of secondary contacts, urbanites are generally adept at dealing with totally unfamiliar people. Urban heterogeneity also ensures that urbanites are used to dealing with

people from a variety of ethnic, occupational, and cultural backgrounds. Furthermore, city dwellers are known for being more tolerant of eccentric, counter-cultural, and deviant forms of behaviour. Hence, it is likely that people in large cities do not discriminate as strongly against out-group members as do rural people.

While this line of reasoning is somewhat speculative, it has received support from two studies. In Weiner's (1976) study (reviewed in Chapter One), urban- and rural-reared subjects were presented with an "accident" during a laboratory experiment in which a female confederate fell over and hurt her ankle. Results indicated that rural subjects helped significantly less than urban subjects. A measure of cognitive complexity (Barron, 1953) was found to be positively associated with both urban background and higher helping scores. With differences in cognitive complexity partialled out in a covariance analysis, no overall difference remained between urban and rural subjects in level of helping. To account for these findings, Weiner reasoned

> People who grew up in rural areas may have maximum rapport and cohesiveness within the family-friend reference group which is likely to be balanced by a minimum rapport and cohesiveness with the secondary environment (p. 121).

Referring to Barron's (1953) hypothesis that cognitive complexity is the result of early exposure to complex stimuli and environments, Weiner suggested that the more complex environment of the large

cities was responsible for the higher complexity scores of urban subjects. Since a more expansive, rather than constrictive, view of the world is associated with cognitive complexity, the cognitive complexity of the urban subjects's reference groups may have been more inclusive than those of the rural subjects. Rural subjects would have helped less often, then, because their more restricted in-group was less likely to include the student with the hurt ankle. Urban-reared subjects, however, with a cognitively complex orientation and a more expansive outlook were more likely to include the student within their in-group, and hence, were more likely to help her.

A second study by Hansson and Slade (1977) also supports this line of thought. In their study (reviewed in Chapter One), lost letters addressed to "deviant" and nondeviant addresses were distributed in small towns and in a large city. While the return rate for the letter addressed to the nondeviant addresses were returned slightly more often from the smaller towns, the return rates for the deviant letters were dramatically lower in the smaller towns. The authors suggested that small town dwellers are less tolerant of individual differences and nonconformity than are people living in larger cities. They stated that "social responsibility was manifested in small towns only when the individual needing help was socially acceptable" (p. 278).

Of course, the in-group/out-group argument presented here is inconsistent with those studies reported in the previous chapter indicating higher levels of helpfulness toward strangers among small town residents. However, a number of studies have indeed found

small town subjects to be less helpful than subjects from larger cities (Amato, 1978; Forbes & Gromoll, 1977; Hansson & Slade, 1977; Hansson, Slade, & Slade, 1978; Weiner, 1976, Whitehead & Metzger, 1981). Furthermore, the in-group/out-group perspective appears to be the only major theoretical perspective which can account for lower rates of helping in nonurban areas. Further research may help to clarify the conditions under which rural people categorise others as in- or out-group members and discriminate in favor of or against people on this basis.

Miscellaneous Explanations

In addition to the theoretical areas reviewed in this chapter, a number of other explanations have been proposed to account for urban-rural differences in helping behaviour. These "simpler" explanations are less general than the perspectives reviewed above. These include: fear or mistrust in urban areas due to perception of crime rates, differences in the "pace of life" in cities and country areas, and differences in population characteristics between urban and rural areas.

A number of writers (eg. Milgram, 1970; Fischer, 1976) have suggested that perception of urban crime rates may create an atmosphere of fear in large cities, leading to lower levels of trust and helping behaviour between strangers. In this context, Levine, et al. (1976) found that urban subjects were less willing than rural subjects to allow a lost stranger (a confederate) into their homes to use a telephone. The authors concluded that the greater "psychological vulnerability" of urban residents may have been

responsible for this difference. They commented that many of their subjects appeared willing to help, yet were reluctant, presumably because of their fear of becoming the victim of a crime. Support for this interpretation is provided by the finding that male confederates were allowed entry substantially less often than female confederates. This explanation was tested in the House and Wolf (1978) study which used interview refusals as a measure of unhelpfulness. Their regression analysis indicated that differences in refusal rates were primarily due to variations in reported crime rates rather than population size, density, or heterogeneity. The authors concluded that "the caution, incivility, distrust, and lack of concern for others that often characterises urban behaviour appears largely to result from a (probably correct) perception that interactions with others, especially strangers, can be dangerous" (p. 1041). While this explanation appears to be reasonable (and parsimonious) it cannot account for those studies which found lower levels of helping behaviour in urban areas in situations in which there was no possible threat to the helper, such as shopkeepers returning an "accidental" overpayment (Korte & Kerr, 1975) or helping a lost child (Takooshian, Haber & Lucido, 1977). Furthermore, the Amato (1981a) study found that helping rates in Sydney and San Francisco were very similar, in spite of the fact that the latter city has a considerably higher rate of street crime.

The explanation based upon urban-rural difference in the pace of life has been suggested by Milgram (1973), Simmel (1950), Korte (1978), and Fischer (1976). The notion here is that urban unhelpfulness may be due to the fact that, for a variety of reasons, life tends to be carried out at a faster pace in large cities than

in rural areas. The demands of getting to work, doing lunch hour shopping, getting to the theatre on time, and catching the bus before it leaves can mean that urbanites frequently do not have the time to give directions or answer a few questions for an interviewer. Research, in fact, has supported the assumption that many activities are carried out at greater speeds in large cities (Lowin, Hottes, Sandler & Bornstein, 1971; Bornstein & Bornstein, 1976). Furthermore, research has indicated that being under a time constraint can inhibit help-giving (Darley & Batson, 1973). In addition, a study by Feldman and Rezmovic (1979) which used answering a ringing public telephone as a measure of helping found that the best predictor of answering was the amount of "movement" among bystanders, that is, the more people who were moving (as opposed to standing still) the less likely the phone was to be answered. Feldman and Resmovic reasoned that moving individuals were in more of a hurry and hence, were less likely to spend the time to help. This pace-of-life explanation assumes that the urbanite's lack of time increases the costs associated with helping, thus making it more unlikely to be given. While this simple explanation has a certain attraction, it cannot account for those studies in which urbanites displayed lower helping rates when contacted in their own homes, where presumably they were under fewer time constraints (eg., House & Wolf, 1978; Korte & Kerr, 1975; Levine, et al., 1976).

The third explanation to be considered here has been referred to as a "compositional" explanation (Fischer, 1976) or a "population bias" explanation (Korte, 1980). Fischer argued that behavioural differences across geographic areas are due to differing population

characteristics, such as differences in age, income level, and race. Similarly, Gans (1968) has argued that social class and stages in the life-cycle and the most important variables in explaining inter-community differences in behaviour and way of life. The assumption here is that urbanites are not any less (or more) helpful than ruralites because of any effects due to environmental features, but that cities simply contain a higher proportion of people from demographic categories that have lower (or higher) helping rates. By shifting the proportions of people in various demographic categories, the relative helpfulness of a city could, in principle, be increased or decreased. Korte (1980) has argued that a review of the social and demographic characteristics of urbanites and ruralite reveals no characteristics which have been shown to be associated with helpfulness. However, Korte's conclusion may be premature in that a number of characteristics which differentiate urban populations from rural populations have revealed associations with helping behaviour in previous research. For example, city residents typically have higher incomes and educational levels than country people, and a number of studies have found various social class differences in helping behaviour (Berkowitz & Friedman, 1967; Berkowitz, 1966; Dreman & Greenbaum, 1973; Muir & Weinstein, 1962; Doland & Adelberg, 1967). Another example refers to religiosity. Religious attendance tends to be higher in rural areas than in urban areas, and religiosity has been found to be related to certain types of nonspontaneous prosocial behaviour (Benson, et al., 1980). While these examples are rather speculative, they indicate that future research in this area may have to rely more upon multivariate techniques to separate the effects of urban residence from other

confounding demographic variables.

Comparison of Theoretical Perspectives

A number of comparisons and contrasts can be made between the various theoretical areas reviewed above. In many cases, strong similarities exist between perspectives. For example, aspects of information overload theory, especially Cohen's (1978) discussion of cognitive fatigue and resulting decrements in altruistic forms of behaviour, are similar to the perspective of urban stress-pathology theories. In this sense, continued exposure to overload can be construed as stressful to the individual and as resulting in certain impairments in the individual's social capacity. Nevertheless, the effects of overload, as articulated by Cohen, are relatively short-term in that attentional capacity, and presumably a positive social orientation, are regained after a period of rest. Furthermore, Milgram's (1970) discussion clearly portrays overload as leading to adaptive forms of behaviour on the part of the individual. Although adaptation in this sense involves a lessened level of involvement with others, this is seen by Milgram as a necessary concomitant of succcessful metropolitan living.

Deindividuation theory is also similar to the urban stress-pathology perspective in that many deindividuated behaviours can be viewed as "pathological" in nature. Zimbardo's (1969) description of deindividuated behaviour as irrational, highly emotional, regressive and destructive suggests notions of pathology. However, while the pathology model interprets urban behaviour as resulting from a general degenerative condition produced by long

term exposure to urban stressors, deinvididuation theory posits that such behaviour constitutes a short-term reaction to situations which, in fact, may be quite pleasurable (for example, being at a rock concert). Deindividuation theory, therefore, is in this sense more like information overload theory in that it sees decriments in prosocial behaviour as being the result of situational characterisics of cities and not due to personality characteristics of urban dwellers.

To faciliatate further comparisons between theories, Table 2.1 has been designed to summarize some of the defining charactersitics of each perspective in relation to the topic of urban-rural helpfulness. While the first column specifies the proposed cause of differences in levels of helping behaviour, the second column specifies the proposed mechanism which relates the cause to helping behaviour. Inspection of the table reveals that many perspectives point to identical characteristics of urban and rural settings, such as the presence of large numbers of people, as being responsible for differential rates of helping, yet the mechanisms involved are all quite different. For example, the presence of a crowd is seen as a causal variable in information overload theory, deindividuation theory, urban stress-pathology theories, social inhibition theory, the setting-mood perspective, and the in-group/out-group perspective. However, the mechanisms relating crowds to helping behaviour involve, respectively, a condition of stimulus overload, the disinhibition of normally restrained behaviours through lack of identifiability, stress, diffusion of responsibility, a negative affect state, and the formation of in-group/out-group boundaries.

Table 2.1 Comparison of Theoretical Perspectives

Theory	Cause of Differential Helping	Mechanism Involved	Generalised or Situational Response
Information Overload	Crowding, noise, movement and other sources of stimulation	Cognitive overload resulting from excess stimuli	Milgram - Generalised Cohen - Situational
Deindividuation Theory	Crowding, anonymity, lack of identifiability, arousal, sensory stimulation	Inhibition of internal and external controls; state of deindividuation	Situational
Urban Stress-Pathology Theories	Crowding, noise, pollution, bureaucratic regulation, other urban stressors	Accumulated stress leading to detriments in social behaviour, pathology, and learned helplessness	Generalised
Social Inhibition Theory	Presence of other people	Evaluation apprehension, pluralistic ignorance, diffusion of responsibility	Situational
Setting-Mood Perspective	Pleasantness, scale and complexity of the environment	Degree of pleasure, arousal, and dominance experienced in setting	Situational
Social Structural Perspective	Social heterogeneity, profusion of secondary relationships, weakening of primary group ties	Weakened social integration, alienation, loneliness, frustration	Generalised
In-Group/ Out-Group Perspective	Community size, familiarity of interactants, rural isolation, frequency of encountering strangers	Formation of local in-group/out-group distinctions and in-group favoritism, suspiciousness of outsiders and strangers	Generalised
Miscellaneous Explanations	Perceived crime levels	Personal fear of victimisation and mistrust	Situational
	Pace of life	Lack of time, increased cost of helping	Situational
	Population bias	Social class differences, differences in religiosity, ?	Generalised

Other major comparisons between theories concern the extent to which differential rates of helping behaviour are seen as being a response which generalizes across settings and situations or whether behavioural differences are specific to certain situations and settings. The latter position holds that urbanites are only less (or more) helpful because their behaviour is observed in urban environments. These situational explanations consist of information overload theory (Cohen's version), deindividuation theory, social inhibition theory, the setting-mood perspective, and explanations based upon the perception of crime rates and the pace of life. According to these perspectives, the unhelpful urbanite observed in a country area (which is less crowded, less noisy, more pleasant, less hurried, and with a lower crime rate) would exhibit just as much helpfulness as a ruralite.

The other position holds that urbanites are less (or more) helpful because of internalized norms, attitudes, beliefs, or values - or in basic personality characteristics - which persist across settings. This positon holds that urbanites would be more (or less) helpful, even if they were observed in nonurban settings. These perspectives include Milgram's notion of general urban norms of noninvolvement, the social-structural perspective, stress-pathology theories, the in-group/out-group perspective, and the population bias explanation. These dispositional explanations for urban unhelpfulness suggest that inherent differences between urban and rural people are due to long term exposure (or early child rearing) in urban and rural environments. Presumably, a change in environment could bring about a gradual change in personal characteristics which might affect subsequent behaviour. Thus, the

friendly and involved rural dweller who moves to a large city might eventually succumb to urban stress and become more socially withdrawn. Alternately, the ruralite with a narrowly-defined in-group consisting of family and the local community, and with a lack of experience in dealing with strangers, may come to hold a more expansive view and learn to become more accepting and tolerant of dissimilar others after moving to a large city. The difference between these two perspectives is thus a matter of degree rather than an absolute difference. The difference essentially lies in the extent to which an individual's helping orientation is seen as being malleable and sensitive to immediate environmental conditions. It is a question therefore, of the generality or situational-specificity of helping responses.

Summary

Seven theoretical perspectives relevant to the topic of urban-rural differences in prosocial behaviour have been discussed. A consideration of these perspectives suggests a number of general observations regarding the fit between these theories and the empirical studies reviewed in Chapter One. First, although each theoretical perspective can explain some of the empirical evidence, no theory is capable of accounting adequately for all of the relevant data. This can be seen to occur for two reasons. First, the data base reviewed in Chapter One includes research from a number of quite diverse areas, including field studies of prosocial behaviour, laboratory experiments dealing with helping, naturalistic observation of behaviour in small towns and large cities, child-developmental studies, and cross-cultural research. Each

theoretical perspective, however, involves the elaboration of a few basic concepts which necessarily limits the range of phenomena which can be addressed. Thus, many of the perspectives, such as information overload theory and the setting-mood perspective, can speak to research involving rates of helping behaviour among pedestrians in the downtown districts of large and small communities. However, these same theories, with their emphases upon situational, stimulus characteristics of environments, are not able to deal with, for example, child-developmental studies revealing less cooperative personal orientations among urban children as opposed to rural children. The concepts necessary for dealing with dispositional differences in prosocial orientations among children are simply not available in these perspectives. All of these theories, therefore, are narrower in focus than the data base which they can be called upon to explain.

Secondly, the explanatory power of each theory is necessarily restricted by the contradictory and conflicting nature of the empirical evidence in this area. Because many of the research results are contradictory, no single theory is given support by all of the data. Furthermore, theories making competing predictions about helping each receive some support from the data. For example, theories such as information overload theory and deindividuation theory are supported by studies finding lower rates of helping behaviour in urban as opposed to rural settings, but are not supported by studies finding the opposite effect or no difference. LIkewise, the in-group/out-group perspective receives support from those studies finding lower rates of helping in rural as opposed to urban areas, but receives no support from studies finding the

opposite effect or no difference. As noted earlier, the contradictory and conflicting nature of many of these findings can probably be attributed to the fact that studies have used widely differing measures of helping, have sampled cities and towns from different geographical regions and along different ranges of the urban-rural continuum, and have failed to control for a number of other possibly confounding variables.

A second major point which can be raised in relation to these seven perspectives is that many make identical or nearly identical predictions about helping behaviour. In a laboratory setting, it might be possible to derive different predictions from two or more theories and test these hypotheses using simulated urban and rural environments. However, if the intention is to explain naturally occurring behaviour in public places, such as downtown areas, any of a number of explanations may be equally satisfactory. Thus, an urbanite in a crowded commercial district might refrain from helping because he or she is distracted and fatigued by the excessive amount of stimulation in the environment, because he or she feels anonymous and identifiable and therefore is less concerned with "doing his/her duty", because he or she feels unpleasant and powerless and wants to move to a more pleasant setting as soon as possible, or because he or she feels little personal responsiblity to help due to the large number of other potential helpers present. Each of these possible explanations could be relevant for some people, and they all might be relevant, in varying degrees, for other people. A single critical test to distinguish which is the "correct" explanation may simply not be possible.

Rather than try to decide which theory is the "best", a more useful strategy might be to attempt to establish the range of conditions under which each theory is operative. It may be that certain kinds of urban-rural differences in prosocial behaviour can be explained best by one model and other kinds of differences can be explained best by a second model. For example, differences in the rates with which people in large and small communities engage in a planned form of helping such as donating blood might be explained by notions of diffusion or focussing of responsibility, while a different type of helping, such as the care with which a supermarket packer fills a shopper's bags, might be better explained by notions of information overload and its attendant fatigue.

It is argued here that establishing the "domains of relevancy" of various theoretical perspectives requires a preliminary taxonomic organisation of the subject matter in question (Smithson, Amato & Pearce, in press). These considerations suggest that rather than picking two or more theories and trying to test differential predictions from each, a more useful approach might be to attempt a taxonomic organisation of helping behaviours and to use the taxonomy as a basis for collecting descriptive data on urban-rural differences across a variety of helping forms in the same sample of communities. Such a procedure would provide an orderly data base on urban-rural differences which would indicate the types of prosocial behaviours which are affected by the urban-rural variable. It might then be possible to sort out which theoretical perspectives are most appropriate under various conditions.

Much of the material to follow in this thesis will concentrate on taxonomic and descriptive concerns. Specifically, the next chapter in this volume will address the problem outlined in detail in Chapter One of establishing a taxonomy of helping behaviours. Subsequent chapters will then describe the results of six behavioural studies in urban and rural communities. Theoretical concerns, however, will help to guide the selection of community variables included for study, as described in Chapter Four. Theoretical issues will also be raised again in Chapter Eleven in which the consistency of the data with the various theoretical perspectives outlined in this chapter is discussed.

Chapter Three: A Cognitively-Based Taxonomy of Helping

In the first chapter of this volume it was argued that an organisational framework for helping would help to establish the limits of empirical generalisations, allow the comparison and interpretation of research findings, and assist in the planning of future studies. Furthermore, the review of theoretical approaches in Chapter Two highlighted the need to understand the range of applicability of various theories, a task which requires a taxonomic organisation of the relevant subject matter. This chapter will describe the development of an empirically based taxonomy of helping produced in response to these needs.

There are several types of taxonomies or organisational schemes which could be used for this purpose. For example, the type of help needed could form the basis of a category scheme. Following this strategy, Schreiber and Glidewell (1978) divided help-giving into emotional support, advice, and economic action (see Gottlieb, 1978 for a similar scheme). A related scheme based upon the type of helping activity involved was suggested by Lau and Blake (1976) who referred to "the major types of helping behavior: donation of one's own resources to individuals or organizations, sharing of one's own resources with others, offering help to the needy, and crisis intervention" (p. 2).

Staub (1978) attempted an organisational model based upon stimulus characteristics of situations which determine the elicitation of helping responses. His model included a number of dimensions along which helping situations might vary, such as the degree to which responsibility is focused upon a bystander, the

amount of cost involved in helping, the seriousness of the situation, and so on. A different method was that of Wispé (1972) who attempted a taxonomy based upon an analysis of the meanings of major helping terms. Wispé first drew attention to the need to develop a taxonomy of prosocial behaviours when he stated "The different manifestations of positive social behaviours should be distinguished so that they can be operationalized more precisely and their genotypic similarities and differences noted " (1972, p. 4). He then went on to distinguish and define six categories of prosocial behaviour: altruism, sympathy, cooperation, helping, aid, and donating. Alternately, the physical setting in which help is required could be the focus of an organising scheme similar to the model proposed by Mehrabian and Russell (1974) which related affiliative behaviours to the emotion-eliciting qualities of the environment.

However, these approaches will not be adopted in the present study since it is argued here that one needs to adopt a holistic approach and consider as many parameters of the situation as possible when constructing the taxonomy. Furthermore, except for the attempt by Staub and Gottlieb, these taxonomies do not appear to have been systematically derived either empirically or theoretically, and are often based upon a commonsense and somewhat arbitrary categorisation.

A useful concept in the present context is that of a social episode (Forgas, 1979). According to Forgas, episodes are cognitive representations of stereotypical interaction sequences. Episodes constitute perceived units in the behavioural stream because of

their symbolic, temporal and often physical boundaries. The value of using the concept of episodes in the present context is that it encompasses the entirety of the interaction sequence between recipient and helper. Such a general approach includes the terms of helping need, helping behaviour, and helping situation in one general concept. This avoids focussing on narrow aspects of helping such as the degree of cost involved or the type of help needed and favours a multidimensional view of the interaction sequence as a whole.

The quantitative technique used to study episodes has typically involved an explicitly cognitive approach using judgemental ratings from sets of subjects. Techniques such as multidimensional scaling are then used to identify the underlying perceptual dimensions subjects use to distinguish between episodes. Inspection of the literature reveals that multidimensional scaling procedures have generally been found to be useful in reliably representing implicit cognitive domains (Falbo, 1977; Forgas, 1976, 1980; Kruskal & Wish, 1978).

There are also many positive arguments which support the choice of an explicitly cognitive approach for a taxonomy of helping. For example, such an approach is broadly consistent with what Backman (1979) has described as the "cognitive revolution in social psychology". This revolution has many origins with notable contributions from symbolic interactionism, phenomenology and ethnomethodology (Blumer, 1969; Schutz, 1970; Garfinkel, 1967). The central emphasis of these cognitive approaches is that the individual reacts to his own construction of social reality.

An increasing number of writers are adopting the opinion that it is the perceived situation, not the "objective" situation, which influences individual behaviour. Backman (1979) and Mixon (1974) have reinterpreted some previous experimental work from this cognitive perspective. They argue that researchers have not paid sufficient attention to the problem of the subjective meaning of the experimental procedure by research subjects. Mixon's (1974) reinterpretation of Milgram's (1963) obedience studies is a good example. Mixon argued that Milgram's experimental situation seems quite clear to outsiders, yet subjects actually in the experiment were highly confused by one aspect of the situation: the experimenter's total lack of concern with the victim's distress. Mixon's role-playing reenactments of the experiment suggest that subjects administered severe shock because, in the extreme ambiguity of the situation, they defined the situation as an experiment in which normal safegaurds only appeared to have broken down. According to Mixon, subjects who believed they were really hurting the victim disobeyed the experimenter.

The point that Mixon and Backman seek to emphasize is that many investigators have failed to perceive that their study could and was being interpreted by subjects in non-obvious ways. Manipulation checks, the standard methodological procedure to deal with this issue, are rarely sensitive enough to uncover the full range of these interpretations.

It is argued here that serious attention to the perceived characteristics of helping episodes is critical in understanding the helping behaviour of individual actors. It is not anticipated,

however, that these individual perceptions will be completely idiosyncratic. Instead, similar perceptions and definitions are likely to characterize the cognitive appraisals of similar groups of people. Such shared perspectives or intersubjectivities can be seen as the building blocks for the commonality and normative behaviour which takes place in social episodes. Therefore, the present study will attempt to derive a general taxonomy of helping forms, based upon the implicit criteria people use to distinguish among different instances of helping. (For a more detailed discussion of these issues, see Smithson, Amato, and Pearce, in press. For an alternative presentation of the research reported in this chapter, see Pearce & Amato, 1980).

Method

The first step in this procedure was to select a sample of helping episodes. In many multidimensional scaling studies, this is a crucial problem, for without a listing of all the elements of the population, it is difficult to know whether one has sampled from the entire range of a given behavioural domain (Frederiksen, 1972). This is precisely the case with a form of behaviour such as helping. To make the results directly relevant to the literature on helping, it was decided to make use of the actual measures of helping from past studies conducted by social psychologists. There is no guarantee, of course, that this is a good representation of the full range of possible forms of helping, but it served as a starting point

A list of well over 100 helping behaviours was compiled by scanning several hundred articles published in major journals such as Journal of Personality and Social Psychology, Journal of Social Psychology, Journal of Experimental Social Psychology, Journal of Applied Social Psychology, European Journal of Social Psychology, Sociometry, and Personality and Social Psychology Bulletin. This list, however, was too long for multidimensional scaling procedures, so it was pruned to a total of 62 items by removing those forms of helping with substantial overlap with another item (for example, donating anonymously to two different charity appeals).

These measures of helping were then summarized as brief helping episodes for presentation to respondents. An example would be "Mailing a lost letter that you have found on the street for the person who wrote it, even though you do not know him/her". The complete list of 62 helping episodes, as given to the subjects, can be found in Appendix A.

The respondents in this study were 72 male and female first year students enrolled in the Department of Behavioural Sciences at James Cook University of North Queensland who volunteered for this project. These students ranged in age from 17 to 50 with a median age of 19. Thirty-four percent of these people were over 25.

Respondents were seated in rooms containing between 10 and 20 people and were given the list of 62 helping episodes and a grid sheet for their responses. They were instructed to read selected pairs of episodes and decide whether they involved basically similar or dissimilar kinds of helping. They then rated the degree of similarity between the two on a scale from 1 to 5 on their grid

sheet. Due to the large number of pairs this procedure generated (1891 altogether), any particular rater was required to rate only a subsample of the pairs (about 300 ratings). This task took most people about one hour to complete. Thus, it took a total of 6 people to complete one matrix of 1891 similarity ratings, with each possible pair of stimuli being rated by a total of 12 people. These data were then aggregated and the mean rating for each stimulus pair served as input into the multidimensional scaling program.

Since every rater did not judge every possible pair of stimuli, and because every pair was rated by a total of only 12 subjects, a check was made to see how much agreement existed between the similarity ratings given by different respondents. A subsample of 12 raters was chosen from the 72, and a random sample of 100 stimulus pairs which the 12 raters had all rated in common was also selected. The 12 sets of ratings for these 100 stimulus pairs were then intercorrelated using Spearman's rank order correlation coefficient. The inter-correlations between the 12 raters ranged from .02 to .65 with a mean coefficient of .34 ($p < .05$). Eighty-nine percent of the inter-rater coefficients were significant at the .05 level. Thus, substantial variation was exhibited between raters, with some agreeing at a fairly high level and others showing little agreement. Nevertheless, none of the correlations were negative, and the average pair of raters agreed at a moderate, and statistically significant, level.

The reliability of the ratings improved when the data were aggregated for groups of subjects. The same 12 raters were randomly divided into two groups of six subjects each and the mean rating

given by each group of six on the same 100 stimulus pairs was calculated. These two sets of means were correlated, yielding a correlation of .75 ($p < .001$). Overall, there appeared to be enough consistency in The data to serve as meaningful input into a multidimensional scaling program.

The data were analyzed with the MINISSA program from the MDS(X) series. MINISSA was originated by E. E. Roskam and J. C. Lingoes (1977) and consists of an algorithm to find the coordinates of a set of points (corresponding, in this case, to the 62 helping stimuli) in an r-dimensional space such that the distances between the points is of the same rank order as the (dis)similarity ratings between the stimuli. MINISSA is a nonmetric smallest space analysis which reproduces the underlying structure inherent in a set of data.

Results

Solutions were obtained in 5, 4, 3, 2, and 1 dimension. The stress levels for the solutions were, respectively: .12, .14, .18, .26, and .43. The three-dimensional solution was chosen as the optimal one because the stress level was acceptable and the obtained configuration could be interpreted easily. Adding the fourth and fifth dimension reduced the stress level marginally and did not add to the interpretability of the solution.

The co-ordinates of the 62 helping stimuli along the three dimensions are shown in Table 3.1. Abbreviated labels have been used to identify the helping episodes. Since 62 episodes are difficult to plot in three dimensions in a single figure, a representative sample of 20 stimuli from all areas of the three

dimensional space was chosen for graphic representation. These data appear in Figure 3.1. Readers can plot in any other helping episode of interest by using the co-ordinates supplied in Table 3.1.

Following a procedure suggested by Kruskal and Wish (1978) a second and third configuration were generated by rerunning the MINISSA program with subsamples of 25 and 21 stimuli. The result was essentially the same in both cases, with stimuli appearing in about the same area in the space relative to each other. In both cases the three-dimensional solution was the best, using the criteria of stress level and interpretability.

Using a neighbourhood interpretation, certain clusterings of stimuli can be noted in the three-dimensional space when all 62 stimuli are plotted (these clusters are not readily apparent in Figure 3.1 due to the small number of stimuli plotted). The first cluster consists of episodes 8, 15, 21, 28, 37, 43, 51, 58, 60, and 62, all representing situations of some seriousness. Hence, this grouping can be thought of as an "emergency intervention" cluster. A second cluster consists of episodes 2, 4, 14, 18, 17 19, 20, 31, 32, 34, 35, 46, 47, and 53. These episodes all involve formal, planned, organisational forms of helping, and could be labelled "formal, organisational helping". The third cluster is made up of episodes 5, 9, 10, 13, 16, 22, 26, 27, 33, 40, 41, 42, 45, 48, 49, 50, 56, and 57. This large cluster could be described as "informal, casual, everyday help to strangers". Finally, a fourth cluster consists of episodes 1, 3, 6, 7, 11, 12, 24, 25, 30, 36, 44, and 61,

Table 3.1

List of the 62 Helping Stimuli and Their Coordinates in the Three Dimensional Configuration

		Dim. 1	Dim. 2	Dim. 3
1.	Giving 50 cents for xerox copies	0.05	0.52	0.45
2.	Time to a community campaign	-1.15	-0.03	-0.21
3.	Donating food to the poor	-0.01	-0.43	0.81
4.	Collating materials for a class	-1.09	0.41	-0.11
5.	Picking up a hitch hiker	0.72	0.19	-0.10
6.	Sharing money you won with friends	0.13	-0.17	0.96
7.	Mailing a wallet to its owner	0.55	-0.06	0.47
8.	Stopping children from fighting	0.57	-0.75	-0.51
9.	Phoning for a sprained ankle victim	0.52	-0.21	0.06
10.	Mailing a package for a stranger	0.36	0.15	0.04
11.	Returning an overpayment	0.92	0.18	0.76
12.	Not claiming money lost by others	0.91	0.43	1.00
13.	Giving the time	0.28	0.53	-0.18
14.	Washing blouse in market research	-0.97	0.61	-0.46
15.	Electric shock victim	0.52	-0.97	-0.11
16.	Helping stranded motorist	0.58	-0.09	-0.34
17.	Interviewed by researcher	-0.64	0.72	-0.64
18.	Distributing questionnaires	-0.91	0.29	-0.61
19.	Numbering task after experiment	-0.87	0.35	-0.31
20.	Saving cartons for art students	-0.67	0.42	0.14
21.	Helping someone fallen over	0.52	-0.62	-0.26
22.	Picking up computer cards	0.32	0.07	-0.94
23.	Helping a child with a hard task	0.05	-0.03	-0.69
24.	Sharing food with friends	-0.18	-0.18	1.17
25.	Donating money to a charity box	-0.39	0.13	1.01
26.	Calling a garage; wrong number	0.33	0.15	0.17
27.	Picking up pencils	0.56	0.43	-0.55
28.	Helping an epileptic	0.31	-0.93	-0.54
29.	Assisting a lost child	0.44	-0.36	-0.52
30.	Funding a fellow player; card game	0.08	0.48	1.02
31.	Binding storybooks for poor kids	-0.80	-0.26	0.07

Table 3.1 (continued)

		Dim. 1	Dim. 2	Dim. 3
32.	Filling out a questionnaire	-0.74	0.76	-0.12
33.	Mailing a lost letter	0.49	0.57	0.31
34.	Volunteering for an experiment	-1.11	0.25	-0.34
35.	Counseling high school students	-1.15	-0.15	-0.43
36.	Donating blood	-0.53	-0.77	0.78
37.	Lowering partner's shock level	0.01	-1.14	0.85
38.	Hand with stuck shopping cart	0.26	0.32	-0.56
39.	Signing favorite color	-0.21	0.97	-0.27
40.	Giving change for a phone call	0.34	0.86	0.12
41.	Giving directions	0.57	0.56	-0.24
42.	Looking for lost contact lens	0.41	0.13	-0.41
43.	Helping a fall victim	0.54	-0.87	-0.47
44.	Giving 20 cents for bus fare	0.39	0.33	0.75
45.	Correcting inappropriate directions	1.14	0.18	-0.33
46.	Chaperone delinquents on zoo trip	-1.00	-0.73	-0.03
47.	Time with mentally retarded boy	-0.82	-0.87	.18
48.	Picking up fallen groceries	0.61	0.27	-0.63
49.	Opening a door for someone	0.41	0.66	-0.38
50.	Phone call for deaf person	0.02	-0.11	-0.05
51.	Aiding an unconscious person	0.37	-1.01	-0.02
52.	Donating bone marrow to patient	-0.42	-1.25	0.29
53.	Reading to a blind student	-0.64	-0.35	0.04
54.	Aiding a lost person	0.22	0.54	-0.32
55.	Working hard for your supervisor	-1.15	0.53	0.47
56.	Informing about a dropped package	0.72	0.60	0.10
57.	Turning lights off; parked car	0.68	0.78	0.11
58.	Heart attack victim	0.36	-1.04	-0.14
59.	Returning books to the library	-0.16	0.40	0.19
60.	Helping a man to first aid	0.01	-0.60	-0.20
61.	Money to Multiple Sclerosis fund	-0.52	0.03	0.99
62.	Breaking up a fight	-0.16	-0.85	-1.30

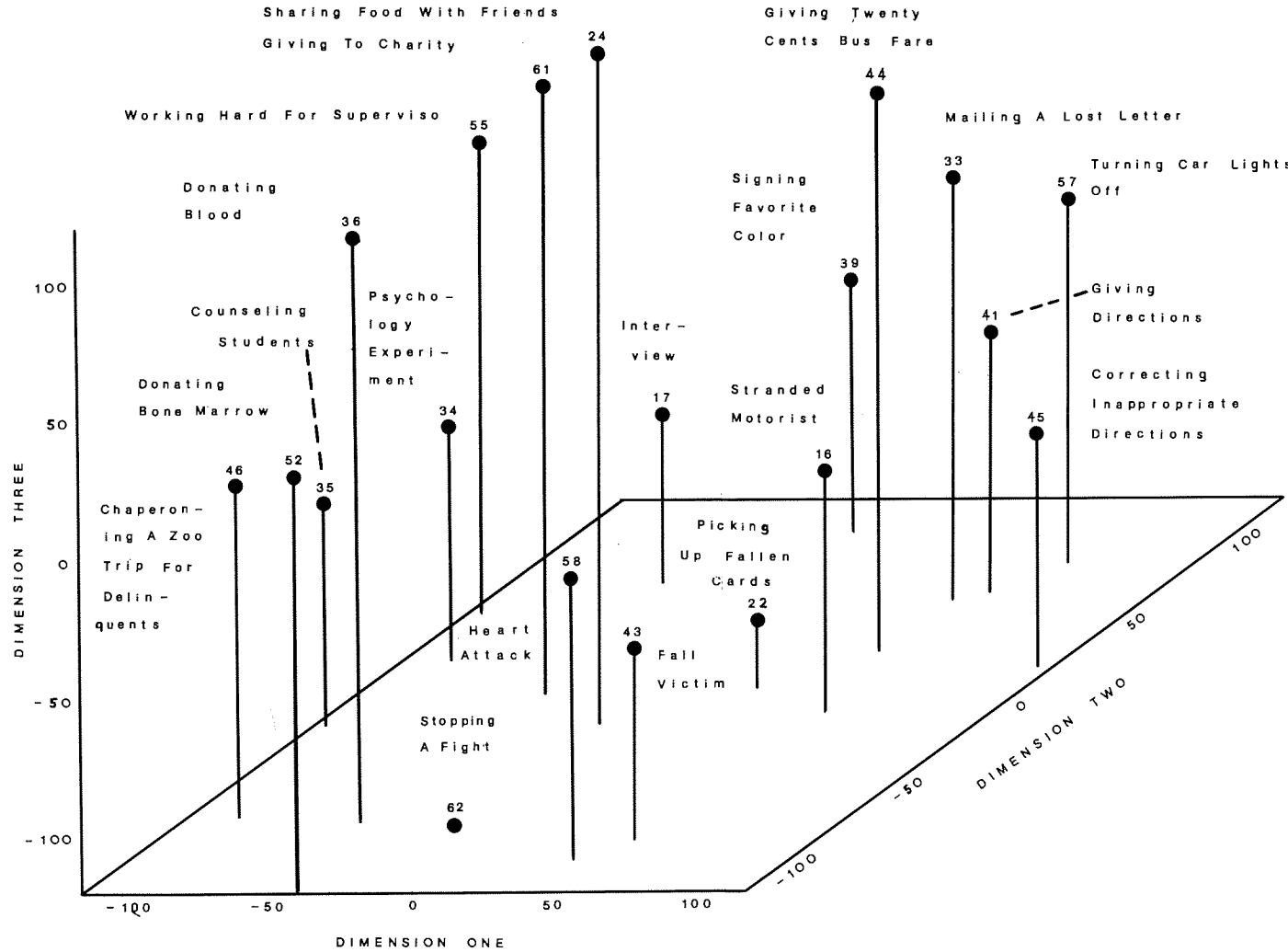

Figure 3.1 The Three Dimensional Configuration of Helping Episodes.

all forms of helping which involve giving material assistance to people. Hence, this could be labelled a "donating and sharing" cluster.

However, after closer inspection, it was decided that a dimensional interpretation might be more appropriate. Accordingly, attention was directed toward labelling the dimensions which appeared to run through the multidimensional space. Although the axes in MINISSA are arbitrary and may be rotated, the three dimensions seemed easily interpretable without rotation. While intuitive hunches were held about the labelling of the dimensions, it was decided to check on these labels empirically.

To do this, judges were recruited to rate the 62 helping episodes on a number of 7-point bipolar scales which could then be fitted as vectors through the multidimensional space via regression procedures. The scales were chosen either because they seemed reasonable interpretations of the dimensions or were suggested by the literature on helping as being of importance. These scales are listed in Table 3.2. For example, the seventh scale, "feel sympathy for the person - feel little sympathy for the person" was suggested by Wispé's (1978) discussion of the role of sympathy in helping, and number 10, "costs me little to help - costs me a lot to help" was suggested by Piliavin and Piliavin's discussion of the role of cost in helping (1972).

The judges consisted of 45 female and male second year students at James Cook University of North Queensland. Their ages ranged from 18 to 52 with a median age of 22. These people were given a list of the 62 helping episodes and a series of rating sheets with

the bipolar scales listed. They then rated the 62 helping episodes on each of the 16 scales. Due to the large number of ratings involved, each person rated only about one third of the 62 episodes. Each episode was rated by a total of 15 people. The mean ratings on each of the 16 scales were then computed for each episode.

These mean ratings were used as input into the PREFMAP program. PREFMAP was originated by Carroll and Chang (1977b) and is part of the MDS(X) series. The vector model, available in PREFMAP, was used to analyze the data. The vector model uses an algorithm suited for assessing whether a scaled property can be represented as a vector in a Euclidean space of points possessing that property to varying degrees. In addition to finding the "best vector" and providing direction cosines to fix its orientation in the space, PREFMAP computes the correlation between projected values of each point on the vector and the input values from the scale itself. This latter quantity is the best indicator of how adequate the vector representation is for the scale concerned. The co-ordinates of the 62 helping episodes on the three dimensions as supplied by the MINISSA program were also used as input. The fourth dimension, although not interpretable, was extracted first, a procedure recommended by Kruskal and Wish (1978) to "clean up" the configuration.

The direction cosines for the fitted vector representations of the 16 scales and the correlation of the scale means with the projections of the stimuli on the vectors are given in Table 3.2. The two scales which serve as the best interpretations of the first dimension are planned help - spontaneous help (direction cosine =

.93, r = .77) and formal help - informal help (direction cosine = .89, r = .69). Inspection of the configuration reveals that episodes such as "chaperoning a group of juvenile delinquents on a zoo trip" and "volunteering for a psychology experiment after your lecturer has asked for volunteers" are at one pole of this dimension and episodes such as "giving directions to a stranger" and "turning off the lights on a parked car" are at the other pole.

The situation is serious - situation is not serious scale appears to be the best interpretation for the second dimension (direction cosine = .98, r = .70). Other scales in approximate alignment with the second axis, and with reasonably high correlations are difficult to do - not difficult to do, don't know what to do - know what to do, and feel sympathy for the person - feel little sympathy for the person. Episodes like "helping a heart attack victim" and "donating bone marrow for a seriously ill medical patient" appear at one pole of this dimension and episodes like "writing your favorite colour for a student working on a class project" and "mailing a lost letter" appear at the other pole of this dimension.

The third dimension is characterized by episodes such as "picking up dropped computer cards" and "breaking up a fight" on one hand while the other pole of the dimension involves episodes such as "sharing food with friends" and "donating to charity". Giving what I have - doing what I can describes this dimension (direction cosine = -.94, r = .71), with indirect intervention - direct intervention (direction cosine =-.71, r = .70) also serving as a reasonable interpretation.

Table 3.2 Bipolar Scales Used for Dimensional Interpretation, Direction Cosines for Each Dimension, and the Correlation Between Observed and Expected Scale Values

Rating Scale	Dim. 1	Dim. 2	Dim. 3	Correlation
1. Planned help - spontaneous help	.93	.23	-.28	.77
2. Formal help - informal help	.89	.45	.04	.69
3. Self initiated help - other initiated help	-.89	.45	-.01	.47
4. Situation is serious - situation is not serious	-.19	.98	.10	.70
5. Difficult to do - not difficult to do	.60	.77	.21	.77
6. Know what to do - don't know what to do	-.47	-.81	-.35	.71
7. Feel sympathy for the person - feel no sympathy	-.46	.89	-.01	.67
8. Everyday occurence - unusual occurence	-.43	-.83	-.37	.56
9. Costs me a lot to help - costs me little to help	.68	.65	-.35	.67
10. Masculine help - feminine help	-.64	.67	.37	.50
11. In control of situation - not in control	-.12	-.97	-.20	.33
12. Feel free to help - feel compelled to help	-.54	-.65	-.54	.46
13. Giving what I have - doing what I can	.32	.10	-.94	.71
14. Indirect intervention - direct intervention	.59	-.38	-.71	.70
15. Active help - passive help	-.27	.43	.86	.59
16. Makes me feel good - makes me feel bad	-.61	-.35	-.71	.28

Overall, this suggests a threefold structure of helping. First, there is spontaneous, informal versus planned, formal help. Second, there is serious versus nonserious help. Third, there is doing, direct help versus giving, indirect help. The second dimension appears to relate to the need of the recipient, while the third dimension relates to the type of response required from the helper. The first dimension characterizes the type of situation in which helping occurs, that is, it distinguishes helping which occurs spontaneously, with little prior warning, in casual and informal settings, from help which has been planned ahead of time by the helper, has less immediacy, and occurs in more formal, structured settings.

Discussion

The seriousness dimension is the one which has appeared most often in the literature on helping. Bar-tal (1976), Staub (1978) and Latane and Darley (1970) all distinguish serious, emergency helping from less serious, everyday helping. Furthermore, the seriousness dimension has been empirically investigated in a number of previous studies (Ashton & Severy, 1976; Staub & Baer, 1974; Shotland & Huston, 1979). While it has been recognized that the type of assistance required is also an important variable, the giving versus doing distinction, as such, has not received much attention in the literature on helping. However, a number of studies have compared direct versus indirect forms of assistance (Schwartz & Clausen, 1970; Page, 1977). Very little research appears to have been directed toward the planned, formal versus spontaneous, informal dimension. It is probably the most surprising

dimension to emerge from the present analysis. An article by Benson and his colleagues (1980), making reference to spontaneous versus nonspontaneous help, is one of the few to draw attention to this important distinction. Further investigations of differences between planned, formal types of helping and spontaneous, informal types of helping might generate interesting results, given the salience of this dimension for our subjects.

The present taxonomy may be useful in helping to integrate prior research and reconcile contradictions in the literature. For example, the "doing versus giving" and the "spontaneous versus planned" dimensions may be relevant to the findings regarding sex differences in rates of helping. A search through the literature reveals that the majority of studies reporting higher rates of helping for males than females have used forms of helping, such as picking up fallen pencils (Latane & Dabbs, 1975) , that are high on dimension 1 (spontaneous, informal) and low on dimension 3 (doing, direct, active). Perhaps situations that elicit spontaneous, informal, active, direct forms of help are governed by a norm that is more salient for men than women. This point will be returned to again in Chapter Eleven (See Smithson, Amato, and Pearce, in press, for a more detailed discussion of this point.)

Another use of the dimensional structure lies in selecting helping episodes for research purposes. Such a procedure can help to avoid duplicating types of helping with similar characteristics and enable differences in rates of helping to be related systematically to the combined effects of the major variables of interest and the helping episode characteristics. This , in fact,

is the procedure which will be carried out in subsequent chapters of this volume.

A Replication Study

Before continuing with this line of research, it was decided to see if the first study could be replicated using a different group of subjects, a somewhat different sample of helping episodes, and a different method for analyzing the data. Accordingly, the sample of 62 helping episodes was stratified on the basis of the three dimensions, and a representative sample of 25 stimuli covering all regions of the multidimensional space was selected. Twenty student volunteers from the University of Queensland in Brisbane were recruited to give similarity ratings between all possible pairs of stimuli. The similarity ratings generated by these subjects were analyzed with the INDSCAL program (Individual Differences Multidimensional Scaling). INDSCAL was originated by Carroll and Chang (1977a) and is part of the MDS (X) series. The INDSCAL model is based upon the assumption that the attribute dimensions underlying perceptions of a sample of stimuli may have differential relevance to different individuals. The model uses a complete set of judgements from each subject to produce a unique group stimulus space, the dimensions of which are said to correspond to meaningful psychological dimensions which are usually interpretable without further rotation. INDSCAL also calculates a set of dimension weights reflecting the salience of the various dimensions to each individual.

The INDSCAL program produced a three-dimensional configuration which accounted for 33 percent of the variance in the subjects similarity ratings. Although the percent of variance accounted for was somewhat low, the solution was strikingly similar to the one generated in the first study, with stimuli falling in about the same area of the three-dimensional space relative to each other. As a check on the interpretability of the new configuration, the bipolar ratings obtained in the first study were input into a PREFMAP program along with the co-ordinates of the 25 stimuli from the three-dimensional INDSCAL space.

The planned help - spontaneous help and the formal help - informal help scales appeared to be the best interpretations for the second dimension, with respective direction cosines of -.91 and -.81 and correlations of .72 and .67. The first dimension was well represented by the serious - not serious scale (direction cosine = .89, r = .70), and by don't know what to do - know what to do (direction cosine = .86, r = .72) and costs a lot to help - costs little to help (direction cosine = .84, r = .78). The third dimension was best represented by three scales: giving what I have - doing what I can, indirect intervention - direct intervention, and passive help - active help (direction cosines, respectively, were .84, .99, and .76). However, the PREFMAP correlations for these last three scales were rather low: .51, .56, and .49, respectively. These low correlations may reflect an atrophied range of helping episodes due to the decreased number of stimuli.

While the subjects revealed a certain amount of individual variation in the salience of the three dimensions, these differences in dimensional weights did not appear to be related to any of the demographic variables included in the study.

Conclusion

All in all, there appeared to be enough consistency between The results of the first and the replication study to warrant the further elaboration and use of this taxonomic model. An important question, however, refers to the original sampling of helping episodes. The results of any data-reduction technique, like multidimensional scaling, are limited by the range of data one begins with. The present sample of helping episodes was derived from the social psychological literature on helping behaviour. Can one assume that social psychologists, after more than a decade of research in this area, have adequately covered the entire range of different type of helping? Or have researchers, for one reason or another, left out or seriously understudied certain kinds of helping? If there are major omissions in the helping literature, then the results of these first taxonomic studies may be seriously limited.

A later study (Smithson & Amato, in press) addressed itself to this question. In this study, multidimensional scaling analysis and techniquess derived from fuzzy set theory were used to discover if there were any major forms of helping which had been neglected by social psychologists studying prosocial behaviour. These procedures resulted in the discovery of a "new region" of helping which was

best described as personal (as opposed to anonymous) and the type of help which is usually given only to friends (as opposed to the type of help which is given to either friends or strangers). Unfortunately, this information became available at too late a date to be included in the research described in the remainder of this volume. Therefore, only the three dimensions of helping presented in this chapter form the basis of subsequent research reported in later chapters. This omission, however, is not critical for the present purposes. This point will be returned to in Chapter Ten.

In the next chapter a description will be given of how the helping taxonomy developed in this chapter was used to generate a sample of helping behaviours for study. The sampling of urban and rural areas for study will also be described in detail.

Chapter Four: Sampling Considerations and Procedures

In Chapter One it was argued that previous research on urban-rural differences in helping behaviour suffered from three types of sampling problems. The first problem refers to the non-random selection of individual subjects within communities. A second problem refers to the arbitrary selection of helping behaviours used to measure levels of helpfulness in urban and rural areas. The third problem refers to the nonrandom selection of cities and towns for study. These problems seriously restrict the extent to which separate studies can be meaningfully compared and the extent to which generalisations can be drawn.

The first sampling problem, that of the non-random selection of subjects (usually pedestrians) within a given urban or rural locale is common, not only in this particular line of research, but in social psychology in general. Except for the study by House and Wolf (1978) (which used a probability sample of households and nonresponse rates to an interview request as a measure of "unhelpfulness") these studies have used, at best, a systematic sampling of every nth pedestrian passing along the sidewalk at the time testing procedures were carried out. While this procedure does guard against selection bias on the part of the investigators, it does not guarantee that the people sampled are representative of the actual city or town being sampled. Thus, there is a serious question as to just what population has actually been achieved by the sampling procedure and to what population the results can be reasonably generalised. Furthermore, there is no guarantee that the two groups studied will be comparable, for people who frequent city

sidewalks may be different in a variety of ways from people found on the sidewalks of rural areas (for example, in age or social class).

However, there does not appear to be an easy way of solving this problem if one's intention is to study rates of helping in public places (like city sidewalks). Indeed, this appears to be an inherent limitation of the particular research question. This should not be cause for undue pessimism. As Cook and Campbell (1979) point out, formal random sampling of individuals for representativeness, allowing strict generalisation to target populations, is extremely rare in field research in the social sciences. In this context, they distinguish between generalising to well-defined target populations and generalising across specific groups within a population. Practically speaking, most field researchers wishing to make comparisons between groups have been less concerned with strict random sampling than have researchers wishing to accurately generalise to target populations, with the first set of researchers generally being content to demonstrate a difference with the actual, achieved samples.

Greater emphasis will be given in this volume to the second and third sampling problems outlined above (i.e., the sampling of behaviours and urban-rural areas for study), where there is greater scope for further development, than to the first problem (i.e., the sampling of specific individuals). In fact, a number of field studies which will be reported in subsequent chapters have used the same method of selecting individual subjects as was mentioned above, that is, the systematic selection of every nth person. There are, however, a number of precautions which were taken in this context.

First, an attempt was made to ensure that as many aspects of the testing situation as possible (such as the time of day and day of the week) were not confounded with any of the major independent variables to produce a bias in favor of one particular group. Furthermore, as much data as possible was collected on the characteristics of each sample (such as sex and age distributions) to ensure that the samples of interest (in this case urban and rural groups) were equivalent in these "irrelevant" respects. Alternately these extra observations were used as controls, when required, so that any differences between samples could be statistically partialled out. These sorts of precautions are recommended by Cook and Campbell (1979) to minimize the effects of differences in treatment implementations, the effects of irrelevant variables in the experimental setting, and random heterogeneity of respondents (pp. 43-44). More detail will be presented regarding the selection of subjects in subsequent chapters.

This chapter will first concern itself with the selection of helping behaviours for study. For this purpose, the helping taxonomy developed and described in Chapter Three was used for a guide. The second part of this chapter describes the sampling procedure used to generate a sample of 61 cities and rural areas in Queensland and New South Wales. This section also describes the collection of supplementary data on each city and rural area studied, most of it derived from the 1976 Australian census. Data reduction procedures were then used to reduce this rather large collection of data to a more manageable size for use in subsequent analyses .

Selection of Helping Behaviours for Study

The three-dimensional model of helping described in Chapter Three was used to select a sample of helping measures, the intention being to choose one helping episode from each region of the space. Six helping episodes were therefore needed, one from the extreme end of each of the three dimensions. Four helping episodes were initially chosen. "Correcting inaccurate directions which you have overheard being given to a stranger" was chosen from the spontaneous extreme of the planned-spontaneous dimension. In this situation, the investigator walked into a store and asked directions from a shopper (confederate). The confederate gave obviously incorrect directions, and the behaviour of the shop assistant, standing within hearing range, was recorded (i.e., did or did not correct the inaccurate information). " Writing your favorite colour for a student working on a class project" was chosen from the nonserious end of the seriousness dimension. In this situation the investigator approached a pedestrian on the sidewalk, explained that he was a university student, and asked him or her to write a favorite colour on a sheet of paper. Whether the subjects complied with the request or not was recorded. For an active, doing form of helping, "picking up fallen cards" was chosen. In this situation, the investigator dropped a handful of envelopes in front of a pedestrian chosen to be the subject. Whether the subject helped to pick up the envelopes or not was recorded. For the passive, giving form of helping, "giving a donation to the Multiple Sclerosis Society" was chosen. In this situation, researchers working as official collectors for the Multiple Sclerosis Society, and wearing identifying badges, approached pedestrians in the downtown area with

the intention of selling one dollar packets of greeting cards. Whether the subject purchased a packet of cards or not was recorded.

A problem arose, however, because none of the situations at the extreme seriousness pole of dimension 2 or the planned, formal pole of dimension 1 seemed appropriate for field work purposes. Therefore, two new helping episodes had to be invented. The serious situation consisted of a actor walking along the street with a noticeable limp. Suddenly he would fall to the ground with a cry of pain, and while lying there, would reveal a heavily bandaged leg smeared with fresh theatrical blood. The actor would continue to lie on the ground until the pedestrian chosen to be the subject either offered assistance or completely passed by. For the measure of planned, formal helping, an already existing data set was utilized: nonrespnse rates to the 1976 Australian census. For this purpose, nonresponse rates were conceptualized as behaviour indicating a lack of cooperation with the federal government, while properly completed forms were conceptualized as cooperative, helpful behaviour. Before using these two measures, however, similarity ratings from six raters were obtained between these measures and a representative sample of 25 other helping forms from the original multidimensional scaling study reported in Chapter Three. In this way the situations could be "mapped" back into the multidimensional helping space by rerunning the MINISSA program. The two new situations emerged in the areas anticipated: the bloody leg situation appeared close to the end of the seriousness pole of dimension two while completing the census form accurately and completely was seen as a planned, formal type of helping at the extreme end of dimension one (see Figure 4.1). This step in the

research process indicates, interestingly, that the taxonomy can be used not only to choose previously studied forms of helping, but to generate new helping forms which have certain desired characteristics.

The Sampling of Urban and Rural Settings

Previous studies of urban-rural differences in helping behaviour have relied upon convenience samples of cities and towns. The usual procedure in this research has been to compare rates of helping in a single large city with rates of helping in one, or more, smaller towns which are often within a few hours drive of the large city. As discussed in Chapter One, this procedure has generated three major problems for this line of research. First, generalising across separate studies is difficult because the actual population of the "big city" and the "small town" used has varied a great deal from study to study. Researchers have, in fact, sampled along quite different ranges of the urban-rural continuum. Furthermore, because the majority of these studies have compared a single large city with one or more small towns of approximately the same size, little information is available regarding rates of helping at intermediate levels of population size. With only two levels of observation, it cannot be determined whether the relationships are linear (which is usually inferred) or nonlinear.

Second, because the selection of areas for study is made on a nonrandom basis, it is not possible to generalise the results to the larger population of urban and rural areas. One likely problem here refers to the nature of the small towns sampled in past research.

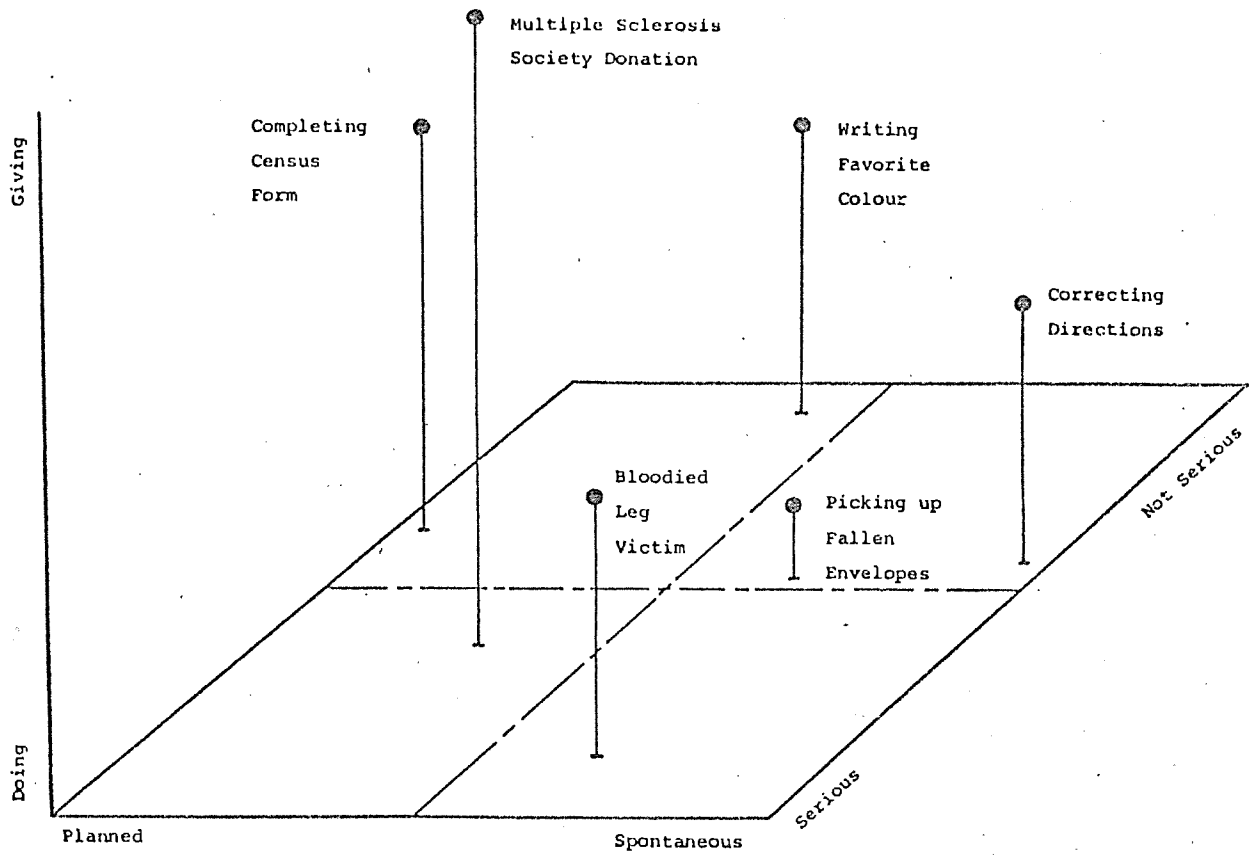

Figure 4.1 Location of the six helping measures in the multidimensional space

Being relatively near large urban centres may give these small towns certain characteristics which set them apart from their more isolated rural counterparts. Thus, while previous research has taken into account population size, the effects of rural isolation have not yet been considered. This last point is especially problematic, for factor analytic studies of city characteristics have revealed that isolation from a major metropolitan centre reduces the "urbanism" of a city, regardless of its actual size. Holding population constant, proximity to a large city increases the degree of urbanism (Sherbenov & Flango, 1976).

This raises an important general issue and leads to the third problem. Population size is undoubtedly a major dimension of urbanism, but it does not define it exclusively. The concept of urbanism also includes notions of population heterogeneity, population density, technological modernisation, physical congestion, and cosmopolitan tastes and viewpoints. While it might be expected that many of these aspects of urbanism are positively correlated, individual large cities, and small towns, can vary substantially in the degree to which they lie along these diverse dimensions. For example, inspection of the 1976 Australian census data reveals that small towns vary substantially in the proportion of foreign born and bilingual people residing there. A rural town of less than 5,000 people with one fourth of its population European-born is quite high in terms of population diversity and heterogeneity, yet is quite "nonurban" in terms of its actual size. Generally, there has been little attempt made in previous research of this nature to identify the relevant dimensions of urbanism which correspond to actual differences in levels of prosocial and other

interpersonal behaviours.

Consideration of these issues led to three decisions being made regarding the sampling of areas for the present research. First, a number of different areas would be studied lying across as wide a range of the urban-rural continuum as possible and covering as great a geographical area as possible. Second, the sample of cities and towns would be selected randomly. Third, the population of cities and towns would first be stratified along two major dimensions of urbanism - population size and isolation from a major metropolitan centre - and the sample of cities and towns would be selected in accordance with this stratification. Because it proved difficult to stratify and sample along more than two dimensions, supplementary data were collected relating to other aspects of urbanism (such as heterogeneity, modernisatioon, etc.) for each city and town in the final sample. The steps in the procedure are described below.

Sampling Procedure

A list was obtained from the Australian Bureau of Statistics of all the local government areas in Queensland and New South Wales. Information was also available from the Australian Bureau of Statistics on the number of people living in each local government area at the time of the 1976 Australian census (Population and dwellings in local government areas and urban centres, 1976). The local government areas were then divided into four levels on the basis of their size. Since little data is available on the effects of various population sizes on interpersonal behaviour, the cutting-points used were somewhat arbitrary. The four levels used

were: 999 people or less, 1,000 to 4,999 people, 5,000 to 19,999 people, 20,000 or more. The fourth category was somewhat broad, but this was necessary due to the relatively small number of cities of this size in the two states.

These four levels approximately correspond to major human settlement levels frequently used in Ekistics research (Doxiadis, 1968). The first level, with 999 people or less, corresponds to the traditional size of villages around the world and is a reflection of comfortable walking distances. The second level, with up to 4,999 people, corresponds to the "urban neighbourhood". Its size is large enough to support a local primary school and a commercial shopping area. Communities in the range of 5,000 to 19,999 people and cities somewhat larger than 20,000 people correspond to the Ekistic units of "small town" and "urban community". Settlements of these sizes provide increasing levels of choice regarding activities and lifestyles for their inhabitants.

The local government areas were also stratified on the basis of isolation. For this purpose, isolation was conceptualized as distance from a capital city, that is, Sydney or Brisbane (whichever is closer). Maps were obtained from the Royal Automobile Club of Queensland and the N.R.M.A which gave the driving distance, in kilometers, of cities and towns in each state from Sydney or Brisbane. On the basis of this information, the local government areas were stratified into four levels. These were: 399 kilometers or less, 400 to 799 kilometers, 800 to 1399 kilometers, and 1400 kilometers or more. These distances were chosen on the basis of driving time, with 400 kilometers representing a half day drive and

800 kilometers representing a full day drive. These distances were intended to reflect perceived levels of difficulty in travelling to an urban destination from a home town starting point. The cutting point between the third and fourth level was 1400 kilometers (rather than 1200) to balance out the number of larger cities falling into the third and fourth levels.

Stratifying on the basis of size and isolation resulted in a 4 X 4 sampling frame. Each local government area in Queensland and New South Wales was then allocated a unique 4-digit number and a table of random numbers was used to select local government areas. Due to certain practical limitations in carrying out the later research, it was necessary to restrict the acceptable local government areas to those lying south of Cairns in northern Queensland and north of Sydney in New South Wales. Local government areas were then randomly selected, without replacement, until each cell in the sampling frame contained four local government areas. Some cells finished with less than four cases because there were less than four local government areas in the population having the appropriate characteristics. In addition to these, Sydney and Brisbane were included to represent the upper limit of the size dimension and the lower limit of the isolation dimension.

The final sample contained a total of 61 cities and towns, 34 from Queensland and 27 from New South Wales. The list of areas is given in Table 4.1. Six of the 61 areas were later excluded from the sample during the field work phase of the research. Their omission was due to a number of practical problems encountered in travelling to these areas and will be discussed in the next chapter.

The resulting 55 areas (90.2 % of the original 61) covered approximately one third of Australia. The geographical spread of the local government areas sampled across the two states is displayed in Figure 4.2. Cities and towns falling in the sample are represented by a dot, and the six areas which were not included in the later behavioural studies discussed in subsequent chapters are underlined.

Selection of City Variables

An attempt was made to compile as much information as possible on each city and town sampled in relation to its degree of urbanism. Obviously, a large number of variables are related to city size, such as the proportion of the work force engaged in primary industries and the average family size. It was decided, therefore, to limit the selection of variables to those seen as being most likely to influence interpersonal forms of behaviour (such as helping behaviour) between strangers. For this purpose, the literature review and discussions provided in Chapters One and Two were used as guides, particularly the work on socio-structural variables.

Many of the theoretical perspectives reviewed earlier suggest that the quality of urban life is strongly influenced by the large number of strangers encountered in everyday activities. In very large metropolitan areas, this would be largely determined by the size variable alone. However, in smaller towns, the amount of contact between locals and strangers might vary considerably depending upon whether the town is on a major transportation route

Table 4.1

The 61 Local Government Areas Selected for Study on the Basis of Population and Driving Distance from a Capital City[1]

	Driving distance (kilometers)			
Population	400 or less	401 to 800	801 to 1400	1401 or more
20,000 or more	Orange Newcastle Bundaberg Maryborough	Rockhampton Tamworth Armidale Dubbo	Mackay Broken Hill[2]	Townsville Cairns Mt Isa
19,999 to 5,000	Gympie Parkes Dalby Katoomba	Port Macquarie Gunnedah Coffs' Harbour Roma	Bowen Ayr Charters Towers	Ingham Innisfail Mareeba
4,999 to 1,000	Molong Alstoneville Kyogle Woolgoolga	Macksville Walget Manilla Nyangan	Emerald Cunnamulla[2] Blackwater Brewarrina[2]	Pallarenda Tully Edmonton Nelly Bay (Magnetic Is.)
999 or less	Murrurundi Clarence-town Illuka Dayboro	Duaringa[2] Lightning Ridge Yuleba Peak Hill	Rubyvale[2] Bluff Capella Marian	Malanda Herberton Richmond Mary Kathleen[2]

[1] Also includes Sydney and Brisbane

[2] Not included in the behavioural field studies

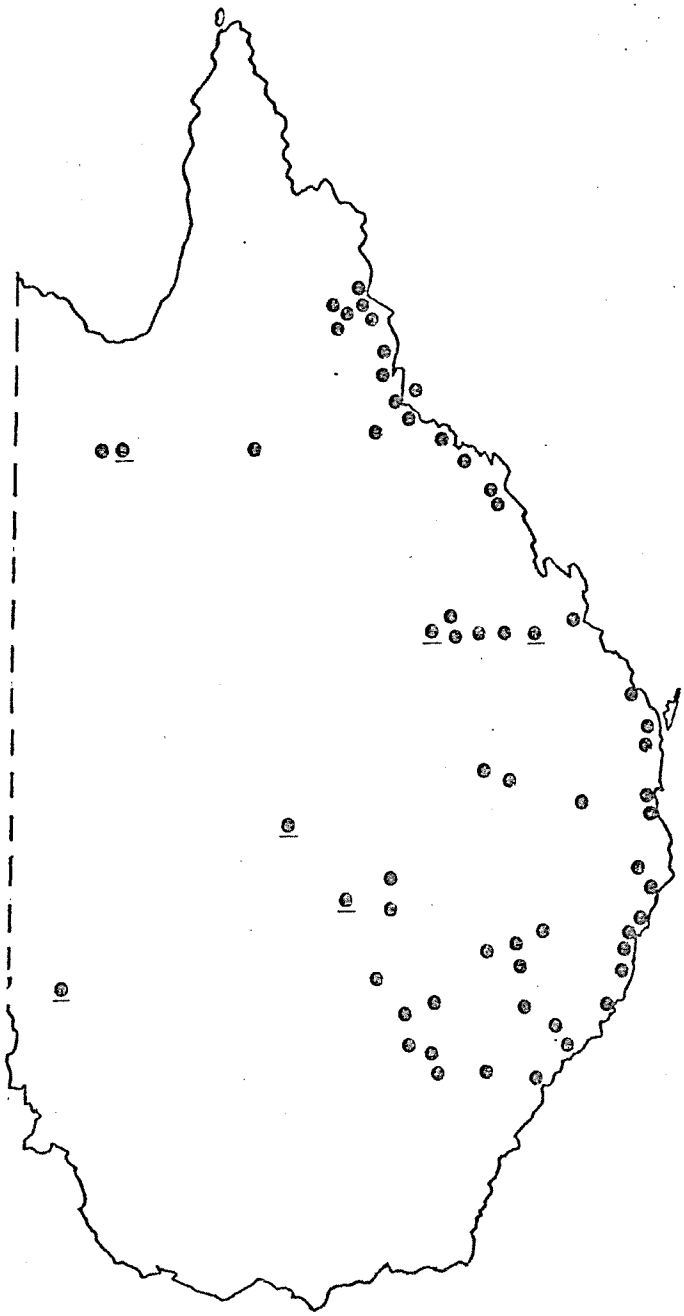

Figure 4.2 Distribution of Sampled Communities in Queensland and New South Wales (Underlined Communities Were Not Included in the Final Sample).

or has an ongoing tourist industry. Based upon these considerations, the following data were obtained:

1. The number of main, paved roads leading in/out of the city.

2. The number of per capita hotel/motel rooms in the city.

3. The percentage of the workforce employed in the entertainment industry (hotels, restaurants, resorts, etc.).

4. The number of people visiting an area on the night of the 1976 Australian census (as a proportion of population size).

5. The proportion of holiday homes in the area.

Variable number one, the number of roads, was obtained from detailed district maps provided by the N.R.M.A. and the R.A.C.Q. The number of per capita hotel rooms was obtained from detailed accomodation and caravanning directories for Queensland and New South Wales provided by the R.A.C.Q. and the N.R.M.A.. For this purpose, the number of hotel and motel rooms, as well as overnight caravans in each city or town, was totalled up and divided by the population figure. The data for variables 3, 4, and 5 was directly provided by the Australian Bureau of Statistics offices in Brisbane and Sydney from the 1976 census.

Another aspect of urbanism is the degree of technological development, or "modernisation" of an area. Exposure to radio and television are likely to broaden the outlook of people in an area, and the introduction of modern features such as electricity, indoor plumbing, and sewage systems into rural areas changes the lifestyles of people in ways which would be considered more urban. Two indices of modernisation were available from the Australian Bureau of Statistics. These were:

1. The percent of homes in the local government area with indoor plumbing.

2. The percent of homes in the local government area attached to city sewage lines.

Both sets of data were obtained directly from the Bureau offices in Brisbane and Sydney.

As discussed in Chapter Two, the theoretical writings of Louis Wirth (1957) strongly emphasized the importance of population heterogeneity in explaining the quality of interpersonal behaviour in urban areas. This suggested the inclusion of the following three indices of population heterogeneity:

1. The percentage of foreign-born residents.

2. The percentage of bilingual residents.

3. The percentage of Aboriginal and Islanders residing in the area.

These figures for each local government area were obtained directly from the Australian Bureau of Statistics.

Consideration of the importance of in-group/out-group distinctions (Billig & Tajfel, 1973; Tajfel & Billig, 1974) led to the collection of data on what might be conceptualized as "community stability". It seems likely that certain community characteristics might be conducive to the formation of strong and clear notions of a local in-group. These conditions might include having a large proportion of people who have lived in the area for a long period of time and have established a long-term committment to the community (i.e., "putting down roots"). Furthermore, the local in-group of familiar people should not be destabilized or "watered down" by recent rapid influxes of newcomers to the area. This particular constellation of community characteristics might also foster a provincial outlook on the part of the inhabitants. These considerations led to the collection of data on the following three variables:

1. The percent of people who have lived in the local government area for at least five years.

2. The percent of families in the community who own their own home.

3. The rate of population growth (or decline) during the period 1971 to 1976.

The data for the first two variables were obtained directly from the Australian Bureau of Statistics. The percent owning their own home variable was actually computed on the basis of households, not families or individuals. The rate of population growth was computed for each local government area by taking its population as determined by the 1971 census and subtracting it from its population as determined by the 1976 census. This remainder was then divided by the population size in 1976 and multiplied by 100 to give the percentage rate of growth, or decline, during the five year period.

Information on economic prosperity, or general level of social class, for each area was also obtained. These data was included for two reasons. First, social class measures have been found to vary with the degree of urbanism of an area (Duncan, 1957). Second, social class indices have been found to be strongly associated with a large number of behaviours including criminal behaviour and crime victimisation (Freedman, 1975), marital instability and divorce (Goode, 1962), the number of close friends reported (Kahl, 1957) and participation in local voluntary organisations (Miller & Riessman, 1961). Although there is not much data at present on social class differences in helping behaviour, a few studies have found such differences (cf. Berkowitz, 1966; Berkowitz & Friedman, 1967). On the basis of thes considerations, the following four variables were included:

1. The median household income for the area.

2. The percentage of people who left school at 14 years of age or less.

3. The percentage of workers in blue-collar, manual occupations.

4. The number of people per bedroom (residential density).

All data were obtained from the Australian Bureau of Statistics offices in Sydney and Brisbane. Median household income was computed from grouped data. The percentages for the education variable were based only upon the number of people in an area who were 15 years of age or older. The number of people in manual occupations was computed by adding the number of workers in each local government area listed as professional, technical, administrative, executive, clerical, and sales, and subtracting this figure from the total number in the local workforce. The residential density variable was computed in the following manner. First, the total number of bedrooms in an area was computed from information provided on the number of homes in an area with 1, 2, 3, 4, 5, or 6 bedrooms. The total number of bedrooms was then divided by the total population figure for the area.

Consideration of cognitive overload theory (Milgram, 1970) as discussed in Chapter Two led to the inclusion of an "information rate" measure for each city. This variable was created in the following manner: In the course of doing field research in each of the 55 cities and towns in the final sample, a team of researchers

gathered objective data on downtown characteristics. The researchers chose a block in the centre of the central business district and gathered the following data: (1) The number of automobiles passing in both directions during a 10 minute period. (2) The number of pedestrians passing a fixed point on the sidewalk during a 10 minute period. (3) The number of separate signs visible to a pedestrian - including those in shop windows - walking the entire length of the block. (4) The average number of stories per structure on both sides of the street. Although substantial differences were likely to occur in the first two measures depending upon time of day, the data collection was necessarily limited to a single time period. Nevertheless, all observations took place during normal working hours. Furthermore, the number of pedestrians and number of automobiles measures were strongly correlated with the number os signs and average stories per building measures, the latter two being uninfluenced by time of day. The intercorrelations between these items are revealed in Table 4.2. Because all four items appeared to be measuring the same phenomena (downtown complexity or information rate) it was decided to combine them into a single information rate scale. For this prupose, a Z score transformation of each variable was performed and the four Z scores were added to give an overall measure of information rate. This became the 18th variable in the community data file.

In addition to these 18 variables, the previously obtained population size and driving distance from a capital city variables were also included in the data set.

Representativeness of the Sample

Table 4.2

Correlation Matrix for City Information-Rate Measures[1]

	Number of people	Number of cars	Number of signs	Mean number of stories per building
Number of people	-	.56	.60	.83
Number of cars		-	.62	.52
Number of signs			-	.53
Mean number of stories per building				-

[1] All correlations $p<.001$

Due to the fact that a disproportionate stratifed sample was taken (approximately equal numbers of cities and towns were chosen from each level of tne stratified sampling frame) the final sample of areas was to a certain extent not representative of all the local government areas in the two states. In the present sample, larger cities and isolated areas are somewhat over-represented. This is due to the fact that the great majority of local government areas in both Queensland and New South Wales are relatively small: median population size is less than 1,000 people in both states. Furthermore, the majority of cities and towns in both states are clustered near the capital cities and along the eastern coast.

The "unrepresentativeness" of the present sample should not be seen as problematic, however, for the purpose of the present research was not to estimate population parameters such as the "average level of helpfulness of people in Queensland and New South Wales". Instead, the main intention was to make comparisons between areas differing in population size and isolation. A simple random sample of local government areas would have produced a sample consisting mostly of very small towns clustered near the two capitals and the eastern coast. To make the intended comparisons, it was necessary to ensure that cities at all possible levels of size and isolation were included, making disproportionate sampling the appropriate sampling strategy (Loether & McTavish, 1974; Warwick & Lininger, 1975). It is always possible to weight the cases falling into the various cells in the sampling frame by some figure corresponding to the degree of underrepresentation if estimates of population parameters are desired.

Nevertheless, a check was made to see how well the cities and towns in the final sample compared with figures for Queensland and New South Wales on the variables provided by the Australian Bureau of Statistics. For this purpose, the Census figures for all of Queensland and New South Wales were combined and the figures for all 55 cities and towns in the sample were combined (and weighted by their populations). Comparing across the census variables, the sample characteristcs generally matched the state figures fairly closely. Differences were in the direction suggested by the sample's inclusion of a larger number of major urban areas, especially Sydney and Brisbane. Thus, while the median household income for people living in Queensland and New South Wales was $9,799 in 1976, the comparable figure for the 55 cities and towns in the sample was $9,928. Other differences indicate that the sample had fewer blue-collar workers (52.5% versus 57.4%), fewer people who left school at 14 years of age or less (20.3% versus 28%), and had more homes with indoor plumbing (96.4% versus 89%) and hook-ups to city sewage systems (74% versus 86.8%). All other comparisons between the sample and combined state figures were extremely close (i.e., within one or two percent).

Relationships Between the City Variables

Before continuing further, it was decided to investigate the relationships between the variables chosen for inclusion in the city data file. Specifically, it was decided to see if the variables correlated or clustered in ways which would allow a reduction in the number of variables used in later analyses. As a first step in this procedure, all 20 city variables were intercorrelated. For this

purpose, the log (base 10) of population size was taken to correct for the extreme skewness of this variable. Duncan (1964) suggests using the log of population size in analyses of this sort because it generally yields higher and more meaningful correlations with other variables. The matrix of pearsonian correlation coefficients is displayed in Table 4.3.

It is apparent from this matrix of correlations that many of the variables correlate at high levels (.60 or higher) and that certain groups of variables appear to cluster together. For example, the number of visitors, per capita hotel rooms, percent holiday homes, and percent workers in the entertainment industry all intercorrelated at moderately high levels.

A principal components factor analysis using varimax rotation was then performed on the twenty community variables. The factor analysis resulted in a solution with six factors having eigenvalues greater than one. These six factors accounted for 74.2 percent of the total variance in the data. The eigenvalues and percentage of variance accounted for by each factor are presented in Table 4.4.

The rotated factor matrix is presented in Table 4.5. The principal loading variables on Factor 1 (which accounted for 31.3% of the common variance) were population log, information rate, the number of main roads in/out of the city, and the percent of homes connected to city sewage systems, all of which had positive loadings. Other variables with smaller loadings on this factor were the percent of manual workers, residential density, and isolation (all with negative loadings) and the percent of homes with indoor plumbing and median household income (with positive loadings). On

Table 4.3

Pearsonian Correlations Between Community Variables (n=55)*

	Distance	% Foreign born	% Bilingual	% Black	% Manual Labour	Education	Median income	Residential density
Population (log)	-.21	.26	.28	-.16	-.47	-.08	.36	-.33
Distance		.33	.38	.13	.22	-.15	.07	.35
% Foreign born			.69	-.14	.04	-.09	.08	.38
% Bilingual				.01	.10	-.15	.12	.37
% Black					.13	-.25	.11	.28
% Manual labour						.24	-.22	.54
Education							-.68	-.21
Median income								-.09
Residential density								
% Plumbing								
% Sewage								
% Owning home								
Population growth								
% Living in same area								
% Employed in entertainment								
Visitors on census night								
Hotel rooms (per capita)								
% Holiday homes								
Number of roads								

*r = .26, p < .05; r = .33, p < .01; r = .49, p < .001 (two-tailed)

Table 4.3 (continued)

% Plumbing	% Sewage	% Owning Home	Popu-lation growth	% in same area	% Enter-tainment	Visitors	Hotel Rooms	% Holiday Homes	Number Roads	Information rate
.29	.65	.24	-.07	.19	-.09	-.18	-.10	-.11	.64	.92
-.09	-.28	-.36	.03	-.14	-.11	.23	-.14	-.07	-.28	-.27
-.16	-.08	-.05	.25	-.36	.07	.25	.10	.31	-.16	.36
-.28	-.11	-.05	.01	-.22	-.14	.09	-.07	.05	-.10	.35
.03	.05	-.41	-.11	.06	-.27	.14	.03	-.06	-.07	-.12
-.52	-.41	-.43	-.01	-.27	-.21	.23	.01	-.03	-.27	-.47
-.25	-.14	.35	.13	.26	.00	.07	.07	.08	.03	-.01
.36	.33	-.36	.03	-.18	.04	-.35	-.24	-.22	.15	.34
-.45	-.40	-.49	.15	-.54	-.03	.38	-.02	-.03	-.33	-.26
	.41	.01	.11	.11	.17	-.24	.02	-.01	.34	.22
		.06	-.07	.30	.07	-.34	-.08	-.17	.58	.51
			-.30	.50	-.04	.05	.05	.06	.14	.24
				-.44	.25	.21	.24	.42	-.20	-.02
					-.12	-.30	-.15	-.24	.20	.10
						.40	.58	.67	-.10	-.06
							.49	.49	-.18	-.13
								.54	-.20	-.08
									-.27	-.09
										.55

Table 4.4

Principal Factoring with Iterations:
Eigenvalues and Percentage of Variance Accounted For By Factors

Factor	Eigenvalue	% of Variance	Cumulative variance %
1	4.375	21.9	21.9
2	3.328	16.6	38.5
3	2.622	13.1	51.6
4	1.788	8.9	60.6
5	1.460	7.3	67.9
6	1.271	6.4	74.2
7	.956	4.8	79.0
8	.841	4.2	83.2
9	.565	2.8	86.0
10	.499	2.5	88.5

the basis of these loadings, this factor was interpreted as a general "Urbanism" factor. The moderate loadings of the percent manual, household income, and residential density variables are consistent with this interpretation, for these variables have been found in the past to correlate negatively with urbanism (Duncan, 1964).

The principal loading variables on Factor 2 (which accounted for 23.5% of the common variance) were number of visitors, per capita hotel rooms, percent of holiday homes, and percent of workers employed in the entertainment industry. On the basis of these loadings, Factor 2 was interpreted as a "Tourism" factor.

The third factor (which accounted for 17.8% of the common variance) was labelled "Foreign-born heterogeneity". Inspection of the loadings reveals that percent foreigh-born and percent bilingual were the principal loading variables, with distance from a capital city also loading moderately. The small but positive correlation with residential density probably reflects the tendency of many ethnic groups to have somewhat larger families compared to Australian-born residents, and the positive correlations with population and information rate probably reflect the tendency of ethnic groups to congregate in larger cities.

The principal loading variables of Factor 4 (11.5% of the common variance) were the percent owning their own home (with a negative loading) and the percent Black, residential density, and percent manual (all with positive loadings). The interpretation of this factor was not as clear as the others, but the tentative interpretation appeared to be "Presence of a transient Black

Table 4.5

Varimax Rotated Factor Matrix and Commonalities

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	h^2
Population (log)	.898	-.090	.351	-.149	-.056	-.046	.964
Information rate	.818	-.057	.357	-.250	-.002	-.015	.863
N of main roads in/out	.725	-.126	-.126	.075	.077	-.063	.610
% Homes with city sewage	.753	-.104	-.164	-.001	-.191	-.005	.642
% Homes with indoor plumbing	.336	.045	-.103	-.113	-.216	.129	.201
Number of visitors	-.105	.736	.117	.240	.102	-.038	.636
Per capita hotel rooms	-.060	.704	-.045	.021	.106	.114	.525
% Employed in entertainment	.019	.857	-.043	.026	-.241	.131	.812
% Holiday homes	-.109	.745	.096	-.172	.049	.342	.725
% Foreign born	.116	.206	.759	-.092	-.097	.210	.695
% Bilingual	.058	-.063	.856	.106	-.090	-.017	.760
Distance from capital city	-.313	-.078	.407	.331	-.047	-.002	.381
% Black	.028	.157	.057	.555	-.168	-.187	.400
Residential density	-.301	.289	.339	.524	-.142	.074	.594
% Manual labour	-.361	-.086	-.088	.533	.345	.063	.551
% Owning own home	.037	.117	.054	-.797	.171	-.549	.984
% Same area 5 years	.128	-.283	-.141	-.171	.215	-.492	.433
Rate of community growth	-.021	.228	.063	-.057	.072	.715	.577
% Left school 14 years or less	-.020	-.064	-.143	-.169	.967	.066	.994
Median household income	.316	-.306	.161	.127	-.612	.226	.668

population". The residential density loading probably reflects the tendency for Black families to be somewhat larger than average (Commonwealth Department of Aboriginal Affairs Fact Sheet, 1979), and the percent manual may reflect lower levels of Western occupational skills among Blacks (Berndt, 1977; Statistical Section Newsletter, Department of Aboriginal Affairs, 1978). This factor, therefore, can also be interpreted as a type of social class factor. However, the fifth factor (8.3% of the common variance) also appeared to be a social class factor with a somewhat clearer interpretation. The principal laoding variables were the percent of people leaving school at 14 years of age or less (which loaded positively) and median household income (which loaded negatively), with the percent of manual workers in the labour force also showing a smaller positive loading. The fifth factor was thus labelled "Social Class".

The variable with the highest loading on Factor 6 (7.8% of the common variance) was the percent growth in population variable. The other two variables with high loadings were the percent of people living in the area for at least 5 years and the percent of families owning their own home, both of which loaded negatively. The percent of holiday homes also had a small positive loading on this factor. The best interpretation of this factor appeared to be "Community Instability".

It must be noted that 55 cases is a very small number to base a factor analysis upon (Comrey, 1973). However, the six factors generally appeared to be both interpretable and intuitively meaningful. Furthermore, the six factors were able to recover about

three-fourths of the variance in the original data. Due to the greater simplicity involved in working with six factors rather than 20 separate variables, it was decided to retain the factors for later analysis with the behavioural data. Factor scores for each of the 55 cities and towns on each of the six factors on the basis of the loadings of all 20 variables were therefore computed.

Inspection of the factor scores for selected communities generally supported the interpretations of the six factors. For example, Sydney and Brisbane had the highest factor scores on Factor 1, the Urbanism factor. The resort towns of Illuka in New South Wales and Nelly Bay on Magnetic Island in Queensland had the highest scores on Factor 2, the Tourism factor. The third factor, Foreign-born Heterogeneity, produced the highest scores for Sydney and Brisbane as well (both cities have large ethnic communities). Other areas with high scores on this factor included several sugar cane growing centres in far north Queensland with large Italian populations (Ingham, Edmonton) and some inland mining towns such as Mt. Isa. Evidence for Factor 4 was less clear. Towns scoring highest on the "Transient Black Population" factor included a number of small inland communities such as Walget in New South Wales. While this would seem to fit the interpretation of this factor, a number of cities and towns in north Queensland which have relatively large Black populations did not receive high scores. Therefore, the interpretation of this fourth factor is still somewhat unclear.

Evidence for the fifth factor, Social Class, was somewhat clearer. Communities scoring highest on this factor included a number of older, small ex-mining towns in central Queensland such as

Charters Towers. Another central Queensland mining town, Blackwater, scored highest on the Community Instability factor (Factor 6). This town has grown extremely rapidly in recent years after the discovery of large deposits of coal and the opening of a large-scale mining operation there. The local economy, being based exclusively on the local mining industry, results in a fairly rapid turnover in the local workforce. The scores of Blackwater and other communities on this factor generally bear out its interpretation.

The next chapter will begin with general comments on the data collection procedures and analytic methods employed in relation to the six helping forms chosen for study. Chapter Five, and the five chapters which follow, will then describe in detail the results of the six helping studies.

Chapter Five: The Overall Research Strategy; Compliance with a Colour Request

This chapter, and the four that follow, will report the results of five behavioural studies which were carried out in 55 cities and towns in Queensland and Northern New South Wales. Before describing in detail the method used and the results of this particular study, some general comments will be made about the overall data-gathering procedures employed and the general strategy used for analyzing data for the five field experiments. Because the sixth study involved archival data (census nonresponse rates), it will not be discussed until Chapter Ten.

General Comments on Data-Gathering Procedures

The five helping episodes used were: complying with a colour request, purchasing greeting cards for the Multiple Sclerosis Society, helping a victim with a bandaged and bleeding leg, correcting inaccurate directions given to a lost stranger, and helping to pick up dropped envelopes. In most locations, the five sets of observations were gathered on the same day by a team of two male investigators. Each helping episode was enacted five times in most cities, and a minimum of two times in the smaller rural communities. In Sydney and Brisbane each procedure was enacted between thirty and forty times. The procedures were always carried out in the centre of the central business district.

While no difficulties were encountered in the larger cities, the carrying out of these procedures in the smaller towns and rural areas involved potential problems with conspicuousness, and hence,

experimental reactivity. Therefore, certain precautions were taken in small towns to avoid drawing attention to the research procedures. First, one investigator would enter the centre of town on foot, having been dropped off three or four blocks away at a spot which could not be seen from the testing area. The second investigator would then drive into town in an automobile and park in the centre of the testing zone. At all times, the two investigators acted as if they did not know each other. The first helping episode enacted was one dealing with correcting inaccurate directions in which shopkeepers served as subjects. One investigator serving as the confederate would enter a shop, followed approximately one minute later by the second investigator. After carrying out the procedure (described in detail in Chapter six) the second investigator would leave the shop and unobstrusively record the details of the subject's behaviour. In the meantime, the first investigator would leave the shop and enter a second shop. This process was repeated until a sufficient number of cases were observed (usually five).

At this point, the two investigators would "split up" with one carrying out the "dropped envelopes" and the "colour request" procedures and the other carrying out the "greeting cards" procedure (these procedures are described in detail in Chapters Nine, Five, and Eight, respectively). Each investigator recorded his own data. After collecting the data for the greeting cards study, the second investigator collected information on the "information rate" of the downtown area. This consisted of four observations: the number of people passing a selected spot on the sidewalk on one side of the street during a 10 minute period, the number of automobiles passing

on both sides of the street during a 10 minute period, the number of signs (including those in shop windows) visible to a pedestrian walking along a one block length of the sidewalk, and the mean number of stories per building on both sides of the street in the testing area.

The final helping episode enacted involved the hurt leg measure. This required the participation of both investigators. The investigator who had driven into town wore a large bandage on his leg. At this point he would return to the car and smear the bandage with fresh theatrical blood, after which he would return to the sidewalk. During the entire length of the testing period, this investigator exhibited a noticeable limp while walking. The other investigator by this time was positioned in a suitable location (often on a nearby bench) to view the episode. The bandaged investigator then enacted a situation in which he appeared to fall to the ground, and in so doing, exposed the bloodied bandage to passers-by. The investigator observed the scene and recorded the details of the subject's behaviour. (This study is described in detail in Chapter 7.) When this procedure was completed, and all the behavioural data had been collected, the investigator with the "hurt leg" returned to the automobile and used a portable Sony black and white video tape recorded to take a 60 second film of the area in which testing had occurred. The other investigator used a portable Kodak colour camera to take two 35 mm slides of the city area. These films and slides were collected to provide both documentary evidence of the city conditions under which testing took place and to serve as possible stimuli for the collection of further data regarding perceived characteristics of each city and town in

the sample. After these procedures were carried out, the two investigators drove out of town together.

In only a small number of towns did it appear that people in the area were becoming suspicious of the behaviour of the investigators. It was often possible in these situations to use as subjects only pedestrians who had just entered the commercial area. Often these people drove up in automobiles and were only on the sidewalk a few moments before they interacted with the investigator. Thus, these subjects should not have been affected by the conspicuousness of the research procedures.

Reliability Checks

Reliability checks were carried out for all of the major dependent variables in the five behavioural studies. These included checks on the estimates of subjects' ages, walking speed, the number of words used when speaking to the investigator, and whether smiling occurred or not. Comparison of age estimates from two independent observers resulted in a Pearsonian correlation of .96 ($n = 20$). Independent estimates of walking speed also correlated highly ($r = .92$, $n = 20$). For the various studies, estimates of the number of words used variable generally correlated at high levels ($r = .80$ or more) and agreement over whether smiling behaviour occurred averaged at approximately 80 percent. These checks suggested that the investigator's observations were reliable enough to serve as meaningful data for later analyses.

Overview of Steps in the Analysis of Data

A preliminary step in the analysis involved a check on the comparability of the urban and rural samples. Because the subject selection procedures did not involve a random selection from the urban and rural populations, it is quite possible that the samples differed in certain "irrelevant" respects, such as the proportion of males and females or the proportion of people in various age groups. If males, for example, had higher rates of helping on a certain measure, and if rural areas contributed more males to the sample, then a spurious relationship would appear between ruralism and helping. Alternately, these irrelevant differences might mask actual relationships in the data. Therefore, to check that the samples were at least minimally comparable, the proportions of males and females, and the proportions of subjects in various age categories were compared across levels of population size and isolation. For this purpose, population size was divided into five levels: 999 people or less, 1,000 to 4,999 people, 5,000 to 19,999 people, 20,000 to 300,000 people, and Brisbane and Sydney, with populations of 892,987 and 2,765,241, respectively (1976 Census). Isolation was divided into two levels: 799 kilometers driving distance from a large capital city versus 800 kilometers or more driving distance from a large capital city. If differences were noted between the samples, a check was made to see if either sex or estimated age was associated with helping. If either variable appeared to be related to both helping and either population size or isolation, it was used as a control variable in subsequent data analyses.

Other differences between samples could have resulted from certain aspects of the testing procedures. For example, it was not possible to randomize time of day and day of the week. It is possible therefore, that observations gathered in urban and rural areas were not equally distributed across days of the week or hours of the day. This, in fact, was the case in a number of the data sets reported in subsequent chapters. Therefore, a check was made to see if day of the week or time of day were associated with helping. In most cases, no such relationships were apparent. In a few cases, however, relationships with helping did emerge. In these cases, later analyses were conducted using the confounding variable (day or time) as a control.

Finally, it was the case in a number of data sets that the two investigators did not sample equal numbers of subjects across the levels of population size or isolation. Therefore, checks were make to see if there were any differences in the helping rates for the two investigators. In most cases, no differences were present. If differences in rates of helping were apparent, the subsequent analyses were replicated separately for each investigator. If the results were very similar, the two sets of data were combined and analyzed as a single piece.

The next major step in the data analysis involved a detailed assessment of the relationship between the two major urban-rural variables in this study, population size and isolation, and the helping measures used. The first step involved putting the data into graphic form for visual inspection. This step is consistent with the procedure recommended by Hartwig (1979) who emphasized the

importance of visually displaying data in the initial, exploratory stage of data analysis. For this purpose, the same cutting points described earlier were used to divide population size into five levels and isolation into two levels.

The next step involved a determination of the nature of the relationship between the urban-rural variables and the helping measures. The first question concerned whether the relationships were linear or curvilinear. The second question concerned the existence of possible interactions between population level and isolation. Inspection of the graphs (and scatterplots) allowed an initial answer to these questions. If the data met the assumptions of analysis of variance (interval level scaling of dependent variable, normally distributed dependent variable, equal sample variances), ANOVA was used to assess interactions and main effects of the urban-rural variables. If these assumptions could not be met, log-linear techniques were used for the same purpose. If any effects appeared to be nonlinear, or if interactions were present, this stage of the analysis was completed. If all effects were linear and no interactions were present, multiple regression procedures were used to summarize the independent effects of population size and distance from a capital city on the helping measures.

The third step involved an examination of the quality of help-giving. For this purpose, only those cases in which a helping response was exhibited were analyzed. Comparsions were made on a number of measures (such as whether the helper smiled or not and the number of words she or he used) between urban and rural areas. The

statistical techniques utilized at this stage of the data analysis depended on a number of factors, such as the level of measurement of the dependent variables, the number of cases, and the relationship (curvilinear or linear) between the quality of helping variables and population size and isolation.

The fourth step involved bringing in the larger community data set into the picture. To assess the impact of all the community information, and to determine the characteristics of cities which were relevant to the exhibiting of prosocial behaviours, the helping measures were regressed upon all six community factors. Preliminary inspection of scatterplots was carried out to ensure that all relationships were linear. Because it was suspected that the effects of certain community characteristics, such as heterogeneity and tourism, might be more pronounced in small communities than in larger urban centres, a check was made to see if any factors had a differential impact in the smaller, as opposed to the larger, communities.

A Note on the Use of Significance Tests

Throughout the next six chapters, significance tests will be used to assess the differences between urban and rural samples on a number of measures. In the sixth study, reported in Chapter Ten , nonresponse rates to census question were used as the dependent variable. In this particular study, the use of significance testing was entirely justified, since the data were generated from a stratified random sample of local government areas in Queensland and Northern New South Wales. However, the data from the five field

experiments reported in Chapters Five, Six, Seven, Eight, and Nine are somewhat problematic. Although the 55 communities were selected randomly, the selection of individual subjects in each area was done on a nonrandom basis. The usual procedure was to select every third or fifth pedestrian walking along the sidewalk. If this procedure had been carried out consistently, it might have qualified as a "systematic" sample, a sample which is often used interchangeably with a simple random sample (Blalock, 1960). However, in this case, the results upon which the significance tests were based could only be generalised to the population of pedestrians who happened to be on the city streets at the time the testing procedures were carried out. Unfortunately, not even this procedure was rigorously adhered to, for many pedestrians were necessarily excluded from the research (including those walking with someone, those carrying heavy packages, and those with noticeable handicaps). Therefore, the resulting sample was only a "convenience sample" of subjects from a randomly selected (and hence, representative) sample of towns and cities. Therefore, the use of significance testing with these data is problematic.

However, in the present volume, significance levels for various statistics will still be reported. In this context, significance tests will simply be used as rough screening devices to separate major effects from trivial effects. In this sense, they will be used as guides to questions of internal validity (is this difference relatively large in relation to measurement error?) rather than questions of external validity (can these results be generalised to a larger population?). For a discussion of the use of significance tests on nonrandom data, see Henkel (1976). However, throughout

this volume, measures of strength of relationship and variance accounted for, as well as simple graphing of data, will be used as the most important measures of the importance of effects. This approach is consistent with recent emphasis on presenting effect sizes in addition to probability values (c.f. Rosenthal, 1980).

Compliance with a Colour Request

The helping measure used in this particular study involved compliance with a request for a favorite colour. In this study, an investigator approached a pedestrian walking along the sidewalk and stated that he was a student working on a class project. The investigator then asked the pedestrian (subject) if he or she would help by writing the name of his or her favorite colour on a piece of paper. Whether the subject complied and wrote a colour name for the investigator was the main measure of helping. This helping form was originally used in a study by Harris and Meyer (1973) to assess the effects of dependency and threat on helping. This particular form of helping was located at the extreme end of dimension two of the multidimensional helping taxonomy developed in Chapter Three of this volume (see Figure 4.1 for the location of this episode in the multidimensional space). Its defining characteristic is that it was perceived by subjects as being a nonserious helping situation, that is, the consequences for the recipient of failing to give assistance were very minor.

Method

The procedure began with the investigator standing on the sidewalk in the centre of the commercial district. In the larger cities, every third suitable pedestrian passing on the same side of the street was selected to be a subject. In the smaller communities, every suitable pedestrian was selected. Pedestrians were deemed suitable if they were walking alone, were not carrying large numbers of packages, and were in no way physically handicapped. When the subject was approximately 10 feet away, the investigator would approach the subject and say "Excuse me. I'm a university student working on a class project here in this area. I wonder if you could help me. I'm asking people if they will write the name of their favorite colour for me. Would you like to help?" The investigator then produced a sheet of paper on a clipboard and a pen. The paper on the clipboard was numbered from 11 to 20, with the first three or four numbers being followed by colour names, all written with a different style of handwriting. If the subject stated a colour name, the investigator asked the subject to write it on the paper. If the subject asked what it was for, the investigator simply repeated that it was for a class project (see Figure 5.1).

After the completion of the episode, the investigator recorded the details of the interaction on a coding form under the sheet of paper with the colour names. The following observations were recorded: the subject's sex, the subject's estimated age, whether the subject stopped walking or not, whether the subject complied with the colour request by writing a colour name, whether the subject smiled or not, whether the helper spoke or not (and if so, the estimated number of words used), the day of the week and the

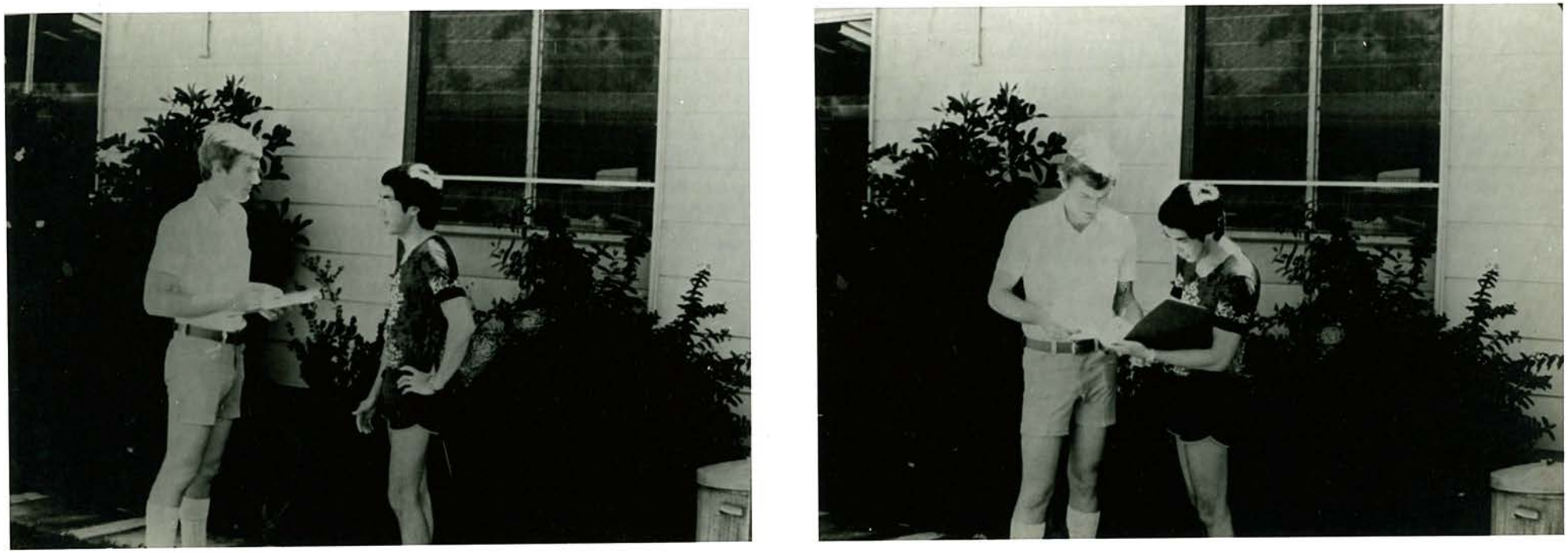

Figure 5.1 The Colour Request Episode

time of day.

The walking speed of subjects was also recorded. This was accomplished by marking a ten meter zone on the sidewalk prior to the initiating of testing. Natural boundaries, such as street signs and benches, were used to make the endpoints of this zone. As subjects entered the zone, the investigator used a hidden stopwatch to measure the number of seconds it took the subject to traverse the full ten metres. Unfortunately, this walking speed data was difficult to obtain in many of the smaller rural towns due to the absence of a sidewalk area of sufficient length. In many cases in these areas, subjects emerged from automobiles and walked shorter distance into shops. Hence, the walking speed data could not be gathered for many of the subjects in the smallest communities.

After these data were recorded, the investigator repeated the procedure by taking the third (or next) suitable pedestrian. Altogether, 291 subjects were observed. Two investigators were used, both males. Their ages were 21 and 27. During the data collection periods, both investigators dressed neatly but casually. Chi-square analysis revealed that the two investigators did not significantly differ in their rate of receiving help (72 percent versus 81 percent, $\chi^2 = 2.83$, $df = 1$, $p > .05$).

A small pre-test consisting of 30 observations was carried out in a small town of less than 1,000 people and in a city of approximately 100,000 people using both a male and a female investigator. Rates of helping for the male and female investigator were very similar (73 percent versus 67 percent, respectively, $\chi^2 = .158$, $df = 1$, $p > .10$). Furthermore, no sex by city size

interaction was apparent. Therefore, it is likely that having used a female investigator in the larger study would not have generated substantially different results.

Urban and Rural Sample Characteristics

A preliminary step in the analysis of the data involved an inspection and comparison of the sample characteristics for the urban and rural areas. Due to the fact that the selection of subjects was nonrandom, the urban and rural samples may have differed on a number of "irrelevant" variables. A check on the comparability of the urban and rural samples was therefore made. This involved the classification of cities and rural areas into five levels of population size: 999 people or less, 1,000 to 4,999 people, 5,000 to 19,999 people, 20,000 to 300,000 people, and 850,000 people or more (Brisbane and Sydney). Isolation was divided into two levels: 799 kilometers or less driving distance from a large capital city versus 800 kilometers driving distance or more.

Overall, 54 percent of the sample was male. Chi-square analysis revealed that the proportions of males and females in the sample were not equal across the five levels of population size ($\chi^2 = 11.36$, df = 4, $p < .05$), although the proportions in the two levels of isolation were approximately equal ($\chi^2 = 1.28$, df = 1, $p > .10$). However, males and females complied with the colour request at very similar rates (72.2% versus 73.6%, respectively, $\chi^2 = .10$, df = 1, $p > .10$).

The estimated ages of subjects ranged from 16 to 70 with a mean estimated age of 37 (median = 34). The estimated ages of subjects were divided into four categories: 24 years or less, 25 through 39, 40 through 59, and 60 years or more. The percent of subjects in the four categories were 15, 41.8, 30.6, and 12.4, respectively. Chi-square analysis revealed that the distribution of subjects in the four age categories did not differ significantly across the levels of population size (χ^2 = 13.7, df = 12, p > .10) or across the two levels of isolation (χ^2 = 1.14, df = 3, p > .10). Furthermore, estimated age did not appear to be related to helping the investigator. The Pearsonian correlation between age and helping (coded 0 = did not comply, 1 = did comply) was -.09 (p > .10).

There was a slight tendency for subjects in the larger communities to walk at slower speeds, presumably because the sidewalks were more congested. The Pearonian correlation between walking speed and population size was -.15 (n = 171, p < .05). The correlation between walking speed and distance from a capital city was not significant (r = .03, n = 171, p > .10). Furthermore, walking speed was unrelated to whether subjects complied with the investigator's request (r = .05, n = 171, p > .10).

Because the distribution of cases across the various days of the week and hours of the day varied somewhat across the five levels of population size and the two levels of community isolation, a check was made to see if these two variables were associated with helping. Chi-square analysis revealed that neither day of the week (χ^2 = 9.64, df = 6, p > .10) or time of day (χ^2 = 10.35, df = 9, p > .10) were significantly associated with helping.

Results

Overall, 74 percent of the subjects complied with the request to write their favorite colour for the investigator. As a preliminary step in ascertaining whether helping rates varied with urban and rural location, the percentage of subjects helping at various levels of population size and isolation were computed. For this purpose, population size was divided into five levels and isolation was divided into two levels. The same cutting points described earlier were used. The percent of people complying with the colour request at each level of population size and isolation is presented in Table 5.1 and Figure 5.2.

It can be seen from Table 5.1 and Figure 5.2 that population size was negatively associated with compliance. This is reflected in a negative Tau coefficient of $-.24$ ($p < .001$, two-tailed) for the nonisolated communities and a negative Tau coefficient of $-.20$ ($p < .05$, two-tailed) for the isolated communities. For the nonisolated communities, the helping rates remained relatively high for the first four levels of population size, but dropped dramatically in Brisbane and Sydney, the two largest cities in the sample. For the more isolated communities, helping rates were very similar across the first three levels of population size, but then dropped substantially in cities of 20,000 people or more. Overall, the percentage of people helping tended to be somewhat lower in the isolated communities, although this was mainly due to the low rate

Table 5.1

Percent of Subjects Complying with the Colour Request in Communities at Five Levels of Population Size and Two Levels of Isolation

Population Size	Isolation: 799 kilometers or less from a capital city[1]	Isolation: 800 kilometers or more from a capital city[2]
999 people or less	80.0 (n = 20)	83.9 (n = 31)
1,000 to 4,999 people	83.3 (n = 36)	76.5 (n = 17)
5,000 to 19,999 people	86.4 (n = 44)	81.0 (n = 21)
20,000 to 300,000 people	82.4 (n = 34)	56.5 (n = 23)
850,000 or more	55.4 (n = 65)	

[1] Kendall's Tau =-.24, p<.001 (two-tailed)

[2] Kendall's Tau =-.20, p<.05 (two-tailed)

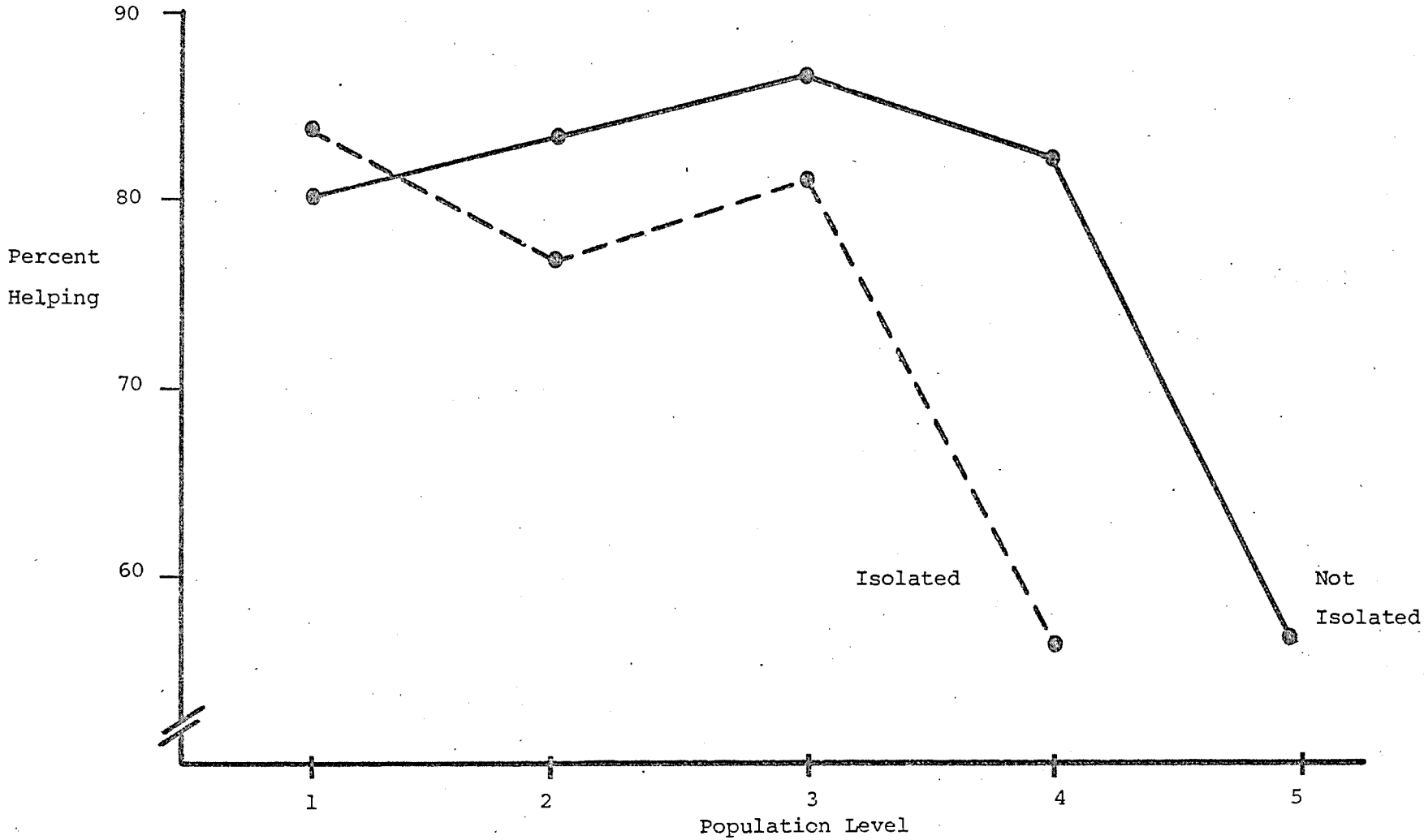

Figure 5.2 Percent of Subjects Complying with the Colour Request in Communities at Five Levels of Population Size and Two Levels of Isolation.

of helping in isolated communities of more than 20,000 people. Excluding Sydney and Brisbane, the percent of people helping in the nonisolated areas was 83.6 percent compared to 75.0 percent in the isolated areas. However, this difference was not statistiscally significant (χ^2 = 2.46, df = 1, p > .10).

While compliance with the colour request was the main dependent variable, other behaviours of the subjects had been recorded as well, including whether the subject stopped walking, whether the subject spoke to the investigator (and if so, the number of words used), and whether the subject smiled. Inspection of these data suggested that it might be useful to combine the various dependent measures to form a scale of prosocial involvement (all of the measures were positively and significantly intercorrelated). Similar behavioural scales of helpfulness are common in the helping literature (eg. Darley & Batson, 1973; Weiner, 1976). Therefore, these measures were combined to form the following six point scale:

1. Subject did not stop walking and did not speak to the investigator.

2. Subject did not stop walking but spoke briefly to the investigator. Typical comments included "I don't have time now" and "Sorry, maybe later."

3. Subject stopped walking and listened to the investigator. However, the subject did not comply with the colour request. The subject may have spoken to or smiled at the investigator. Typical comments included "Sorry, I'm not interested."

4. Subject complied with the colour request by writing a colour name. The subject may have remained silent or may have spoken up to five words. Typical comments included "Is this all?" or "There you go."

5. Subject complied with the colour request and spoke between 6 and 30 words to the investigator. Typical comments included "You university students are always up to something unusual. What's this all about anyway?"

6. Subject complied with the colour request, spoke more than 30 words to the investigator and smiled. This indicated a prolonged, friendly conversation with the investigator. Some subjects in this category wanted to knew what university the investigator was from. This information was used as a pretext for a conversation about someone they know, often a son or daughter, who was attending a university.

The number of subjects at the six steps of this scale were 16, 33, 29, 142, 55, and 16, yielding an approximately "bell-shaped" distribution (skewness = -.615, kurtosis = .159). Although this scale was only ordinal in level of measurement, it was decided to treat it as if it were an interval scale so that more powerful data analytic techniques could be used (for a justification, see Labovitz, 1970). The use of parametric methods in the analysis of ordinal data is also common in the helping literature (cf. Darley & Batson, 1973). As a check on this procedure, however, the dichotomous variable (coded 0 = did not comply, 1 = did comply) was

also analyzed in a similar fashion. In all cases, the six point scale and the dichotomous scale yielded similar results, so only the results for the six point scale will be reported.

The mean of the six-point prosocial involvement scale was computed for subjects at each level of population size and isolation. These means revealed a pattern very similar to the pattern described earlier. Overall, the means dropped from a high of 4.45 in the smallest nonisolated communities to a low of 3.03 in the largest cities, Brisbane and Sydney. This trend was apparent in both the nonisolated and isolated communities. Consistent with the previously reported data, the isolated areas also tended to have slightly lower mean scores than the less isolated areas. These data can be found in Table 5.2 and Figure 5.3.

To determine whether any interactions were present between population size and community isolation, these data were subjected to a 4 x 2 analysis of variance, with population level forming one factor and isolation the other. The analysis was done twice, once with the data from Brisbane and Sydney omitted and once with these data included in population level four. The first analysis revealed a significant main effect for population size ($F = 3.09$, $df = 3/225$, $p < .05$) and a significant main effect for isolation ($F = 5.55$, $df = 1/225$, $p < .025$). The interaction between the two variables was not significant ($F = .48$, $df = 3/225$, $p > .10$). The second analysis, including the data from Brisbane and Sydney, resulted in a significant main effect for population size ($F = 12.39$, $df = 1/290$, $p < .001$). However, the addition of these extra cases resulted in the difference between isolated and nonisolated areas disappearing,

Table 5.2

Mean Prosocial Involvement Scores for Subjects in Communities at Five Levels of Populations Size and Two Levels of Isolation in the Colour Request Episode

		Isolation	
Population Size		799 kilometers or less from a capital city	800 kilometers or more from a capital city
999 people or less	$\bar{X}$	4.45	4.15
	SD	1.00	1.26
		(n = 20)	(n = 31)
1,000 to 4,999 people	$\bar{X}$	4.31	3.82
	SD	1.01	.95
		(n = 36)	(n = 17)
5,000 to 19,000 people	$\bar{X}$	4.075	4.00
	SD	.97	.77
		(n = 44)	(n = 21)
20,000 to 500,000 people	$\bar{X}$	3.95	3.46
	SD	.93	1.29
		(n = 34)	(n = 23)
850,000 people or more	$\bar{X}$	3.03	
	SD	1.32	
		(n = 65)	

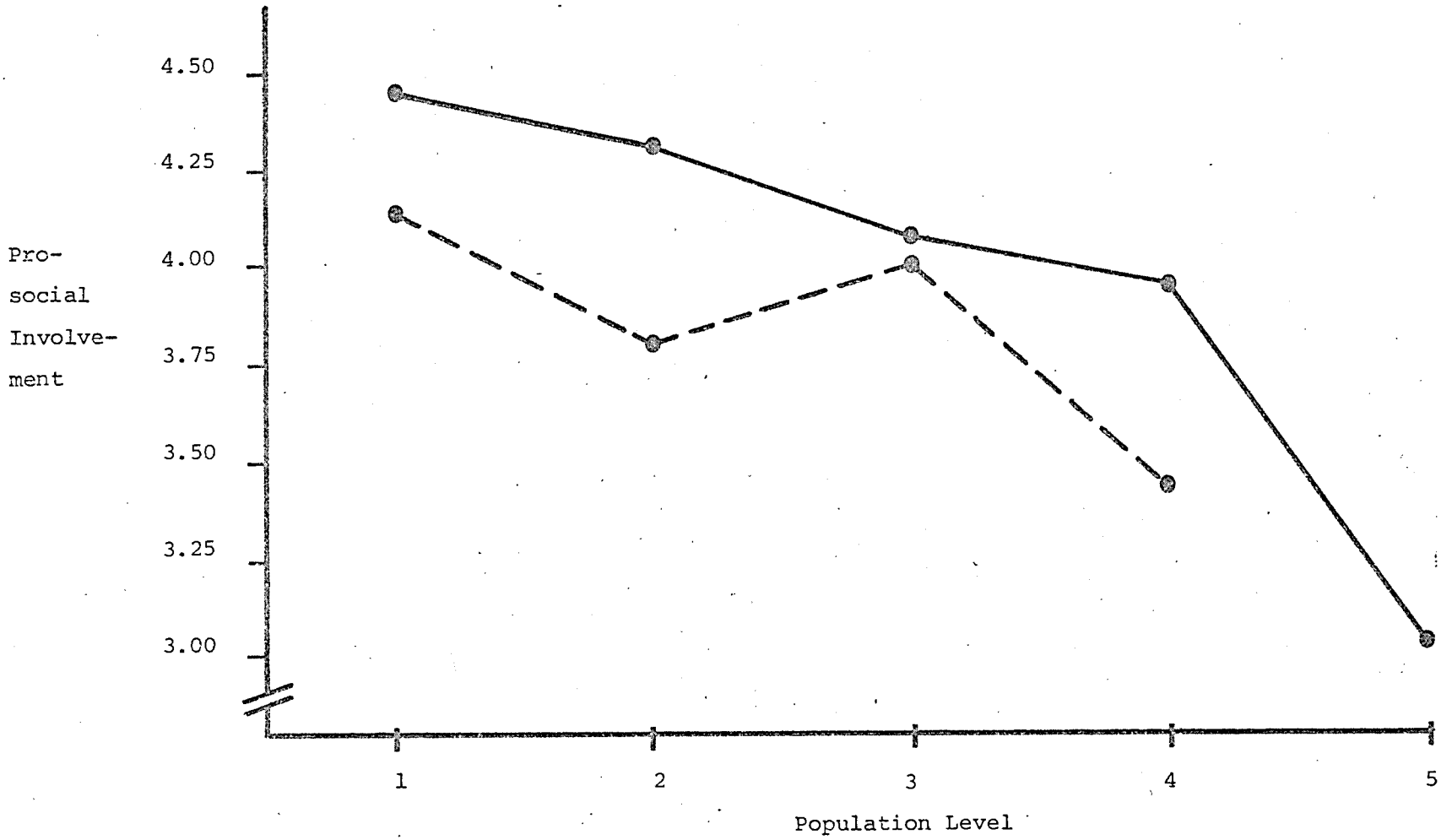

Figure 5.3 Mean Prosocial Involvement Scores of Subjects in Communities at Five Levels of Population Size and Two Levels of Isolation in the Colour Request Episode.

producing a nonsignificant main effect for the isolation variable ($F = .267$, $df = 1.290$, $p > .10$). Again, however, the interaction was not significant.

Because the effects of population size and isolation appeared to be linear (this was also borne out by inspection of scatterplots for the isolation variable), and because no interactions were present, it was decided to summarize these data by subjecting them to a multiple regression procedure. In this analysis, the prosocial involvement scores were regressed upon the population size and distance from a capital city variables. For this purpose, a logarithmic transformation of the population size variable was used. The results of this multiple regression analysis appear in Table 5.3.

The multiple regression analysis revealed that the two independent variables accounted for just over 17 percent of the variance in the prosocial involvement variable ($R = .42$, $p < .001$). Population size accounted for over 15 percent of the variance and its negative beta weight (-.466) indicated that subjects in areas with large populations had lower scores. Distance from a capital city (isolation) accounted for a further two percent of the variance, and its beta weight (-.15) indicated that subjects in more isolated areas scored lower on the scale. The original positive simple correlation for the distance variable was largely an artifact of the large number of low scores from Brisbane and Sydney (which had been coded 0 distance from a capital city). The regression analysis appeared to have disentangled the effects of distance from population size quite well; a similar analysis excluding the data

Table 5.3

Multiple Regression Analysis of the Effects of Population Size and Isolation on Helping in the Colour Request Episode

Variable	Multiple R	R^2	R^2 Change	Simple r	Beta
Population Size (log)	.40	.16	.16	-.40	-.47**
Isolation	.42	.17	.02	.07	-.15*

* $p < .05$

** $p < .001$

from Brisbane and Sydney yielded an identical negative coefficient for the distance variable.

The Quality of Help-Giving

To assess the quality of help-giving in urban and rural areas, only those subjects who complied with the colour request were selected. An analysis was then made of the presence or absence of smiling behaviour and the number of words used by these helpful subjects. However, since the number of words variable and the smiling variable were also involved in the prosocial involvement scale reported above, this analysis overlapped somewhat with the material previously presented. However, for the sake of consistency with data-analytic procedures carried out on subsequent data sets, a brief description of these resuts will be given here.

Overall, 34 percent of the helpers smiled at the investigator. The mean number of words used by helpful subjects was 6.7. However, the distribution of the number of words used by helpful subjects was substantially skewed (skewness = 3.13, kurtosis = 11.77). Therefore, a logarithmic transformation of these data was taken. This resulted in an approximately normally distributed variable (skewness = .25, kurtosis = .49). Observation of scatterplots revealed that both population size and community isolation appeared to be related in a linear fashion to both words used (log version) and smiling. To summarise these relationships, the number of words used variable and smiling behaviour (coded 0 = did not smile, 1 = did smile) were regressed upon the log of population size and distance from a capital city. Although the smiling variable was

only dichotomous, multiple regression procedures can still be profitably used under such circumstances (Kerlinger & Pedhazur, 1973).

Population size and distance from a capital city (isolation) together accounted for 11 percent of the variance in the number of words used variable ($R = .33$, $p < .001$). Population size by itself accounted for 9.6 percent of the variance and its negative beta weight ($-.37$, $p < .001$) indicated that helpers in larger cities used fewer words when speaking to the investigators. Isolation accounted for a further 1.4 percent of the variance and its negative beta weight ($-.13$) indicated that helpers in more isolated communities tended to use fewer words when speaking to the investigator. However, this latter beta value was not significant ($p > .05$).

Population size and distance from a capital city (isolation) together accounted for only five percent of the variance in the smiling variable ($R = .22$, $p < .01$). Isolation accounted for 1.8 percent of the variance and its negative beta weight ($-.22$, $p < .01$) indicated that helpers in more isolated communities were less likely to smile at the investigator. Population size accounted for a further 2.9 percent of the variance and its negative beta weight ($-.19$; $p < .05$) indicated that helpers in larger cities were less likely to smile at the investigator.

Analysis of Community Factors

The final step in the analysis of these data involved the assessment of the overall impact of the various community characteristics included for study. For this purpose, the scores on

the prosocial involvement scale were regressed upon the six community factors described in Chapter Four: Urbanism, Tourism, Foreign-born Heterogeneity, Social Class, Transient Black Population, and Community Instability. Step-wise multiple regression procedures were used to assess the independent effect of each community factor. The result of this analysis is presented in Table 5.4.

Altogether, the six community factors accounted for 20 percent of the variance in the dependent measure ($R = .445$, $p < .001$). The largest proportion of the variance was accounted for by the Urbanism factor (13.3%). Its negative beta weight indicated that subjects in areas characterized by high levels of urban development were less helpful. This result is consistent with the findings reported above. The Foreign-born Heterogeneity factor accounted for a further 2.8 percent of the variance and its negative beta weight (-.21) indicated that subjects in communities with large numbers of foreign born and bilingual residents exhibited lower levels of prosocial involvement with the investigator. The Tourism factor accounted for a further 2.4 percent of the variance and its positive beta weight (.15) indicated that subjects in areas with high levels of tourism exhibited higher levels of prosocial involvement with the investigator. Finally, the Presence of a Transient Black Population factor accounted for a small 1.1 percent of the variance, and its negative beta weight (-.11) indicated that subjects in areas with a large transient, Black population were less helpful.

Discussion

Table 5.4

Multiple Regression Analysis of the Effects of Six Community Factors on Prosocial Involvement Scores in the Colour Request Episode

Variable	Multiple R	R^2	R^2 Change	Simple r	Beta
Urbanism	.36	.13	.13	-.36	-.24**
Foreign-born Heterogeneity	.40	.16	.03	-.31	-.21**
Tourism	.43	.18	.02	.26	.15*
Transient Black Population	.44	.20	.01	-.03	-.11*
Social Class	.44	.20	.00	.06	.04
Community Instability	.44	.20	.00	.04	.03

** $p < .001$

* $p < .05$

The overall percentage of people complying with the colour request was relatively high: 74 percent. This probably reflects the fact that writing a colour name was a relatively non-costly form of compliance. Furthermore, the solicited nature of the help-giving probably helped to produce the high rate of compliance by clearly defining the behaviour required of the subjects.

Nevertheless, rates of help-giving varied significantly with both population size and the isolation of communities. The highest rates of compliance occurred in communities of less than 20,000 people. The combined rate of compliance in these smaller communities was 83 percent. This rate declined to 72 percent in cities larger than 20,000 people and 55 percent in the two largest cities, Brisbane and Sydney. Combining a number of dependent measures (stopping, compliance with the request, smiling and speaking) into a summary measure of prosocial involvement yielded similar results: as city size increased, the level of prosocial involvement of pedestrians decreased. While it can be argued that the scaled measure of prosocial involvement might "spread out" into other areas of the taxonomic helping-space, the results suggest that the community size effect is similar, regardless of whether one considers the more straightforward presence/absence of help variable or the scaled variable which reflected the magnitude of the subject's prosocial involvement in the episode. A similar result was obtained when the quality of helping was considered. Pedestrians who stopped to help the investigator in the larger cities gave help which was less positive than the help given by pedestrians in the smaller communities. These results are generally consistent with the belief that residents of small communities are

more helpful and more friendly than residents of large cities (Korte, 1978, 1980).

It was also found that community isolation, as measured by distance from a large capital city, was negatively correlated with compliance. Both analysis of the dichotomous compliance measure and the scaled prosocial involvement measure indicated that the residents of more isolated communities were less helpful than residents of less isolated communities. This relationship was only apparent, however, when the population size of communities was controlled for. A similar result was obtained when the quality of help-giving was examined: helpers in more isolated communities were less likely to smile and spoke fewer words to the investigator than did helpers in the less isolated areas. These findings have no precedent in the helping literature, but are consistent with the notion that ruralites can be distrustful or aloof when dealing with strangers (see the discussion in Chapter 2). Effects of community isolation have never been revealed in the literature on helping because urbanism (or ruralism) has previously been defined exclusively in terms of population size. The findings of the present study suggest that the definition of urbanism-ruralism in terms of population size or isolation leads to opposite conclusions about the effects of urbanism or ruralism on helping. When the degree of urbanism is measured in terms of population size, then it appears that urbanites have lower rates of helping than ruralites. This is consistent with the majority of studies which have been done in this area. However, when the degree of urbanism of a community is defined in terms of its nearness to a large capital city, then it appears that urbanites have higher rates of helping than ruralites.

This interpretation will be returned to and discussed in more detail in Chapter Eleven.

When assessing the effects of the six community factors, four were found to be related to prosocial involvement. The factor with the highest correlation with helping was Urbanism. This is consistent with the findings reported earlier: pedestrians in cities of greater urban development were less helpful. The finding that Foreign-born Heterogeneity was negatively associated with prosocial involvement indicated that cities with large numbers of bilingual and foreign born residents were less helpful. This can be interpreted in two ways. First, it may be that the pedestrians approached by the investigator in communities with large numbers of foreign-born residents were likely to be foreign-born themselves. Since most of these people would have learned English as a second language, it is likely that they did not understand the investigator's request (it was, after all, an unusual request). Confusion over just what was being asked of them could have resulted in lower levels of involvement for these subjects. A second explanation refers to the work of Louis Wirth (1957) who argued that increased heterogeneity in a community leads to a sense of fragmentation and decreased feelings of involvement with others. This notion is also relevant to the work done on in-group and out-group distinctions (Tajfel, 1970). Thus, it may be that foreign-born subjects felt less of an obligation to comply with a request from a stranger perceived as being a member of the "out-group". Alternately, high levels of population heterogeneity may simply have created a general climate in which helping total strangers was less likely. These interpretations will be returned

to in the final chapter of this volume.

The multiple regression analysis also revealed a significant effect for the Tourism factor, indicating that pedestrians in areas with high levels of tourism were more helpful. It may be that communities which experience a large influx of visitors and tourists every year are less "isolated" than communities which receive few outside visitors. Residents of these communities would be more likely to see and deal with strangers and out-of-towners on a regular basis. Being more at ease with strangers may have led these subjects to react more positively to the investigator's unusual request. This interpretation is consistent with the earlier finding that more isolated communities (as measured by distance from a capital city) were less positive in their dealings with the investigators.

Finally, the Presence of a Transient Black Population factor was negatively associated with prosocial involvement. The interpretation of this finding is unclear, since the interpretation of the factor itself is somewhat problematic. On one hand, since the proportion of Aboriginal and Islander residents loaded highly on this factor, it may be that it is functioning as a measure of population heterogeneity. This result would then be consistent with the finding that foreign-born heterogeneity was also negatively associated with helping. However, very few Black pedestrians appeared in the sample. Alternately, this factor may be functioning more as a social class measure, indicating that people living in mainly working class communities with low rates of home ownership were less helpful. However, because this factor accounted for only

a trivial proportion of the variance (1.1%) further discussion at this point will not be presented.

Chapter Six: Correcting Inaccurate Directions

This study was based upon a helping episode which was high on dimension one of the multidimensional helping space, that is, it was a helping episode seen as being highly spontaneous (see Figure 4.1). The episode consisted of a subject overhearing a staged conversation between an investigator and a confederate. In this conversation the investigator asked for directions to a nearby location. In reply, the confederate gave information which was obviously incorrect. The measure of helping used was whether or not the subject intervened and corrected the inaccurate directions. This measure was originally used by Allen Harvey (discussed in Latane & Darley, 1970) in a study of helpfulness in the New York subway.

It was decided to use shopkeepers and shop assistants as the subjects of this study. This was done for a number of reasons. First, the episode required a subject who was stationary for a period of time long enough to overhear the staged conversation. Second, using shopkeepers allowed the episode to take place indoors, out of public view. Since four other studies were conducted on the sidewalks using pedestrians as subjects, this helped to keep the research from becoming too conspicuous. Third, it has been suggested by Jacobs (1961: 60-62) that shopkeepers are an important component of the street life of a community. Jacobs argued that by keeping an eye on what is going on near their shops, shopkeepers and shop assistants assume responsibility for seeing that all is well in the local area. If shopkeepers do take responsibility for the problems and activities which occur near their shops, then they are an important target population for study in relation to urban-rural

differences in involvement and helping behaviour. This procedure also decreases the chance that subjects are not members of the local community, a potential problem with using pedestrians as subjects.

Method

The situation began with a confederate entering a shop in the centre of the downtown commercial district. The confederate would approach the counter where a shop assistant was waiting, and would stop to look at a nearby display of goods. Often a rack of magazines or sunglasses was used for this purpose. The confederate would make sure that he was within hearing distance of the shop assistant (within six to eight feet). After approximately one minute had elapsed, the investigator would enter the shop and walk up to the confederate. He would then say in a loud voice "Excuse me. Can you tell me how to get to the post office?" (Usually the local post office was used as a location, although other destinations such as a nearby street were occasionally used.) In reply, the confederate first stated that he wasn't exactly sure of the location. He then gave directions to the investigator which were obviously incorrect. To emphasize the inaccurate nature of the information, the confederate would point in the direction opposite to the correct one. To ensure that the shop assistant overheard, the investigator would repeat the directions while the confederate nodded and said "Yes, I think that's right". If the shopkeeper failed to intervene at this point, the investigator thanked the confederate and slowly walked out of the shop. The confederate would linger for another 30 seconds and then leave as well. The entire conversation took about 30 seconds (see Figure 6.1).

Figure 6.1 The Correcting Inaccurate Directions Episode

After leaving the shop, the investigator would walk to a convenient location (often a doorway or a bench) and record the details of the episode. These consisted of: the type of shop, the sex and estimated age of the shopkeeper, whether the shopkeeper corrected the inaccurate directions or not, and the time of day and day of the week. If the shopkeeper corrected the inaccurate directions, the approximate number of words used and whether the shopkeeper smiled or not were recorded.

After the confederate left the shop, he would walk along the sidewalk until the next suitable shop was encountered and then enter it. In the larger cities, every fifth shop was selected. In the smaller communities, especially those of less than 1,000 people, every suitable shop or store was selected.

Shops were deemed unsuitable for a number of reasons. First, shop assistants could not be busy at the time the conversation took place. Therefore, shopkeepers who were serving a customer or were talking with a customer were not included. This often meant that shops which were very busy with large numbers of customers could not be included. Furthermore, the shopkeeper had to be standing alone before the episode was enacted. If two or more shop assistants were standing together, the shop could not be used, for this would have increased the probability that at least one subject would have intervened. Finally, some specialty shops had to be omitted from the sample, such as maternity clothing stores, to keep the situation from appearing unrealistic. Table 6.1 gives the frequencies for which certain types of shops were included in the sample.

Table 6.1

Number and Percentage of Type of Shops Used

Shop type	N	%
Milk bar	15	5.1
Grocery store	11	3.8
Newsagent	34	11.6
Souvenir shop	15	5.1
Take away food	12	4.1
Chemist	37	12.7
Department store	46	15.8
General store	4	1.4
Other	118	40.4
	292	100.0

The locations used (usually a local post office or a nearby main street) were selected so as to be quite close to the shops and stores where the episodes were enacted (usually within 3 or 4 blocks). It is unlikely, given the nature of the desired location, that shopkeepers would have been unaware of its real whereabouts. Also, destinations were chosen so that they could be described by shopkeepers with a minimum of instruction. Usually the investigator could be directed to the location by simply instructing him to walk three or four blocks along the main street in a certain direction. Care was taken to choose a destination such that instructions were equally difficult to give in both the large cities and the small towns.

Two investigators were used, both male. Three people acted as confederates, two males and one female. Investigators and confederates dressed casually but neatly for the enactments. Chi-square analysis revealed that the two investigators did not receive equivalent levels of help (53% versus 66%, $\chi^2 = 4.43$, df = 1, $p < .05$). Chi-square analysis also revealed that the two investigators did not sample equal numbers of subjects across the various levels of population size and isolation. Therefore, later analyses were replicated separately for each investigator. Essentially the same results were obtained for each investigator. Furthermore, analysis of variance revealed no significant interactions between investigator and either population level or level of isolation. Therefore, the data for both investigators were combined and analyzed as a single data set.

A small pretest of 30 trials, conducted in a small town of less than 1,000 people and in a larger city, used both a male and a female investigator. While the female was helped slightly more than the male investigator (69.2 % vs. 58.2 %) this difference was not statistically significant (χ^2 = .347, df = 1, p > .10). However, this nonsignificant difference may have been due to the small sample size used. It is likely that overall helping rates for females in need would have been slightly higher than for males if female investigators had been used. Hence, this study may have slightly underestimated the actual level of helpfulness. The pretest did not reveal any interaction between sex of investigator and urban-rural location.

Altogether, the episode was staged 292 times in 55 cities and towns in Queensland and northern New South Wales. Chi-square analysis revealed that both type of shop and day of the week in which testing occurred were unrelated to helping responses. However, a significant association was found between time of day and correcting the inaccurate directions (χ^2 = 20.65, df = 8, p < .01). Rates of helping were highest in the early morning before 9 am, at noon, and during the hour before closing time (4 to 5 pm). Unfortunately, the distribution of observations across the various hours of the day was not the same across the five levels of population size. Therefore, later analyses investigating the effect of urban-rural location on helping rates were replicated holding time of day constant. The results were essentially similar across the various time periods of the day. Therefore, later results describing differences between urban and rural areas in rates of helping cannot be accounted for by reference to the time of day

variable.

Sample Characteristics

The first step in the analysis was to check and see if the urban and rural samples differed in their age or sex distributions. This was done to ensure that the samples did not differ in "irrelevant" aspects which would make later urban-rural comparisons problematic. For this purpose, population size was divided into five levels: 999 people or less, 1,000 to 4,999 people, 5,000 to 19,999 people, 20,000 to 300,000 people, and Sydney and Brisbane, the two largest cities in the sample. Isolation was divided into two levels: 799 kilometers or less driving distance from a major capital city and 800 or more kilometers driving distance from a capital city.

The majority of subjects in this study were female (64.7%). Chi-square tests revealed that the proportions of male and female subjects did not vary significantly across the five levels of population size (χ^2 = 2.34, df = 4, $p > .10$). Furthermore, the proportions of males and females did not differ with level of isolation (χ^2 = .43, df = 1, $p > .10$). Analysis also revealed that female and male shopkeepers did not differ in their rates of helping the investigator (males = 61.8 %, females = 57.3 %, χ^2 = .54, df = 1, $p > .10$).

The estimated ages of subjects in this study ranged from 16 to 64 with a mean estimated age of 33.6 years (median = 34.5). To see if the proportions of subjects in various age categories was constant across the urban and rural settings, estimated age was

divided into four levels: 24 or less, 25 through 39, 40 through 59 and 60 or more. The percentage of subjects in these four age groups was 36.6, 40.7, 21.5, and 1.1. Chi-square analysis revealed that the proportion of subjects in each age category did not vary significantly across levels of population (χ^2 = 16.7, df = 12, p > .10) or isolation (χ^2 = 3.25, df = 3, p > .10). Furthermore, estimated age was uncorrelated with whether the subject helped or not (r = .05, p > .10).

Results

Overall, 59 percent of the shopkeepers and shop assistants intervened and corrected the inaccurate directions. To determine if the rates of helping differed in the urban and rural environments, population size was divided into five levels and isolation was divided into two levels using the same cutting points mentioned earlier. The percentage of people helping was then plotted simultaneously for both population level and isolation level. These data appear in Table 6.2 and Figure 6.2.

The major trend which appeared in Figure 6.2 can be described as a general decrease in the percentage of shopkeepers who helped the investigator in population centres of increasing size. Furthermore, this trend was very similar for both the isolated and nonisolated communities in the sample. This is reflected in a significant Tau coefficient of −.25 (p < .001) for the nonisolated communities and by a similar Tau coefficient of −.16 for the isolated communities. The latter coefficient, however, is not significant (p = .18, two-tailed), although this may be due to the

Table 6.2

Percent of Subjects Helping by Correcting Inaccurate Directions in Communities at Five Levels of Population Size and Two Levels of Isolation

Population Size	Isolation: 799 kilometers or less from a capital city[1]	Isolation: 800 kilometers or more from a capital city[2]
999 people or less	77.8% (n = 18)	66.7% (n = 18)
1,000 to 4,999 people	68.6% (n = 35)	63.6% (n = 22)
5,000 to 19,999 people	64.9% (n = 37)	65.0% (n = 20)
20,000 to 300,000 people	60.0% (n = 40)	45.5% (n = 22)
850,000 people or more	45.0% (n = 80)	

Tau = -.25, n = 210, $p < .001$ (two-tailed)

Tau = -.16, n = 82, $p > .10$ (two-tailed)

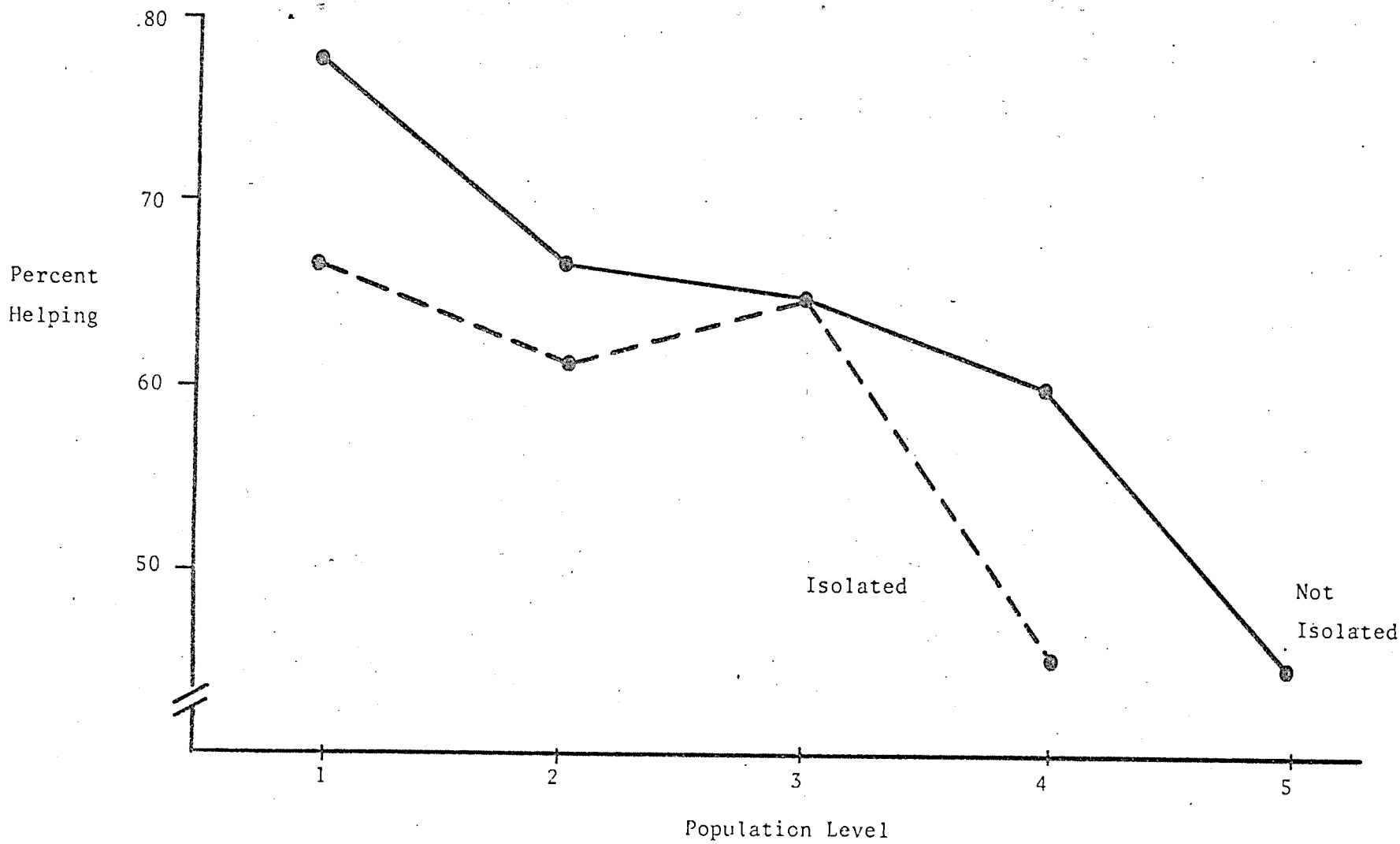

Figure 6.2 Percent of Subjects Correcting Inaccurate Directions in Communities at Five Levels of Population Size and Two Levels of Isolation

fact that it is based upon a relatively small number of cases. Collapsing the two levels of isolation revealed that shopkeepers in the smallest communities were most likely to help (70 percent) while shopkeepers in Sydney and Brisbane, the two largest cities in the sample, were least likely to help (45 percent).

It also appeared in Figure 6.2 that more distant areas tended to have slightly lower rates of helping. This was the case at all levels of population size, except for level three where the two rates were identical, and level five where no comparable rate existed for the isolated areas. Overall, 60 percent of the shopkeepers in the more distant areas helped while 66 percent of the shopkeepers in the nonisolated areas helped (this latter figure does not take into account the data from Sydney and Brisbane). However, this difference is not statistically significant ($\chi^1 = .91$, df = 1, $p < .10$). Furthermore, dividing distance from a capital city into more than two levels did not reveal any substantial linear or nonlinear trend.

Submitting the frequencies upon which the percentages in Figure 6.2 and Table 6.2 were based to a log linear analysis using the GLIM computer program (Baker & Nelder, 1978) revealed little else in the data. With the data from the two largest cities, Sydney and Brisbane, omitted, the log linear analysis indicated that neither the effect of population level on helping, the effect of isolation level on helping, nor the effect of the interaction between population and isolation level on helping were necessary to bring the scaled deviance down to a nonsignificant level. The fact that no effects emerged from the analysis at all would most likely be due

to (1) the non-sensitivity of log linear analysis to linear trends across cells and (2) the omission of data from cities at the largest level of population size. Nevertheless, the log linear analysis was useful in demonstrating the absence of an interaction in the data between the population size and isolation variables.

It was therefore decided that the effects of population size and isolation could be described in terms of the linear, independent effect of each. To summarize this relation, the dependent variable (coded 0 = did not help, 1 = did help) was regressed upon population size (log version) and distance from a large capital city. The results of this multiple regression analysis appear in Table 6.3. Together, the two urban-rural variables accounted for only four percent of the variance in the helping measure ($R = .20$, $p < .05$). However, almost all of this variance was due to the effect of population size (beta weight = $-.22$, $p < .01$).

The Quality of Help-Giving

To assess differences in the quality of help-giving in urban and rural areas, two variables were examined: whether the helper smiled or not and the number of words used by helpful subjects in giving directions. The percent of helpers who smiled at the investigator was 60.6. The estimated number of words used by helpers ranged from 2 to 95 with a mean of 19.4 (SD = 16.1). However, this distribution was substantially skewed (skewness = 2.02). A logarithmic transformation of these data corrected this problem (resulting skewness = $-.02$).

Table 6.3

Multiple Regression Analysis of the Effects of Population Size and Isolation on Helping in the Inaccurate Directions Episode

Variable	Multiple R	R^2	R^2 change	Simple R	Beta
Population Size (log)	.19	.04	.04	-.19	-.22*
Isolation	.20	.04	.00	.08	-.04

* $p < .01$

The mean number of words spoken (log version) is displayed in Table 6.4 and Figure 6.3 for communities at five levels of population size and two levels of isolation. For the nonisolated communities, the relationship between the number of words spoken and community size appeared to be curvilinear, with helpers in the smallest communities speaking the largest number of words, helpers in the largest cities speaking the second largest number of words, and helpers in communities of intermediate size speaking somewhat fewer words. For the more isolated cities and towns, the relationship appeared to be very irregular. Furthermore, speakers in the more isolated communities appeared to generally use fewer words when giving directions to the investigator, except for communities at population level three, where the trend was slightly reversed. To ascertain what effects were present, these data were subjected to an analysis of variance using population level and isolation as factors, resulting in a 4 X 2 factorial design. The analysis was conducted twice, once with Sydney and Brisbane included in population level 4, and once with Sydney and Brisbane excluded from the analysis. This was due to the fact that adding Sydney and Brisbane resulted in a substantial inequality in the number of cases in the cells of the design. However, both analyses yielded very similar results, so only results of the analysis which used all the data will be reported. A significant effect was obtained for the isolation variable ($F = 5.25$, $df = 1/170$, $p < .025$). Both the effects of population level and the interaction between population level and isolation were non significant. Comparison of the means for isolated and nonisolated areas, as well as examination of a scatterplot, indicated that helpers in more isolated areas spoke

Table 6.4

Mean Number of Words Used (log) by Helping Subjects in Communities at Five Levels of Population Size and Two Levels of Isolation in the Inaccurate Direction Episode

Population Size		Isolation: 799 kilometers or less from a capital city	Isolation: 800 kilometers or more from a capital city
999 people or less	$\bar{X}$	1.36	.98
	SD	.46	.47
		(n = 14)	(n = 12)
1,000 to 4,999 people	$\bar{X}$	1.13	1.32
	SD	.30	.32
		(n = 24)	(n = 14)
5,000 to 19,999 people	$\bar{X}$	1.16	.95
	SD	.24	.29
		(n = 24)	(n = 13)
20,000 to 300,000 people	$\bar{X}$	1.14	1.06
	SD	.32	.31
		(n = 24)	(n = 10)
850,000 people or more	$\bar{X}$	1.27	
	SD	.29	
		(n = 36)	

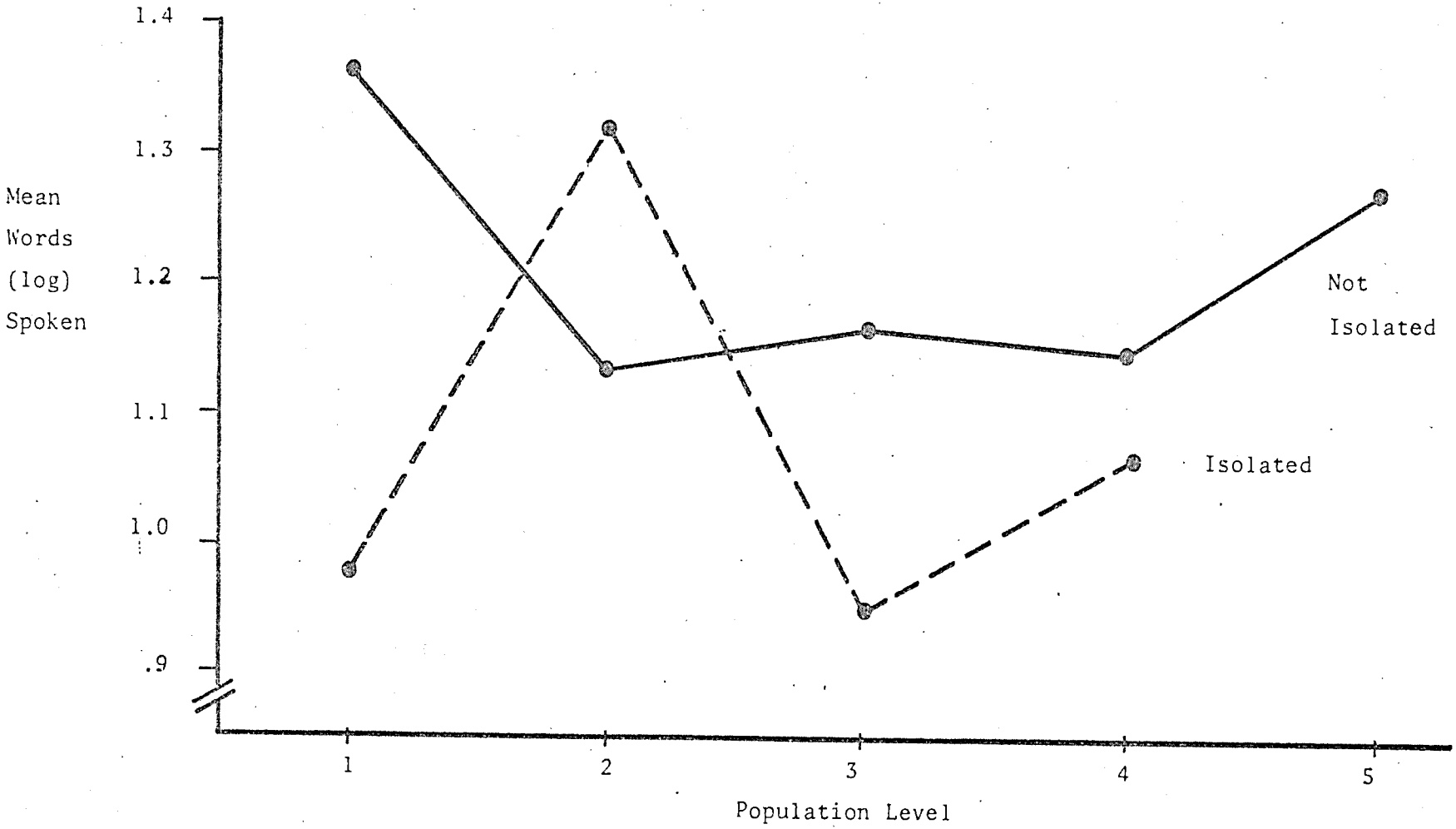

Figure 6.3 Mean Number of Words Spoken (log) by Helpful Subjects in Communities at Five Levels of Population Size and Two Levels of Isolation in the Inaccurate Directions Episode

fewer words to the investigator.

Because no interaction was present, and because no significant nonlinear trends were evident, the words used (log version) variable was regressed upon population size (log version) and distance from a large capital city. The results of the multiple regression analysis appear in Table 6.5. It appeared from this analyses that both urban-rural variables together accounted for slightly over five percent of the variance in the words used variable ($R = .23$, $p < .05$). However, almost all of this variance was accounted for by the distance variable (beta weight = $-.26$, $p < .01$).

A similar analysis was conducted on the smiling variable. Preliminary analysis of the data indicated a weak linear effect for the population size variable. The correlation between population size (log version) and smiling (coded 0 = did not smile, 1 = did smile) was .16, $p < .05$). Furthermore, no interaction effect appeared to be present between the population size and isolation variables. To summarize the effects of population size and distance on smiling behaviour, the smiling variable was regressed upon the two urban-rural variables. Together, population size and isolation only accounted for a nonsignificant 2.7 percent of the variance ($R = .16$, $p > .10$). Neither beta weight was significantly different from zero.

Effects of Community Factors

The final step in the analysis of these data involved the regression of the helping measure (coded 0 = did not help, 1 = did help) on the six community factors. Although the dependent variable

Table 6.5

Multiple Regression Analysis of the Effects of Population Size (log) and Isolation on the Number of Words Used by Helpful Subjects in the Inaccurate Directions Episode

Variable	Multiple R	R^2	R^2 change	Simple R	Beta
Isolation	.23	.05	.05	-.23	-.26*
Population Size (log)	.23	.05	.00	.06	-.06

* P < .01

in this analysis was only a dichotomy, multiple regression procedures can still be profitably used in situations like this (Kerlinger & Pedhazur, 1973). Preliminary inspection of the data using various cutting points did not reveal any nonlinear relationships between the six community factors and the percent of people helping. The results of the step-wise multiple regression analysis appear in Table 6.6.

Altogether, the six community factors accounted for 7 percent of the variance in the helping measure ($R = .27$, $p < .01$). The two best predictors were the Foreign-born Heterogeneity factor, which accounted for slightly over three percent of the variance, and the Social Class factor, which accounted for a further two percent of the variance. The negative beta weight for the Foreign-born Heterogeneity factor (beta = $-.15$, $p < .05$) indicated that shopkeepers in communities with high proportions of foreign-born and bilingual residents were less likely to help the investigator. The negative beta weight for the social class factor (beta = $-.15$, $p < .05$) indicated that shopkeepers in areas of lower social class were less likely to help the investigator. Although the simple Pearsonian correlation for the Urbanism factor was significant and negative ($r = -.18$, $p < .05$), it did not emerge as a significant predictor from the multiple regression analysis, accounting for only a further one percent of the variance.

Discussion

Table 6.6

Multiple Regression Analysis of the Effects of Six Community Factors on Helping in the Inaccurate Directions Study

Variable	Multiple R	R^2	R^2 change	Simple R	Beta
Foreign-born Heterogeneity	.18	.03	.03	-.18	-.15*
Social Class	.23	.05	.02	-.12	-.15*
Urbanism	.25	.06	.01	-.18	-.09
Community Instability	.26	.07	.01	.04	.07
Tourism	.27	.07	.00	.13	.04
Transient Black Population	.27	.07	.00	.05	.02

* $p < .05$

The results of this study indicated that shopkeepers in larger urban areas were less likely to help the investigator by correcting the inaccurate information given to him by the confederate. While shopkeepers in the smallest communities intervened 70 percent of the time, shopkeepers in Sydney and Brisbane only intervened 45 percent of the time. While the percentage of helpers stayed about the same in communities of less than 20,000 people, in cities of more than 20,000 people the helping rates declined. Thus, 20,000 people appeared to be the point at which population size affected the likelihood of shopkeepers offering this particular type of assistance. These data are consistent with the notion that residents of large cities are less helpful than their rural counterparts (Korte, 1978, 1980).

The quality of help-giving did not appear to be related to city size. Although the largest number of words were spoken by helpful shopkeepers in the smallest communities of 999 people or less (mean = 25), the second largest mean number of words were spoken by helpers in the largest cities (mean = 22.6). This U-shaped relationship may have reflected both a tendency for small town shopkeepers to be more helpful and the greater difficulty inherent in directing the investigator through the more complex urban environments. Both tendencies may have counteracted each other, resulting in a U-shaped curve.

However, the number of words used variable was significantly and negatively related to the isolation variable, indicating that shopkeepers in more distant areas tended to use fewer words in giving directions than their less isolated counterparts. This may

have reflected a tendency for people in rural areas to be less inclined to communicate with a stranger. However, the actual magnitude of the difference between areas was quite small (a mean of 18 words for the isolated respondents versus 20.2 words for the nonisolated respondents). The interpretation of this finding will be discussed at greater length in the final chapter.

The multiple regression analysis using the six community factors revealed that both the level of foreign-born heterogeneity and the social class level of communities were related to the helping measure. Foreign-born heterogeneity was negatively associated with helping. There are two alternative explanations for this finding. First, foreign-born people often establish small retail enterprises such as milk bars and take-away food shops. Therefore, in areas with large numbers of foreign-born and bilingual residents, many of the shopkeepers sampled would have belonged to this group. Their lack of fluency in English may have made them less likely to overhear the conversation correctly, leaving them unaware that help was actually needed. Furthermore, their lack of command of the English language may have inhibited them from attempting to give the correct information. A very different explanation refers to the work of Louis Wirth (1957) who argued that high levels of population heterogeneity result in people being less inclined to get involved with strangers because they share so little in common. It may be then, that foreign-born shopkeepers perceived the investigator as a member of the out-group (Tajfel, 1970), resulting in less motivation to lend assistance. Alternatively, if Wirth's observations are correct, high levels of heterogeneity may have simply produced a general community atmosphere which is not

conducive to the exhibiting of prosocial behaviours to strangers.

The social class of communities was found to be related to help-giving, with areas of lower social class being less likely to lend assistance. The interpretation of this finding must be quite speculative. However, it may reflect the fact that shopkeepers in less economically advantaged communities are less likely to be prosperous. Economic marginality may produce stress, an attitude of fatalism, or lowered self-esteem in such residents. Since rates of helping behaviour have been found to be higher among those who feel good, perceive themselves to be potent, and have high self-esteem (for a review, see Rushton, 1980), shopkeepers experiencing the negative side-effects of economic marginality may have been less concerned with the investigator's plight.

Finally, although the population variable by itself was significantly correlated with rates of helping, the urbanism factor did not emerge as a significant predictor of helping once the other factors were entered into the step-wise multiple regression analysis. This reflects the fact that the effects of the population size variable are actually quite weak ($r = .19$, $p < .01$). In fact, all the variables in the present analysis only accounted for small amounts of the variance in the helping measure (the R squared from the multiple regression analysis was .07). Further discussion of these results will take place in the final chapter.

Chapter Seven: A Hurt Leg Episode

This study was based upon an episode in which a pedestrian stumbled to the ground, and in the process, revealed a heavily bandaged and bleeding leg. This helping episode was located high on the "serious" pole of the second dimension of the helping taxonomy developed and described in Chapter Three (see Figure 4.1). Subjects perceived this situation as one in which failing to help the victim might have substantial, possibly grave, implications. Although this helping measure was created especially for the present research, it is somwhat similar to a situation used by Staub and Baer (1974). However, the situation used in the Staub and Baer study was less serious than the present one, involving a pedestrian who stumbled and feigned a hurt knee. The use of blood in the present study was introduced to increase the perceived severity of the victim's distress. Previous research has indicated that the sight of blood produces high levels of arousal in observers (Lazarus, et al. 1962; Lazarus, et al. 1965). The notion that observers react strongly to the sight of blood is also consistent with the results of a study by Piliavin and Piliavin (1972) who investigated the effect of blood on a victim's likelihood of being helped. According to Piliavin and Piliavin, the sight of blood produced high levels of arousal which subjects in their study attempted to reduce. The result was a lower rate of direct help for the bloodied victim as opposed to an unbloodied victim.

Method

This episode began with the investigator walking along the sidewalk with a noticeable limp. A pedestrian approaching from the opposite direction was selected to be the subject. Generally, every third suitable pedestrian was selected in the larger cities, and every suitable pedestrian was selected in the smaller towns. Pedestrians were deemed to be suitable if they were walking alone, were not carrying heavy packages, and were not in any way physically handicapped. Only pedestrians 16 years of age or more were selected.

When the pedestrian was approximately 10 feet away, the investigator would suddenly drop to the sidewalk with a cry of pain. Then, while half kneeling, the investigator would reveal a heavily bandaged leg, with white cotton gauze covering an area between the ankle and the mid-calf. The middle portion of the bandage was generously smeared with a fresh application of theatrical blood, with the bloodied area covering an area of about 3 x 5 inches. The investigator would continue kneeling and looking at the wound until the subject either passed by or offered some form of assistance. If the subject offered assistance, the investigator replied "Thank you. I have a hurt leg but I'll be all right." If the subject persisted in offering some assistance, the investigator pointed to the second investigator who was standing nearby and said, "That person is a friend of mine. He can look after me." All the subjects who offered help were satisfied with this statement (see Figure 7.1).

The entire episode was observed and recorded by a confederate positioned at a distance of approximately 30 to 40 feet. Prior to the initiation of testing, two ten meter zones were marked off on

Figure 7.1 The Hurt Leg Episode

the sidewalk. Natural landmarks were used to mark the beginning and end of these two zones (such as benches, street signs, garbage cans, and doorways). As the subject entered the first 10 meter zone, the confederate recorded the length of time, in seconds, it took the subject to traverse this distance. This was accomplished with a concealed stopwatch. The "accident" was timed so that the "victim" fell to the ground just as the subject was entering the second ten meter zone. The confederate recorded the amount of time, in seconds, the subject spent in the second ten meter zone with the hurt leg victim by using a second concealed stopwatch. The difference in the amount of time it took the subject to traverse the first 10 meters and the second 10 meters was one of the main dependent variables used in this study.

The confederate also recorded the behaviour of the subject on a six point scale of prosocial responsiveness. The steps in this scale are defined below:

1. Subject did not stop walking and did not look at the victim.

2. Subject did not stop walking but looked briefly at the victim (up to three seconds).

3. Subject did not stop walking but slowed down and stared at the victim for a prolonged period of time (four seconds or more).

4. Subject stopped walking and stared at the victim but did not verbally offer assistance.

5. Subject stopped walking and offered assistance to the victim. Often this took the form of a question, such as, "Are you right?"

6. Subject offered assistance, and after being told by the victim that no assistance was necessary, continued to offer additional assistance or advice.

A reliability check on 20 cases revealed that two independent observers exhibited a high level of agreement about the appropriate category for describing the subjects' behaviour ($r = .95$).

It was assumed in constructing this six point scale of responsiveness that there are levels of increasing prosocial involvement in an episode such as this, rather than a simple all-or-nothing helping response. Those subjects who looked at or stared at the victim while walking were, in all likelihood, monitoring the situation and attempting to define it in some manner. Apparently, these subjects defined it as one not requiring their involvement. However, it can be argued that their staring behaviour indicated a minimal amount of concern about the victim's plight, and a desire to obtain more information about the seriousness of the situation. Likewise, those subjects who stopped walking but only stared at the victim without offering outright assistance were also, in all likelihood, monitoring the situation closely in an attempt to arrive at an adequate definition of what was occurring. Their stationary behaviour can be considered an indirect although not explicit offer of help. That is, they would have been available if the investigator had requested assistance. Since no assistance was

requested, it is likely that these subjects regarded an explicit offer of help to be unnecessary. Obviously, those subjects who did offer help, or who persisted in offering help even after the victim said he did not need assistance, displayed increased levels of involvement with the victim.

Beside recording the subject's behaviour on the six point scale, the confederate also recorded the number of words the subject spoke (these were obtained later from the investigator acting as the victim), the subject's sex, the estimated age of the subject, the day of the week and the time of day.

Altogether, the episode was staged 226 times in 55 cities and towns in Queensland and New South Wales. Two investigators played the role of victim. The episode was practiced until it appeared to look realistic. The reaction of many passers-by during the enactments (looking shocked, expressing disgust at the sight of the blood, and making statements such as "Oh my God.") suggested that the scene was perceived as being highly realistic. Both investigators were males, aged 21 and 27. During the enactments, they dressed neatly but casually.

Data analysis revealed that both investigators were offered direct assistance (a 5 or 6 on the scale) approximately equally (28.5% versus 35.6%; $\chi^2 = 1.91$, df = 1, $p > .10$). Because it was not possible to randomize day of the week and time of day, a check was made to see if either of these two variables were related to helping. Chi-square analysis revealed that rates of direct assistance did not vary significantly across day of the week ($\chi^2 = 6.02$, df = 6, $p > .10$) or time of the day ($\chi^2 = 15.5$, df = 9, $p >$

.05).

Urban and rural sample characteristics

The first step in the analysis of data involved a comparison of the urban and rural samples. For this purpose, population was divided into five levels: 999 people or less, 1,000 to 4,999 people, 5,000 to 19,999 people, 20,000 to 300,000 people, and 850,000 people or more. Isolation was divided into two levels: 799 kilometers or less driving distance from a capital city and 800 kilometers or more driving distance from a capital city.

Overall, 58 percent of the sample was male compared to 42 percent female. The ratio of males to females did not vary significantly across levels of population size (χ^2 = 3.45, df = 4, $p > .10$) or community isolation (χ^2 = .00, df = 1, $p > .10$). Furthermore, males and females offered direct assistance to the hurt leg victim at approximately equal rates (31.6% versus 29.0%, respectively, χ^2 = .17, df = 1, $p > .10$).

The estimated ages of subjects ranged from 16 to 70 with a mean estimated age of 39 (median = 32.5). The estimated ages of subjects were divided into four categories: 16 through 24, 25 through 39, 40 through 59, and 60 or more. The percent of subjects in each of these four age groups was 9.7, 41.2, 38.1, and 11.1. Chi-square analysis revealed that the proportions of subjects in these age groups was not equal across the various levels of population size (χ^2 = 21.57, df = 12, $p < .05$) or across the two levels of community isolation (χ^2 = 12.79, df = 1, $p < .01$). Therefore, a check was made to see if the estimated ages of subjects were related to the helping measure. The Pearsonian correlation between

estimated age and the six point prosocial responsiveness scale was .23 ($p < .01$), while the Pearsonian correlation for the direct assistance measure (coded 0 = did not offer assistance, 1 = did offer assistance) was .16 ($p < .05$). Because age was associated with both the urban-rural variables and the helping measures, it was used as a control variable in subsequent analyses.

Subjects walked at about the same speed in the larger and smaller communities. The Pearsonian correlations between walking speed and population size and distance from a capital city were, respectively, .00 and -.02. Furthermore, walking speed was unrelated to whether the the subject stopped to help the victim ($r = .09$, $n = 163$, $p > .10$).

Results

Overall, 30.1 percent of the subjects in this study gave an explicit offer of help to the hurt leg victim (that is, they scored a 5 or 6 on the prosocial responsiveness scale). To determine whether rates of direct assistance varied with urban-rural location, population size was divided into five levels and community isolation was divided into two levels. The same cutting points described earlier were used. The percent of subjects offering direct assistance was then computed for each level of population size and isolation. These data are presented in Table 7.1 and Figure 7.2.

It can be seen in Table 7.1 and Figure 7.2 that the percentage of subjects offering direct assistance was between 45 and 50 percent in communities of less than 5,000 people. The percentage of subjects offering direct assistance then declined, with the lowest

Table 7.1

Percent of Subjects Offering Direct Assistance in Communities at Five Levels of Population Size and Two Levels of Isolation in the Hurt Leg Episode

	Isolation	
Population size	799 kilometers or less from a capital city[1]	800 kilometers or more from a capital city[2]
999 people or less	46.7 (n=15)	45.0 (n=20)
1,000 to 4,999 people	50.0 (n=18)	50.0 (n=14)
5,000 to 19,999 people	38.2 (n=34)	28.6 (n=14)
20,000 to 300,000 people	24.0 (n=25)	14.3 (n=14)
850,000 or more	15.3 (n=72)	-

1 Kendall's Tau = -.29 ($p < .001$, two-tailed)

2 Kendall's Tau = -.27 ($p < .05$, two-tailed)

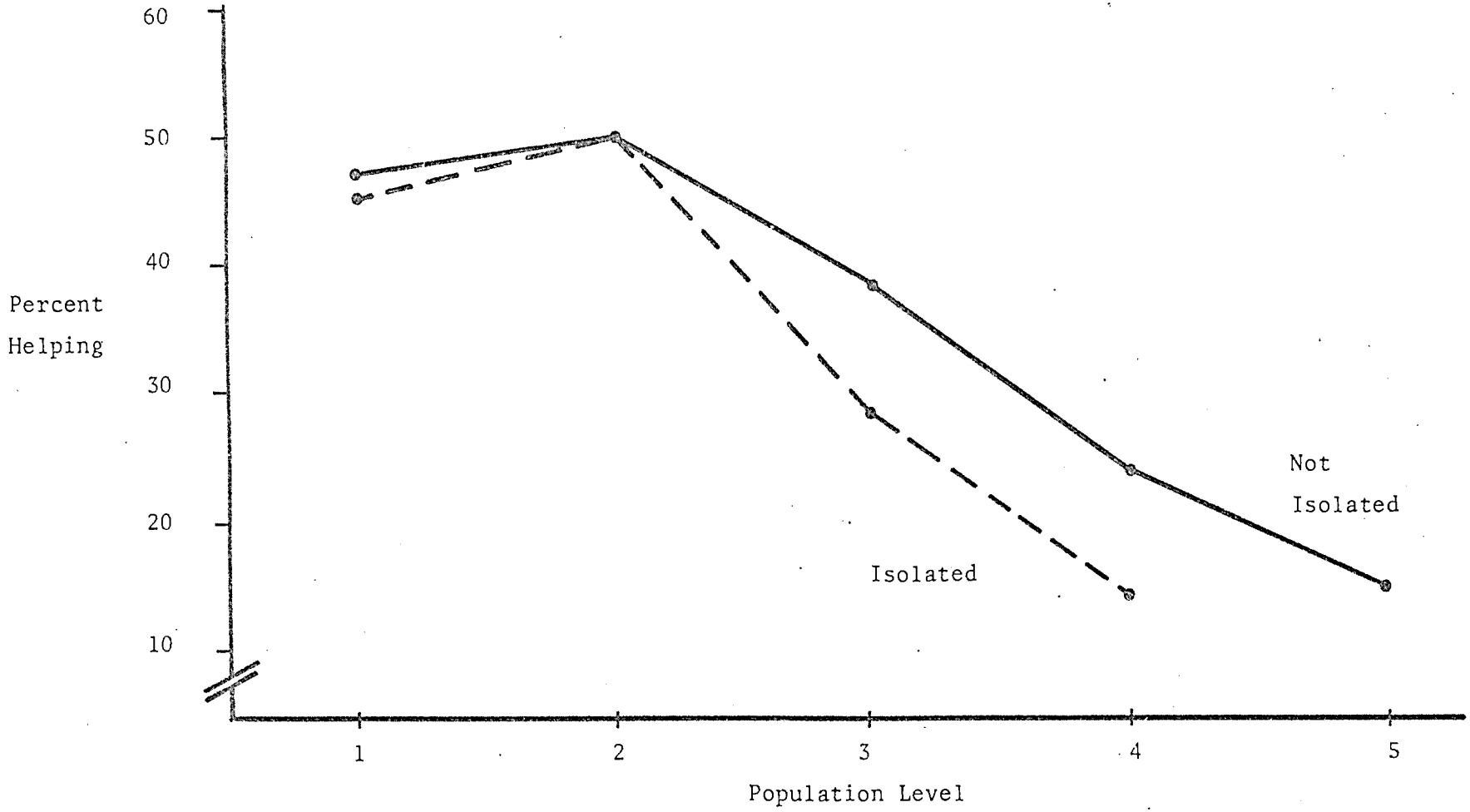

Figure 7.2 Percent of Subjects Offering Direct Assistance in the Hurt Leg Episode in Communities at Five Levels of Population Size and Two Levels of Isolation

rates of direct assistance being in the largest cities. This negative association between population size and helping was very similar for the isolated and nonisolation communities.. This is reflected in a Tau coefficient of -.27 ($p < .05$, two-tailed) between population size and helping for the isolated communities and a corresponding Tau coefficient of -.29 ($p < .001$, two-tailed) for the nonisolated communities.

A similar result was obtained when using the six point scale of prosocial responsiveness. The percent of subjects scoring at the six levels of the scale, in ascending order, were 7.1, 22.1, 29.6, 11.1, 23.9, and 7.2. While the resulting distribution was not substantially skewed (skewness = .154) it was nevertheless too flat in the centre to be considered normally distributed (kurtosis = -1.016). However, while this scale was inherently ordinal in level of measurement, it was decided to treat if as if it were an interval scale, thus allowing the use of more powerful parametric statistical techniques (for a justification, see Labovitz, 1970). As a check on this procedure, the dichotomous variable "offered direct assistance - did not offer direct assistance" was also analyzed along with the six point scale. In all cases, the results were substantially the same.

The mean scores on the prosocial responsiveness scale were then computed for subjects in communities at each level of population size and isolation, using the same cutting points described earlier. These results appear in Table 7.2 and Figure 7.3. These data reveal a pattern similar to the one found with the dichotomous helping data: subjects in larger communities exhibited lower levels of

prosocial responsiveness toward the investigator. This decline in prosocial responsiveness with city size occurred in both the isolated and the nonisolated communities in the sample.

To assess whether any interaction was present between population level and isolation level, these data were subjected to an a 4 x 2 factorial analysis of variance using population level and isolation level as factors. This analysis was done twice, once with the data from Brisbane and Sydney omitted and once with these data included in population level four. The results of the first analysis of variance revealed no significant main effects or interactions. The results of the second analysis with the data from Brisbane and Sydney included, revealed a significant main effect for population level ($F = 3.69$, $df = 3$, $p < .025$). Neither the main effect for isolation nor the interaction between population size and isolation were significant. This suggested that the inclusion of the data from the largest cities (which had the lowest mean scores) was necessary to produce a significant effect for the population size variable. This analysis was useful in demonstrating no significant interaction between the two urban-rural variables.

Because the effects of population size and distance from a capital city appeared to be linear (this was also borne out through inspection of scatterplots) and because no interaction between these two variables was present, it was decided to summarize these data through the use of multiple regression procedures. For this purpose, the scores on the prosocial responsiveness scale, and the dichotomous measure of direct assistance, were regressed on population (logarithmic version) and distance from a capital city

Table 7.2

Mean Prosocial Responsiveness Scores for Subjects in Communities at Five Levels of Population Size and Two Levels of Isolation in the Hurt Leg Episode

Population size		Isolation: 799 kilometers or less from a capital city	Isolation: 800 kilometers or more from a capital city
999 people or less	$\bar{X}$	2.73	2.90
	SD	1.71	1.25
	(N)	(15)	(20)
1,000 to 4,999 people	$\bar{X}$	2.67	3.07
	SD	1.50	1.21
	(N)	(18)	(14)
5,000 to 19,999 people	$\bar{X}$	2.59	2.57
	SD	1.58	1.34
	(N)	(34)	(14)
20,000 to 300,000 people	$\bar{X}$	2.44	1.93
	SD	1.33	1.14
	(N)	(25)	(14)
850,000 people or more	$\bar{X}$	1.99	-
	SD	1.29	
	(N)	(72)	

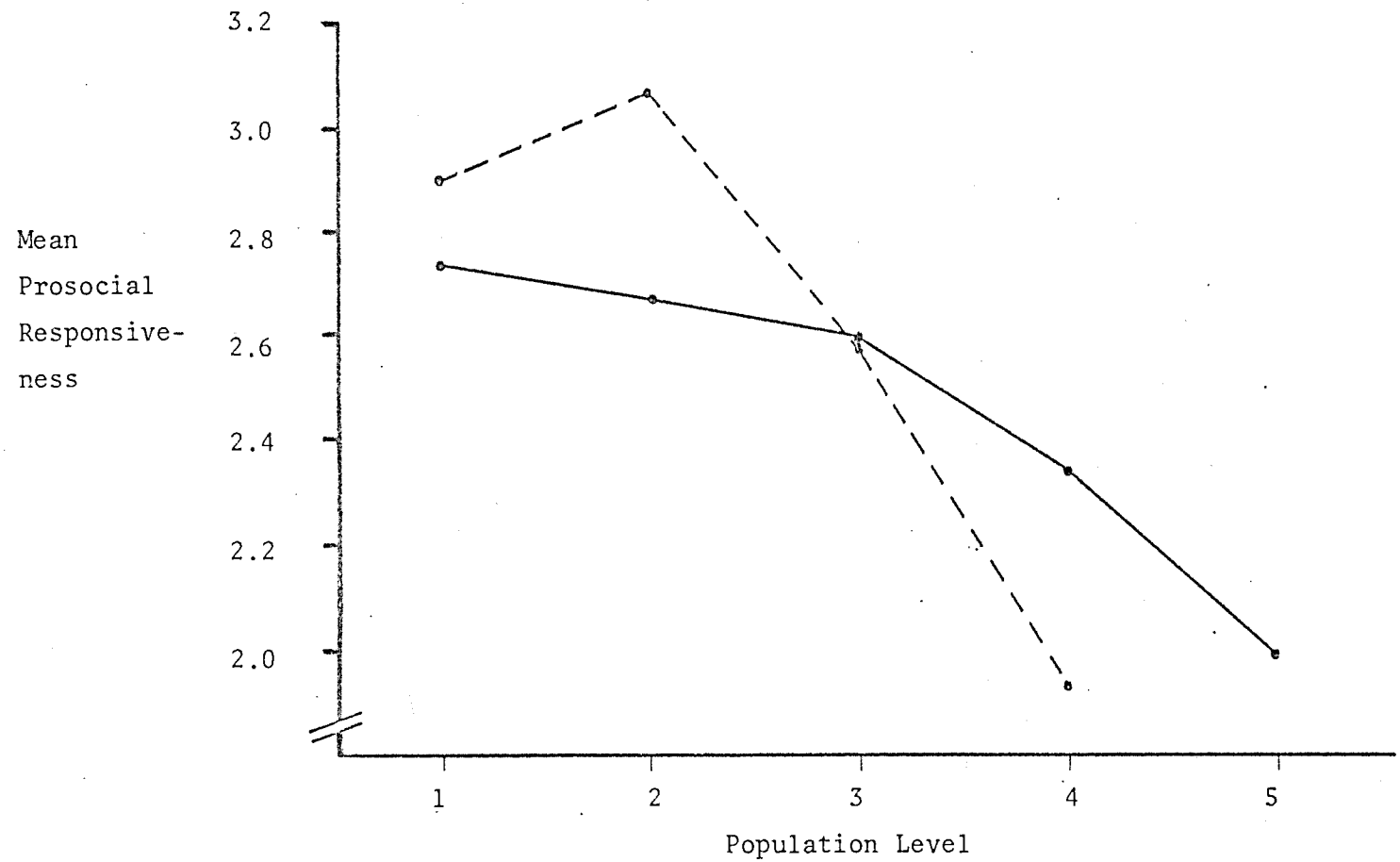

Figure 7.3 Mean Prosocial Responsiveness Scores for Subjects in Communities at Five Levels of Population Size and Two Levels of Isolation in the Hurt Leg Episode

(isolation). The results of this analysis appear in Table 7.3.

It can be seen in Table 7.3 that the two urban-rural variables accounted for 5.9 percent of the variance in the six point scale of prosocial responsiveness ($R = .24$, $p < .01$) and 8.3 percent of the variance in the dichotomous direct assistance measure ($R = .29$, $p < .001$). In both cases, population size accounted for nearly all of the explained variance. Its negative beta weights (-.20 and -.29, respectively) indicated that subjects in larger cities were less responsive to the plight of the hurt leg victim. Because the ages of subjects were found to be correlated with both the population size variable and with helpfulness, a second set of regressions were computed in which age was entered alone on the first step. After the age variable was allowed to account for all the variance in the dependent measure it could, population size was entered. While age accounted for 5.3 percent of the variance in the prosocial responsiveness scale ($p < .01$) population size still accounted for an additional 4.5 percent of the variance ($p < .05$). Similarly, while age accounted for 2.7 percent of the variance in the dichotomous measure ($p < .05$) population size accounted for a further 7.3 percent of the variance ($p < .01$). Therefore, the effect of population size on helping cannot be due to the confounding effect of the age variable.

A different way of looking at prosocial involvement with the victim was to consider the length of time pedestrians spent with the victim in the 10 meter zone described earlier. Two sets of scores were available for this purpose: the absolute number of seconds spent in the 10 meter zone with the victim, and the increase (or

Table 7.3

Multiple Regression Analysis of the Prosocial Responsiveness Scale and the Dichotomous Direct Assistance Measure with Population Size and Community Isolation in the Hurt Leg Episode

Independent Variable	Multiple R	R^2	R^2 change	Simpel r	Beta
Dependent Variable: Prosocial Responsiveness					
Population size (log)	.24	.06	.06	-.24	-.20*
Isolation	.24	.06	.00	.18	.07
Dependent Variable: Direct Assistance					
Population size (log)	.29	.08	.08	-.29	-.29**
Isolation	.29	.08	.00	.04	.00

* $p < .05$

** $p < .001$

decrease) in the amount of time it took the subject to traverse the second ten meters compared to the first 10 meters. For this second measure, a score was computed which was the number of seconds the subject spent in the second zone minus the number of seconds spent in the first zone. Thus, positive scores indicated that the subject slowed down (either to more closely monitor the situation or to offer assistance) while negative scores indicated the subject speeded up (most likely to avoid dealing with the investigator.)

The number of seconds spent with the investigator ranged from 7 seconds to 35 seconds, with a mean of 14.1 (SD = 4.93). The time difference scores ranged from -7 seconds to 20 seconds, with a mean of 2.0 seconds (SD = 4.17). Twenty one percent of the subjects increased their walking speed after the "accident", and a further 19 percent did not change their walking speed. Sixty percent of the subjects slowed down, to some degree, after their observation of the accident. The two measures turned out to be highly correlated (r = .75) and yielded highly similar results in subsequent analyses. Therefore only data on the time difference measure will be reported.

The distribution of time difference scores turned out to be substantially skewed (skewness = 2.00). The addition of a constant to the time difference scores followed by a logarithmic transformation resulted in a distribution which was still substantially skewed, although not as badly as the original distribution. However, subsequent analyses with both the original and logarithmic versions yielded virtually identical results. Therefore, analyses based upon the original scores will be presented, because of their greater interpretability.

Table 7.4

Mean Time Difference Scores for Subjects in Communities at Four Levels of Population Size and Two Levels of Isolation in the Hurt Leg Episode[1]

Population size		Isolation: 799 kilometers or less from a capital city	Isolation: 800 kilometers or more from a capital city
4,999 people or less	$\bar{X}$	4.25	3.92
	SD	4.40	3.43
	(N)	(8)	(13)
5,000 to 19,999 people	$\bar{X}$	2.52	2.86
	SD	4.45	3.34
	(N)	(29)	(7)
20,000 to 300,000 people	$\bar{X}$	1.40	1.75
	SD	4.11	2.38
	(N)	(20)	(12)
850,000 or more	$\bar{X}$	1.22	-
	SD	4.16	
	(N)	(60)	

[1] Individual scores range from -7 to 20; positive values indicate an increase in the amount of time (in seconds) spent with the "hurt leg victim"

The mean time difference scores for subjects in communities at various levels of population size and isolation were computed and appear in Table 7.4. Due to the small number of cases collected in the smallest towns, communities with 999 people or less or between 1,000 and 4,999 people were combined. These data revealed a trend which was very similar to the one reported earlier: subjects in larger cities spent less time with the victim than subjects in smaller communities. Furthermore, the decrease in time difference means is very similar in the nonisolated and isolated communities.

An 3 x 2 factorial analysis of variance was conducted upon these data to establish whether any interaction existed between the two factors of population size and isolation. For this purpose, the data from Brisbane and Sydney were omitted. This analysis revealed no significant main effects or interactions. Therefore, to summarize the data, the time difference scores were regressed upon population size (log version) and community isolation in a multiple regression procedure. Together, the two urban-rural variables accounted for a marginally significant four percent of the variance ($R = .20$, $p < .10$). The original Pearsonian correlation between population size and the time difference measure was significant ($r = .20$, $p < .025$); however, its beta-weight dropped to a nonsignificant level in the regression analysis ($-.17$, $p > .05$). Distance was unrelated to the time difference variable (beta = $-.04$). Adding the age variable into the regression equation did not appreciably alter these results (age was not associated with the time difference measure: $p > .10$)

The quality of help-giving

To assess urban-rural differences in the quality of help-giving, those cases in the data file were selected for which a direct helping response (a 5 or 6 on the scale of prosocial responsiveness) had been given. The number of words used by helpers in speaking to the investigator was then examined. The number of words used ranged from 1 to 30 with a mean of 6.4 (SD = 6.19). However, this distribution was seriously skewed (skewness = 2.64). A logarithmic transformation was used to partially alleviate the skewness problem (resulting skewness = .95). Analysis of these data indicated that the effects of both urban-rural variables on the number of words spoken were linear, and that no significant interaction existed between population size and community isolation. Therefore, the number of words variable (logarithmic version) was regressed upon population size (log) and distance from a capital city in a multiple regression analysis. The results of this analysis appear in Table 7.5.

It can be seen in Table 7.5 that the two independent variables accounted for 6.3 percent of the variance in the words spoken measure. Most of this variance was accounted for by the population size variable (beta = $-.28$, $p < .05$). The actual number of words used ranged from a mean of 9.0 per helper in the smallest nonisolated communities to 6.15 words per helper in cities larger than 20,000 people. The effect of distance from a capital city was negative, but nonsignificant.

Effects of community factors

Table 7.5

Multiple Regression Analysis of Words Used by Helpful Subjects (log version) with Population Size and Community Isolation in the Hurt Leg Episode

Variable	Multiple R	R^2	R^2 change	Simple r	Beta
Population size (log)	.21	.04	.04	-.21	-.28*
Isolation	.25	.06	.02	-.03	-.16

* $p < .05$

To assess the overall impact of the community information, and to establish those characteristics of communities associated with the exhibiting of prosocial responses, the six point prosocial responsiveness scale and the dichotomous direct assistance measure were regressed on the six community factors in a step-wise fashion. The six community factors accounted for a total of 8.4 percent of the variance in the prosocial responsiveness measure ($R = .29$, $P < .01$). However, nearly all of this variance (7%) was accounted for by the urbanism factor. The negative beta-weight for this factor ($-.30$, $p < .001$) indicated that subjects in the more developed urban areas were less responsive to the victim. No other factors were statistically significant or accounted for more than a trivial proportion of the variance.

A very similar result was obtained in relation to the dichotomous helping measure. The six communities accounted for a total of 11 percent of the variance ($R = .33$, $p < .01$) with the Urbanism factor accounting for the largest share (9.3%, beta = $-.33$, $p < .001$). No other factors were significant or accounted for more than a trivial proportion of the variance.

Discussion

Altogether, 30 percent of the subjects in this study offered some form of direct assistance to a person who fell over on the sidewalk with a heavily bandaged and bleeding leg. The low rate of helping may seem somewhat surprising in light of the rather serious predicament of the victim. This rate of helping is, in fact, considerably lower than the rate for a number of other studies

reported in this volume. For example, the rate of helping in the colour request study - a situation in which failing to give assistance would have minimal consequences for the recipient - was 74 percent.

This low rate of helping, however, is consistent with a number of observations which have been made in the helping literature. Staub (1978: 111) has argued that in many studies, helping situations of some seriousness are generally situations in which helping is potentially very costly for the intervenor. It is likely in the present study that pedestrians perceived involvement with the bleeding victim as being very costly. If the victim had turned out to be very ill, the intervenor might have become obligated to drive the person to a hospital, or even to administer first aid himself. Also, the sight of blood is very unpleasant for many people, and dealing with a bleeding victim could mean that the intervenor would have to fight back feelings of disgust or revulsion. Research conducted by Piliavin and Piliavin (1972) found that a bloodied victim was less likely to receive direct assistance than a "clean" victim and they attributed this finding to the substantially greater costs involved in assisting a bleeding victim (high arousal, disgust, etc.). Furthermore, it is always possible in a situation such as this that the "Good Samaritan" might actually wind up doing more harm than good. The intervenor could even be subjected to a law suit if things went badly while he or she was in attendance (Kaplan, 1978). It is likely that in larger cities, where there is much greater role segmentation, pedestrians might have assumed that a potential emergency such as this would best be dealt with by the police or by some other professional agency. Finally, the

investigator did not actually ask for help in this study, leaving the situation somewhat ambiguous. If help had been requested by the victim, it is likely that a much higher proportion of subjects would have given some form of assistance.

However, in spite of all the costs associated with helping, the percent of subjects intervening was as high as 50 percent in some areas. Data analysis revealed that pedestrians in small towns, both isolated and nonisolated, helped the hurt leg victim at significantly higher levels than did pedestrians in the larger cities. The percent of pedestrians offering direct assistance in Brisbane and Sydney (the two largest cities in the sample) was quite low: 15 percent. A very similar result was obtained when different measures of prosocial behaviour were used. A six point scale of prosocial responsivenss and a measure based upon the amount of time the subject spent with the victim (in relation to the amount of time spent traversing a similar distance before the "accident") revealed identical results. With both of these measures, people in small towns were the most responsive while people in the largest cities were the least responsive. Furthermore a similar trend was revealed when the quality of help-giving was considered. Helpers in smaller towns spoke a greater number of words when offering assistance when compared with helpers in the larger cities.

The consistency of these findings lends strong support to the notion that urbanites are less likely to offer assistance to strangers in distress (Korte, 1978, 1980). The beta-weights from the various multiple regression analyses indicated that population size had a negative (but weak) relationship with helping. However,

while the beta-weights were all rather low, and the proportion of variance accounted for was small (ranging 4% to 8.3%) the percentage figures from Figure 7.1 tell a somewhat different story. Even fairly large percentage differences from crosstabulated tables tend to translate into low correlation coefficients. However, in substantive terms, the difference between having a 45 to 50 percent chance of receiving assistance in a small town and having a 15 percent chance of receiving assistance in a large city is very great indeed. Of course, in a large city there are likely to be more people present at the scene of an accident, suggesting that while a victim's chances of receiving help from a particular person might be quite low, his chances of receiving help from anyone might actually be reasonably high. This is consistent with field data reported by Piliavin, Piliavin and Rodin (1969) and Piliavin and Piliavin (1972).

Finally, none of the community factors were associated with helping except for the Urbanism factor. The significant association with this factor is consistent with the earlier results regarding the population size variable, that is, pedestrians in areas of greater urban development responded in a less prosocial fashion than did pedestrians in areas of little urban development.

Chapter Eight: Donating to the Multiple Sclerosis Society

In this study, three investigators became official workers for the Multiple Sclerosis Society and sold one dollar packets of greeting cards to pedestrians. This situation was similar to one used by Kraut (1973) to study the effect of social labeling (being generous versus being ungenerous) on donating to a charity. However, while the Kraut study involved collectors going from door to door in a residential area, investigators in the present study solicited donations from pedestrians in the commercial districts of a number of communities. The episode which this study was based upon was located at the "giving" pole of dimension three in the helping taxonomy developed in Chapter Three of this volume (see Figure 4.1). Its defining characteristics were that it was perceived as being a passive, indirect form of assistance involving "giving" rather than "doing".

Method

In this study, investigators attempted to sell packets of greeting cards for the Multiple Sclerosis Society. These packets contained six cards and envelopes, and were sealed with official labels bearing the title: "Thank you for your donation. $1. MULTIPLE SCLEROSIS SOCIETY." Purchases were accompanied by receipts printed by the Multiple Sclerosis Society. During the data-collection periods, the investigators wore the usual badges used by society workers when soliciting contributions. These badges contained the name MULTIPLE SCLEROSIS SOCIETY, the official seal of the organisation, and the year for which the badges were valid. The

name of the investigator (worker) was printed below this. At the bottom of the badge was the signiture of the North Queensland Director of the Multiple Sclerosis Society.

The investigator stood on the sidewalk in the downtown area and approached every suitable third pedestrian (in the smallest towns, every suitable pedestrian was selected.) Pedestrians were deemed suitable if they were at least 16 years of age, were walking alone, and were not carrying a large number of packages. When the pedestrian was approximately 8 feet away, the investigator would initiate eye contact, smile, and say "Excuse me. I"m selling greeting cards for the Multiple Sclerosis Society. Would you like to buy a packet? They only cost one dollar." If the subject stopped and purchased a set of cards, he or she was thanked and given a receit. All money collected was given to the north Queensland branch of the Multiple Sclerosis Society (see Figure 8.1).

After the termination of the episode, the investigator recorded the details of the subject's behaviour in a small notebook . The following data were recorded: the subject's sex, the subject's estimated age, whether the subject stopped walking or not, whether a packet of cards was purchased or not, whether the subject spoke to the investigator (and if so, an estimation of the number of words used) and whether or not the subject smiled.

Data on the subject's walking speed was also recorded. Following a procedure described in previous chapters, a ten meter zone was marked off on the sidewalk prior to the initiation of data-collection procedures. Natural boundaries such as benches and street signs were used to mark the endpoints of this zone. Before

Figure 8.1 The Multiple Sclerosis Donation Episode

the subject was approached with the request to make a purchase, the amount of time (in seconds) it took the subject to traverse this 10 meter distance was recorded by the investigator. This was done with a concealed stopwatch. Unfortunately, this procedure was difficult to implement in many of the smallest towns in the sample, due to the lack of a sidewalk of suitable length. Therefore, these data were not collected for many of the subjects from the smallest communities.

Three people served as investigators in this study, two male (aged 21 and 27) and one female (aged 19). During the data-collection periods all investigators dressed casually but neatly. Data analysis revealed that the female investigator was helped more often than the two male investigators. While the female investigator was helped 44.7 percent of the time, the rates for the two male investigators were 22.5 percent and 28.6 percent. Further analysis also revealed that the female investigator did not sample equal numbers of subjects from each level of population size. Therefore, an analysis of variance was carried out to see if there was an interaction between sex of investigator and population size in relation to helping behaviour. This analysis revealed a nonsignificant interaction ($p > .10$) between the two variables which accounted for less than one percent of the variance in the helping measure. As a final check, later analyses were carried out both with the entire data set and with the female investigator's data excluded. All significant effects were replicated. Therefore, the higher rate of compliance for the female investigator should not have affected later urban-rural comparisons.

Altogether, the procedure was carried out 303 times in 55 different cities and towns. Preliminary data analysis revealed that neither time of day nor day of the week were significantly related to helping (χ^2 =9.21, df = 9, p > .10 and χ^2 = 9.19, df = 6, p > .05, respectively).

Urban and rural sample characteristics

Overall, 61 percent of the pedestrians approached by the investigators were female and 39 percent were male. To see if the proportions of males and females were constant across the urban and rural settings, population size was divided into five levels: 999 people or less, 1,000 to 4,999 people, 5,000 to 19,999 people, 20,000 to 300,000 people, and 850,000 people or more. Community isolation was divided into two levels: 799 kilometers or less driving distance from a major capital city and 800 kilometers or more. Chi-square analysis revealed that the proportion of males and females did not vary significantly across the five levels of population size (χ^2 = 3.34, df = 4, p > .10). However, the proportion of female pedestrians sampled was marginally higher in the more remote areas (57.3% versus 68.3%, χ^2 = 3.01, df = 1, p > .05). Nevertheless, males and females complied with the request and purchased greeting cards at similar levels (males = 25.4%, females = 33.0%, χ^2 = 1.61, df = 1, p > .10).

To compare the age distribution of subjects in the urban and rural settings, the ages of subjects were divided into five levels: 24 or less, 25 through 39, 40 through 59, and 60 or more. The percentages of subjects in these five age categories were,

respectively, 13.5, 21.1, 25.4, 18.7, and 21.1. Chi-square analysis revealed no significant association between age and either population size (χ^2 = 16.68, df = 12, p > .10) or isolation (χ^2 = 5.67, df = 3, p > .10). Furthermore, the estimated ages of subjects did not appear to be related to helping behaviour. The Pearsonian correlation between estimated age and helping (coded 0 = did not help, 1 = did help) was .08 (p > .10).

Overall, the walking speed of subjects was somewhat slower in the larger cities. The Pearsonian correlation between city size and walking speed was −.18 (n = 178, p < .025). Walking speed was also slightly related to distance from a capital city (r = −.11, n = 178, p < .10). However, walking speed was unrelated to whether subjects helped the investigator by purchasing greeting cards (r = −.01, n = 178, p > .10).

Results

Overall, 30 percent of subjects approached in this study purchased greeting cards for the Multiple Sclerosis Society from the investigator. To make comparisons between helping rates in urban and rural areas, the 55 cities and towns in the sample were divided into five levels of population size and two levels of isolation. The same cutting points described earlier were used. The percent of subjects purchasing greeting cards at these various levels is displayed in Table 8.1 and Figure 8.2.

It can be seen in Table 8.1 and Figure 8.2 that population size was negatively related to purchasing the greeting cards, both in the nonisolated and isolated areas. In the nonisolated cities and

Table 8.1

Percent of Subjects Purchasing Greeting Cards for the Multiple Sclerosis Society in Communities at Five Levels of Population Size and Two Levels of Isolation

	Isolation	
Population Size	799 kilometers or less from a capital city[1]	800 kilometers or more from a capital city[2]
999 people or less	33.3 (n = 18)	52.2 (n = 23)
1,000 to 4,999 people	35.1 (n = 37)	44.4 (n = 27)
5,000 to 19,999 people	28.9 (n = 45)	50.0 (n = 32)
20,000 to 300,000 people	22.9 (n = 35)	22.7 (n = 22)
850,000 people or more	9.4 (n = 64)	- -

[1] Kendall's Tau = -.22, p = .001 (two-tailed)

[2] Kendall's Tau = -.18, p < .10 (two-tailed)

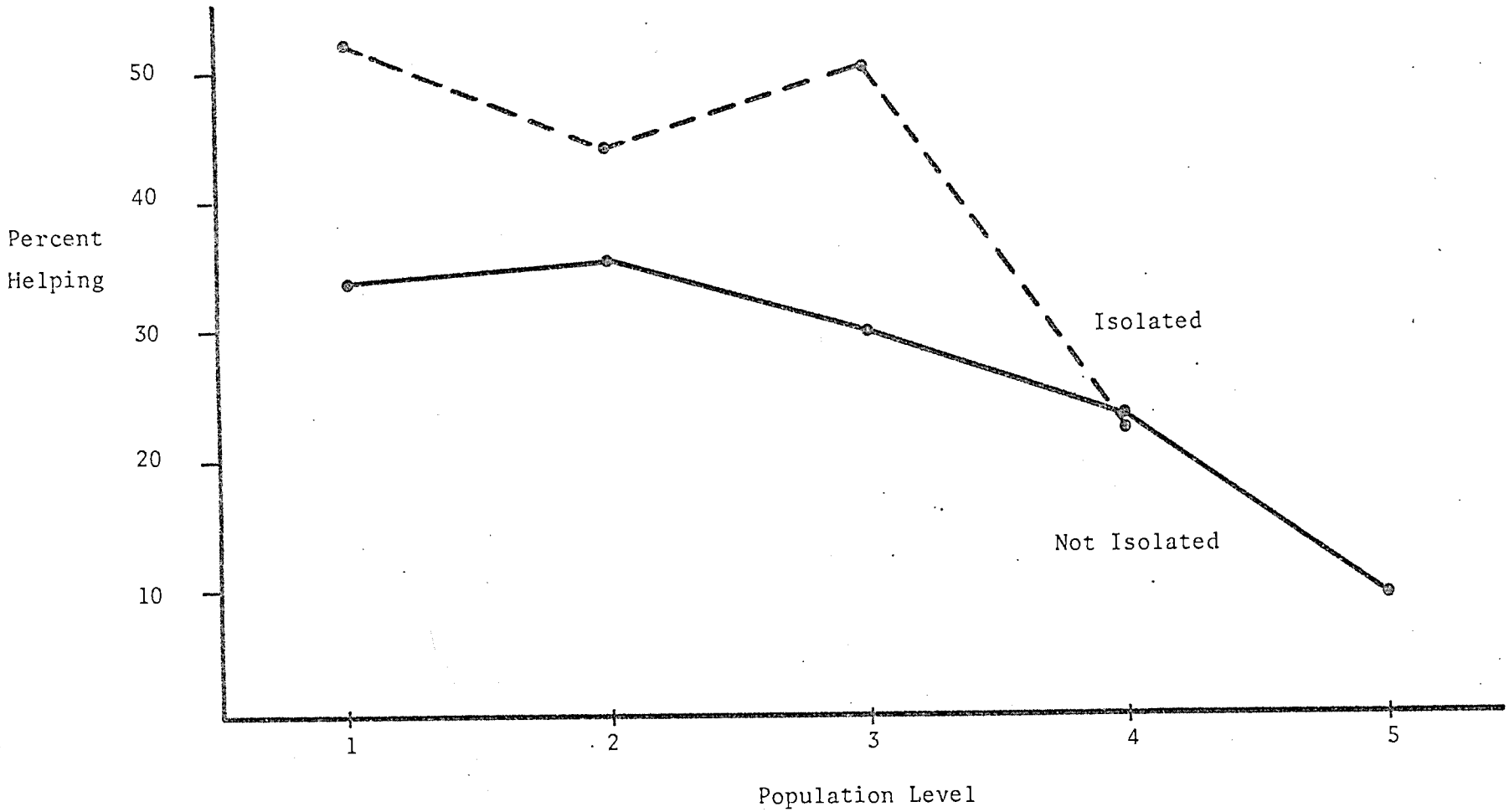

Figure 8.2 Percent of Subjects Purchasing Greeting Cards for the Multiple Sclerosis Society in Communities at Five Levels of Population Size and Two Levels of Isolation

towns, the percent of subjects helping dropped from 33.3 percent and 35.1 percent in the smaller communities to only 9.4 percent in the largest cities (kendall's Tau = −.22, $p < .001$, two-tailed). In the more isolated areas the percent of subjects purchasing greeting cards dropped from 52.2 percent in the smallest towns of less than 1,000 people to 22.7 percent in the larger cities (Kendall's Tau = −.18, $p < .10$, two-tailed). The fact that the second coefficient is somewhat lower and only marginally significant is most likely a reflection of the smaller number of cases and the absence of a fifth category for the population size variable.

Overall, the helping rate was higher in the more isolated areas. With the cases from Sydney and Brisbane excluded, the helping rate in the isolated communities was 43.3 percent while the helping rate in the less isolated communities was 29.6 percent.

Because the female investigator sampled a greater proportion of cases from the isolated areas, and because the rate of helping for the female investigator was somewhat higher, the cases for the female investigator were dropped from the analysis and the differences between helping rates in isolated and nonisolated areas was recomputed. Isolated areas still displayed a higher helping rate, although the difference was somewhat less than before (39% versus 29%).

While the purchase of a set of greeting cards was used as the major dependent variable, a number of other measures were also recorded, including whether the subject stopped walking or not, whether the subject spoke or not (and if so, the number of words used), and whether the subject smiled or not. Inspection of these

data suggested that it might be useful to combine the various measures into a single scale of prosocial involvement. In fact, all of the measures (buying, stopping, smiling, and speaking) were positively and significantly intercorrelated. Therefore, these dependent measures were combined into the following six point scale of increasing prosocial involvement:

1. The subject did not stop walking and did not speak to the investigator.

2. The subject did not stop walking but spoke briefly to the investigator. Typical comments included, "Sorry, I'm busy now" and "I'm not interested."

3. The subject stopped and spoke to the investigator but did not buy any greeting cards. Typical comments included, "I don't see any here that I really like. Thank's anyway," and "I know its for a good cause but I'm a little short of money today."

4. The subject purchased a set of greeting cards but spoke 10 or fewer words to the investigator. Typical comments included, "I'll take this one" or simply "Thanks".

5. The subject purchased a set of greeting cards and spoke between 11 and 30 words. This step in the scale represented a somewhat more extended interaction with the investigator, usually involving the exchange of a number of separate sentences. Typical comments included, "Sure, let me have a look at what you have. I think I'll take one of these sets with the flowers on them. Thanks a lot."

6. The subject purchased a set of greeting cards and spoke more than 30 words to the investigator and also smiled. This step in the scale indicated the existence of a prolonged, positive interaction between the subject and the investigator. Typical subjects in this group wanted to know whether the investigator had been selling many cards that day or where the investigator was from. Others initiated conversations about unrelated topics, such as the weather. No subjects made comments to the investigator which were negative or suggested any suspicion on the part of the subject about what the investigator was doing. Longer conversations, therefore, generally were perceived by investigators as being highly positive in content and tone.

The distribution of subjects across the six levels resulted in an approximately "bell shaped" distribution. The percent of people at each of the six steps was 9.9, 18.2, 41.7, 14.2, 12.6, and 3.3 (skewness = .30, kurtosis = −.25). The overall mean of the scale was 3.11 with a standard deviation of 1.23. Although this scale only formed an ordinal measure of involvement with the investigator, it was used in subsequent analyses as if it were an interval level scale. This was done to allow the use of more powerful parametric statistical techniques (cf., Darley & Batson, 1973; Weiner, 1976). However, as a check on this procedure, the dichotomous variable "purchased versus did not purchase cards", was also analyzed along with the six point scale. Results for all analyses were similar for both the six point and the dichotomous dependent variables.

Therefore, only the analyses based upon the six point measure will be reported.

The mean for the six-point prosocial involvement scale was computed for subjects at each level of population size and isolation. These means revealed a pattern which was similar to the one reported earlier. These means can be found in Table 8.2 and Figure 8.3. In the nonisolated areas, the means dropped from a high of 3.82 in the smallest communities to a low of 2.31 in Sydney and Brisbane. Likewise, for the isolated areas, the means dropped from a high of 4.0 to a low of 3.14 in the larger cities. Further, at every level of population size, the mean score for isolated areas was higher than that of the nonisolated areas.

These data were subjected to a 4 X 2 factorial analysis of variance with population level forming the first factor and isolation level forming the second factor. The analysis was conducted twice, once with the data from population level five (Sydney and Brisbane) omitted from the analysis and once with these data included in population level four. The first analysis revealed a significant main effect for both population level ($F = 6.31$, $df = 3/230$, $p < .001$) and isolation level ($F = 6.06$, $df = 1/230$, $p < .025$). The interaction term was not significant ($F = .17$, $df = 3/230$, $p > .10$). The second analysis, with the data from Brisbane and Sydney included, also yielded significant main effects for both population level ($F = 13.12$, $df = 3/294$, $p < .001$) and isolation level ($F = 9.62$, $df = 1/294$, $p < .025$). Again, the interaction term was not significant ($F = .58$, $df = 3/294$, $p > .10$).

Table 8.2

Mean Prosocial Involvement Scores for Subjects in Communities at Five Levels of Population Size and Two Levels of Isolation in the Multiple Sclerosis Donation Episode

Population Size		Isolation: 799 kilometers or less from a capital city	Isolation: 800 kilometers or more from a capital city
999 people or less	X	3.82	4.00
	SD	1.38	1.21
	(N)	(17)	(23)
1,000 to 4,999 people	X	3.22	3.67
	SD	1.16	1.04
	(N)	(37)	(27)
5,000 to 19,999 people	X	3.28	3.50
	SD	.72	1.08
	(N)	(45)	(32)
20,000 to 300,000 people	X	2.66	3.14
	SD	1.43	1.21
	(N)	(35)	(22)
850,000 people or more	X	2.31	-
	SD	1.05	-
	(N)	(64)	-

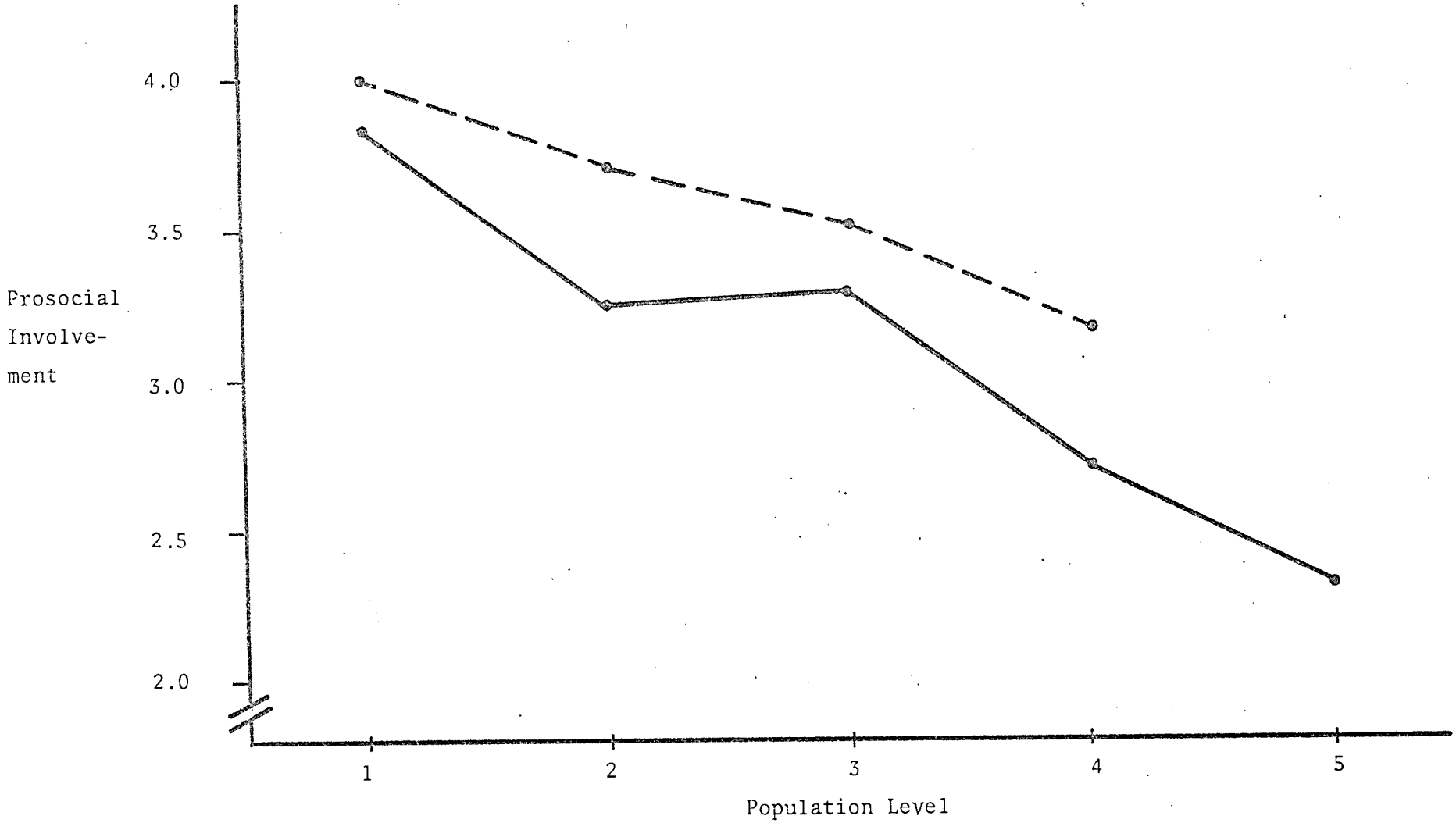

Figure 8.3 Mean Prosocial Involvement Scores of Subjects in Communities at Five Levels of Population Size and Two Levels of Isolation in the Multiple Sclerosis Donation Episode

Because the effects of population size and isolation appeared to be linear (this was also borne out by inspection of scatterplots for the isolation variable), and because no interactions were present between the two, it was decided to summarize these data through multiple regression procedures. In this analysis the prosocial involvement scores were regressed upon the population size and distance from a capital city variables. For this purpose, the logarithmic version of the population size variable was used. The results of this multiple regression procedure appear in Table 8.3.

Together, population size and distance from a capital city (isolation) accounted for 19 percent of the variance in the prosocial involvement scale ($R = .43$, $p < .001$). However, 18 percent of the variance was accounted for by the poulation size variable alone (beta weight = $-.42$, $p < .001$). The isolation variable only accounted for a further .6 percent of the variance (beta weight = .09, $p > .10$).

The quality of help-giving

To assess the quality of help-giving in urban and rural areas, only the 91 subjects who complied with the request to purchase greeting cards were selected for further analysis. For this purpose, the percent of helpers s miling at the investigator and the number of words spoken by subjects were analyzed. Because these data were also included in the prosocial involvement scale analyzed above, this material overlaps somewhat with the material just presented. Therefore, only a brief description of these results will be given.

Table 8,3

Multiple Regression Analysis of Prosocial Involvement Scores with Population Size (log) and Community Isolation in the Multiple Sclerosis Donation Episode

Variable	Multiple R	R^2	R^2 Change	Simple r	Beta
Population Size (log)	.42	.18	.18	-.42	-.38*,
Isolation	.43	.19	.01	.27	.09

*p < .001

Table 8.4

Mean Number of Words (log version) Spoken by Helpful Subjects in Communities at Three Levels of Population Size and Two Levels of Isolation in the Multiple Sclerosis Donation Study

		Isolation	
Population Size		799 kilometers or less from a capital city	800 kilometers or more from a capital city
4,999 people or less	X	1.29	1.25
	SD	.37	.38
	(N)	(19)	(24)
5,000 to 300,000 people	X	1.00	1.12
	SD	.19	.29
	(N)	(21)	(21)
850,000 people or more	X	1.04	-
	SD	.24	-
	(N)	(6)	-

The mean number of words spoken by helpers was 19.4 (SD = 21.35). However, the number of words spoken variable turned out to be substantially skewed (skewness = 3.67). A logarithmic transformation of these data corrected the skewness problem (resulting skewness = .04). Preliminary graphic analysis of these data indicated a negative, linear relationship between the population size variable and the number of words (log version) spoken by helping subjects. Table 8.4 contains a breakdown of the mean number of words used (log version) by helpers in communities at three levels of population size and two levels of isolation (population size was collapsed into three levels due to the small number of cases). Further analysis revealed no linear effect due to community isolation and no interaction between isolation and population size. The number of words spoken by helping subjects (log version) was then regressed upon population size (log version) and distance from a capital city (isolation). Together, the two urban-rural variables accounted for 9.8 percent of the variance in the number of words used variable ($R = .314$, $p < .01$). However, virtually all of this variance was accounted for by the population size variable alone (beta weight = $-.313$, $p < .01$).

The dichotomous smiling variable was also regressed upon the two urban-rural variables, since preliminary analysis indicated no nonlinear effects of either variable, nor any interaction between the two. Together, the two urban-rural variables accounted for five percent of the variance in the smiling measure ($R = .225$, $p < .05$). Most of the variance was accounted for by the isolation variable (4.5%). Its positive beta weight (.24, $p < .05$) indicated that helpful subjects in more remote areas were more likely to smile at

the investigator than were subjects in less remote areas.

Analysis of the six community factors

The final step in the analysis of these data involved an assessment of the overall impact of the six community factors on prosocial behaviour. For this purpose, the scores on the prosocial involvement scale described earlier in this chapter were regressed upon the Urbanism, Tourism, Foreign-born heterogeneity, Social class, Transient Black population, and Community instability factors. Step-wise procedures were used to assess the independent effect of each community factor. These results appear in Table 8.5.

Altogether, the six community factors accounted for 20.2 percent of the variance in the prosocial involvement scale ($R = .449$, $p < .001$). The majority of this explained variance, however, was due to the effect of the Urbanism factor, the first variable entered into the regression equation. It accounted for 19.2 percent of the variance, and its negative beta-weight ($-.414$, $p < .001$) indicated that subjects in areas of lower urban development were more positive in their behaviour. No other beta-weights in the equation were significant or accounted for more than a trivial amount of the variance. Although the simple correlations between two other factors, Transient Black population and Foreign-born heterogeneity, and the helping measure were statistically significant at the .05 level, neither factor emerged as a significant predictor once the effect of Urbanism was removed from the data.

Table 8.5

Multiple Regression Analysis of Prosocial Involvement Scores with Six Community Factors in the Multiple Sclerosis Donation Episode

Variable	Multiple R	R^2	R^2 Change	Simple r	Beta
Urbanism	.44	.19	.19	-.44	-.41*
Transient Black Population	.45	.20	.01	.20	.08
Social Class	.45	.20	.00	.09	.04
Tourism	.45	.20	.00	.10	-.03
Foreign-born Heterogeneity	.45	.20	.00	-.21	-.02
Community Instability	.45	.20	.00	.03	.01

* $p < .001$

Discussion

Overall, 30 percent of the pedestrians approached with a request to purchase greeting cards for the Multiple Sclerosis Society complied with the request. This overall rate is somewhat low compared to the percent of people who helped in the colour request study (74%) and the correcting inaccurate directions study (59%). This is probably due to the fact that purchasing a set of greeting cards is a more costly form of involvement than simply providing information (such as a colour name or directions to a nearby location) to a person in need.

However, the rate of helping varied substantially with the size of the city pedestrians were in. In the towns of less than 1,000 people, the rate of helping was as high as 44 percent. In the two largest cities in the sample, Sydney and Brisbane, the rate was only 9.4 percent. Combining a number of measures into a summary index of prosocial involvement (which included stopping, buying, speaking and smiling) yielded a similar result: the larger the city, the less positive was the behaviour of pedestrians. A similar result was obtained when the quality of helping was examined. Subjects who helped in the larger cities by purchasing a set of greeting cards spoke a smaller number of words to the investigator than did subjects purchasing cards in the smaller towns.

This result is generally consistent with the notion that residents of large cities are less helpful and friendly than residents of smaller country towns (Korte, 1978, 1980). However, it is also possible that these results might be due to a particular characteristic of the helping method used. First, charitable

organisations, such as the Multiple Sclerosis Society, generally have their regional headquarters in larger cities. Secondly, it is easier to recruit volunteers for collection work in larger cities. Because it is easier to recruit volunteers and contact large numbers of people in urban areas, charitable organisations tend to concentrate their fund-raising activities on the populations of larger cities. Thus, people living in smaller or more remote communities are faced less often with direct request for donations to charitable organisations. Since large city inhabitants are more likely to encounter greater numbers of such requests, they might feel less obligated to comply with any specific request. Many would understandably feel that complying with all of the large number of requests for donations that occur every year is simply impractical or even financially impossible. Furthermore, the large number of such requests may generate feelings of annoyance, or even reactance (Brehm, 1966) in many urbanites. The ruralite, on the other hand, with fewer direct requests to contend with may feel a greater obligation or desire to give to a specific charitable cause when the situation arises.

However, it is unlikely that this idiosyncratic characteristic of the present helping method is the sole explanation for the lower rates of helping among the urbanites in this study, given the similarity of these results to the results reported in Chapters 5, 6, and 7. However, this explanation may account for the finding that purchasing rates in isolated areas were somewhat higher than in nonisolated areas. Furthermore, helpers in remote areas were found to be more likely to smile at the investigator. These findings are somewhat inconsistent with the findings of the colour request study

and the inaccurate directions study, in which subjects from more isolated areas were less positive in their behaviour. Thus, the lack of exposure of inhabitants of remote communities to a charitable request may have increased their helping rate in relation to previous studies. This point, however, will not be discussed further since the actual difference in purchasing rates between isolated and nonisolated communities was not large (approximately 10 percent). Furthermore, this effect was not replicated in the multiple regression analysis using the six point prosocial involvement scale. In this analysis, the effect of community isolation dropped to a low and nonsignificant level once population size was entered into the regression equation.

In relation to the community factors, the stepwise multiple regression analysis revealed that the Urbanism factor was the only one to emerge as a significant predictor of prosocial involvement. While only the results based upon the six point prosocial involvement scale were reported in the results section of this chapter, a very similar result was obtained when the dichotomous helping measure was used. The results of this analysis using the factor scores are therefore consistent with the earlier analyses based upon the population size variable: pedestrians in areas of greater urban development and complexity were less helpful and positive in their behaviour toward a worker from the Multiple Sclerosis Society than were pedestrians in areas of less urban development and complexity. Unlike some other helping measures reported earlier in this volume, none of the other community factors in the study were related to prosocial behaviour. These findings will be discussed further in Chapter Elever..

Chapter Nine: A Dropped Envelopes Episode

In this study, the investigator dropped a handful of envelopes on the sidewalk in front of pedestrians chosen to be subjects. The response of the pedestrians, including whether they stopped to help the investigator pick up the envelopes, was recorded. This situation represented a form of helping which was especially high on dimension three of the helping taxonomy, that is, it was a form of helping which was seen by subjects as being active, direct,and involving doing rather than giving (see Figure 4.1). This measure was originally used in a study by Konecni (1972). However, it has been modified slightly for the present purpose: while Konecni used dropped computer cards, the present study used dropped envelopes. It was felt that computer cards might be less familiar to rural subjects, and hence, might inhibit them somewhat from helping. Furthermore, dropping computer cards in small, isolated rural towns seemed unrealistic.

Method

The episode began with the investigator walking along the sidewalk in a natural manner, carrying a handful of 20 envelopes. A pedestrian approaching from the opposite direction was selected to be the subject. In the larger cities, every third pedestrian was selected. In the smaller towns, especially those under 1,000 people, every suitable pedestrian was selected. Pedestrians were deemed suitable if they were walking alone, appeared to be at least 16 years of age, and were not in any way incapable of lending this type of assistance. Therefore, pedestrians carrying large parcels

were excluded, as were pedestrians with any form of handicap such as being on crutches, carrying a cane, or having an arm in a sling.

Before collecting any data, a 10 meter zone was marked off on the sidewalk near the area where testing was to take place. Natural landmarks such as telephone poles, street signs, or benches were used to mark the endpoints of this zone. Once a pedestrian was selected to serve as a subject, the amount of time it took him or her to walk through this 10 meter zone was recorded. The investigator did this with a concealed stopwatch.

When the subject was approximately 10 feet away, the investigator would "accidentally" spill the envelopes onto the sidewalk, bend down, and begin picking them up one at a time. The accident was staged so that the subject would have to pass very close to where the envelopes were spilled, often having to step over the envelopes in order to continue. The investigator did not speak or establish eye contact with the subject unless the subject spoke first or offered assistance. If the subject stopped to help pick up the envelopes, he or she was thanked by the investigator. Once all the envelopes had been collected the investigator continued walking (see Figure 9.1).

After walking a short distance the investigator would stop at a convenient spot (often on a bench or in a doorway) and record the details of the episode. The following data were recorded: the sex and estimated age of the subject, the number of seconds it took the subject to walk the 10 meters, whether the subject stopped to pick up any envelopes, the number of envelopes picked up, whether the subject spoke to the investigator, and if so, the number of words

Figure 9.1 The Dropped Envelopes Episode

spoken, and whether the subject smiled at the investigator.

While it was generally possible to gather the walking speed data in the larger cities and towns, a problem was often encountered in the smaller communities. Many of the smallest towns did not have sidewalks or walking paths of sufficient length to make this procedure possible. A more usual pattern in these areas was for people to emerge from automobiles and walk much shorter distances to enter shops. Therefore, this data was not obtainable for a number of subjects in many of the smaller towns.

Only data on the behaviour of the pedestrian chosen to be the subject was recorded. If other pedestrians stopped to help, whether the subject stopped to help or not, their behaviour was not recorded. It was often the case, especially in the larger cities in the sample, that the subject would not stop to offer assistance, but some other person would come up to help pick up the envelopes. To have counted these as instances of helping would have overestimated the helpfulness of urbanites, for larger cities generally had more crowded sidewalks, and hence, more potential helpers, than did the smaller towns.

After recording the data, the investigator moved into position again on the sidewalk to select the next subject. In the smaller towns, it was necessary to wait a sufficient amount of time between trials to avoid the problem of conspicuousness. The accidents were usually staged near a post office to make the situation appear more authentic.

Two people served as investigators. Both investigators were male, aged 21 and 27. During the data-collection periods both investigators dressed neatly but casually. Data-analysis revealed a difference in the rate with which the two investigators were helped (16% versus 2.5%, $\chi^2 = 8.93$, df = 1, $p < .01$), although there was no difference between investigators in the percentage of subjects who spoke to them ($\chi^2 = .26$, df = 1, $p > .10$). Analysis also revealed that the two investigators did not sample equal proportions of subjects from each level of population and isolation. Later analyses, therefore, were conducted separately for each investigator. No overall differences in the pattern of results emerged between investigators, so the combined data from both were analyzed as a whole.

Altogether, the "accidents" were staged a total of 271 times in 55 different locations. Chi-square analysis revealed that the time of the day and day of the week were unrelated to whether help was given ($\chi^2 = 5.43$, df = 6, $p > .10$, and $\chi^2 = 6.90$, df = 8, $p > .10$, respectively) and with whether the subject spoke to the investigator ($\chi^2 = 10.96$, df = 6, $p > .05$, and $\chi^2 = 3.02$, df = 8, $p > .10$, respectively).

Urban and rural sample characteristics

Before directly examining rates of prosocial responses in urban and rural areas, a check was made on the "comparability" of the urban and rural samples. For this purpose, the urban and rural samples were compared on the basis of their age and sex distributions.

Males, overall, were somewhat overrepresented in the total sample at 58.5 percent versus 41.5 percent female. The degree of overrepresentation, however, did not vary with size of city. With population size divided into five levels (less than 1,000 people, 1,000 to 4,999 people, 5,000 to 19,999 people, 20,000 to 300,000 people and 850,000 people or more) the proportions of males and females did not vary significantly across the five levels (χ^2 = 3.09, df = 4, p> .10). However, the proportion of males was significantly higher in the more isolated areas greater then 800 kilometers from a capital city (69.6 % vs. 53.9%; χ^2 = 5.04, df = 1, p < .025). Therefore, a check was make to see if males and females differed in the rates with which they helped the investigator. Comparison of percentages and chi-square analysis revealed that males and females did not differ in the extent to which they offered help (12.0 % vs. 12.5 %) or spoke (27.6 % vs. 25.9 %, respectively) to the investigator. Thus, the higher frequencies of males encountered in more isolated areas should not affect the later comparisons of rates of prosocial behaviour in urban and rural areas.

The estimated ages of subjects ranged from 16 to 75 with a median age of 35. The estimated ages were broken down into four broad categories: 16 to 24, 25 to 39, 40 to 59 and 60 or more. The percent of subjects within each of the four categories was 12.5, 37.3, 37.3, and 12.9. This distribution did not vary significantly across either the five levels of population size (χ^2 = 11.45, df = 12, p > .10) or the two levels of isolation (χ^2 = 3.68, df = 3, p > .10). Estimated age did not appear to be related to whether help was given or not (r = -.05, n = 270, p> .10), although estimated age

was weakly correlated with whether the subject spoke to the investigator ($r = 21$, $n = 270$, $p < .01$).

The walking speed variable was not associated with either the size of communities or their degree of isolation. The Pearsonian correlation between walking speed and city size was $-.08$ ($p > .10$) while the correlation between walking speed and distance from a capital city was .09 ($p > .10$). Furthermore, walking speed was unrelated to whether the subject stopped to help the investigator ($r = .05$, $p > .10$).

Results

Subjects stopped to help pick up envelopes 12.2 percent of the time. The mean number of envelopes picked up by helpful subjects was 7.3. A more common reaction, however, was for subjects to speak to the investigator without actually offering assistance. Another 26.5 percent of the subjects reacted in this way. Examples of such comments include "Looks like you've gone and done it now," and "Oh, tough luck." The mean number of words spoken by these subjects was 3.3. While this type of response did not actually constitute a form of direct helping, it is likely that many pedestrians spoke to the investigator for reasons which could be considered, in a broad sense, prosocial. Pedestrians might have spoken to the "clumsy" investigator to help relieve his embarassment. Alternately, speaking might have been a way of expressing an affiliative tendency or a desire to engage in communication. Because of the prosocial character of this form of response, it will be analyzed along with the more direct helping responses, although as a measure of

secondary importance to the direct helping measure.

While both the number of envelopes picked up variable and the number of words spoken variables were measured at the ratio level, both distributions turned out to be seriously skewed due to the large number of zeros (skewness = 3.32 and 2.29, respectively). It was not possible to transform these data in any manner to remove the severe skewness. Therefore, data analysis was limited to treating these variables as dichotomies (coded 0 = did not help, 1 = did help and 0 = did not speak, 1 = did speak).

The percent of subjects stopping to help the investigator is revealed in Table 9.1 and Figure 9.2. For the purposes of data presentation, population has again been divided into five levels and isolation has been divided into two levels, using the same cutting points discussed earlier. The results do not appear to indicate any strong effect of either city size or isolation on rates of helping. A log linear analysis of the dichotomous helping data confirmed this conclusion. Neither the effects of population size, isolation, or their interaction, were necessary to bring the amount of deviance down to a nonsignificant level. Collapsing the two levels of isolation in Figure 9.1 revealed a slight curvilinear trend with the smallest and largest communities having the highest rates of helping and communities of intermediate size having the lowest rates of helping. However, a test of linearity on these data did not reveal either a significant linear effect or a significant deviation from linearity ($p > .10$).

Table 9.1

Percent of Subjects Helping to Pick up the Dropped Envelopes in Communities at Five Levels of Population Size and Two Levels of Isolation

	Isolation	
Population size	799 kilometers or less from a capital city[1]	800 kilometers or more from a capital city[2]
999 people or less	10.0 (n=20)	23.1 (n=13)
1,000 to 4,999 people	11.4 (n=35)	12.0 (n=25)
5,000 to 19,999 people	5.0 (n=40)	9.5 (n=21)
20,000 to 300,000 people	12.5 (n=40)	9.5 (n=21)
850,000 people or more	17.9 (n=56)	-

[1] Kendall's Tau = .07, $p > .10$ (two-tailed)

[2] Kendall's Tau = -.08, $p > .10$ (two-tailed)

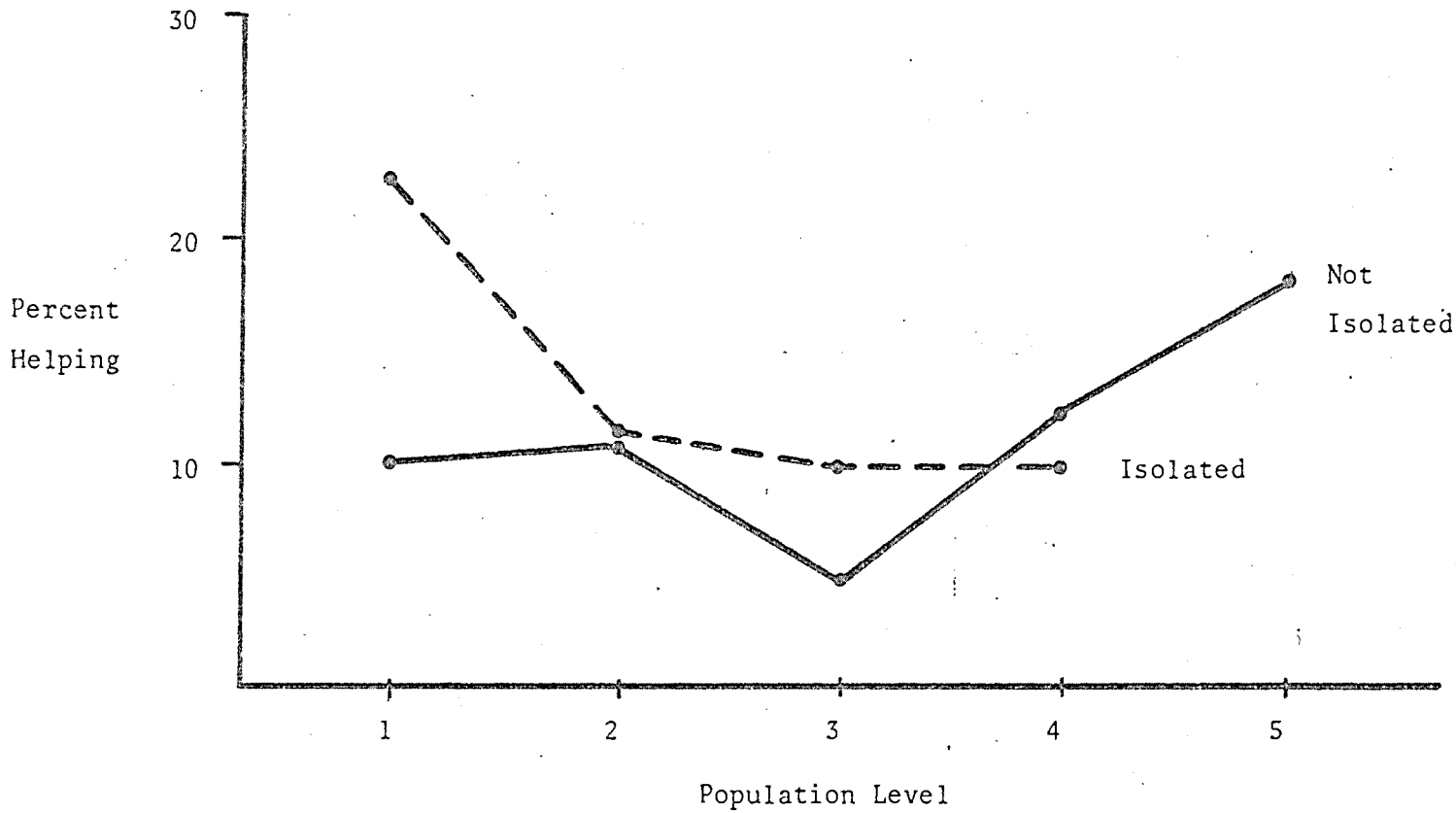

Figure 9.2 Percent of Subjects Helping to Pick Up Dropped Envelopes in Communities at Five Levels of Population Size and Two Levels of Isolation

The percentage of subjects talking to the investigator is displayed in Table 9.2 and Figure 9.3. Inspection of this figure reveals two trends. First, it appears that less distant areas had higher rates of speaking to the investigator than did the more isolated areas. Second, collapsing the two levels of isolation revealed that speaking to the investigator was highest in the smallest communities (37.0%) and decreased gradually with the largest cities, Sydney and Brisbane, having the lowest rates of speaking (14.0%). However, the relationship between city size and speaking appears to only exist for the nonisolated communities. While the Tau coefficient was $-.30$ ($p < .001$) for the nonisolated cities and towns, the correlation reverses to .07 ($p > .10$) for the isolated communities. The smallest , nonisolated communites had the highest rate of speaking (60.0%), a rate which was substantially higher than the figure for the smallest isolated communities (11.0%). However, at higher levels of population size, the gap between nonisolated and isolated communities narrowed substantially.

The frequencies which these percentage data were based upon were subjected to a log linear analysis. The GLIM computer program from the NAG series was used for this purpose (Baker & Nelder, 1978). For this purpose, the frequencies for the two cities at population level five, Brisbane and Sydney, were omitted. The results of this analysis appear in Table 9.3. Both the effects of isolation and population level were necessary to bring the scaled deviance down to a nonsignificant level. The interaction effect between isolation and population level on speaking, however, did not appear to be necessary to fit the data adequately, although adding it to the model did reduce the deviance somewhat. A second log

Table 9.2

Percent of Subjects Speaking to the Investigator in Communities at Five Levels of Population Size and Two Levels of Isolation in the Dropped Envelope Episode

	Isolation	
Population Size	799 kilometers or less from a capital city[1]	800 kilometers or more from a capital city[2]
999 people or less	70.0 (n=20)	15.4 (n=13)
1,000 to 4,999 people	48.6 (n=35)	28.0 (n=25)
5,000 to 19,999 people	25.0 (n=40)	23.8 (n=21)
20,000 to 300,000 people	30.0 (n=40)	28.6 (n=21)
850,000 people or more	23.2 (n=56)	- -

1 Kendall's Tau = -.28, $p < .001$ (two-tailed)

2 Kendall's Tau = .06, $p > .10$

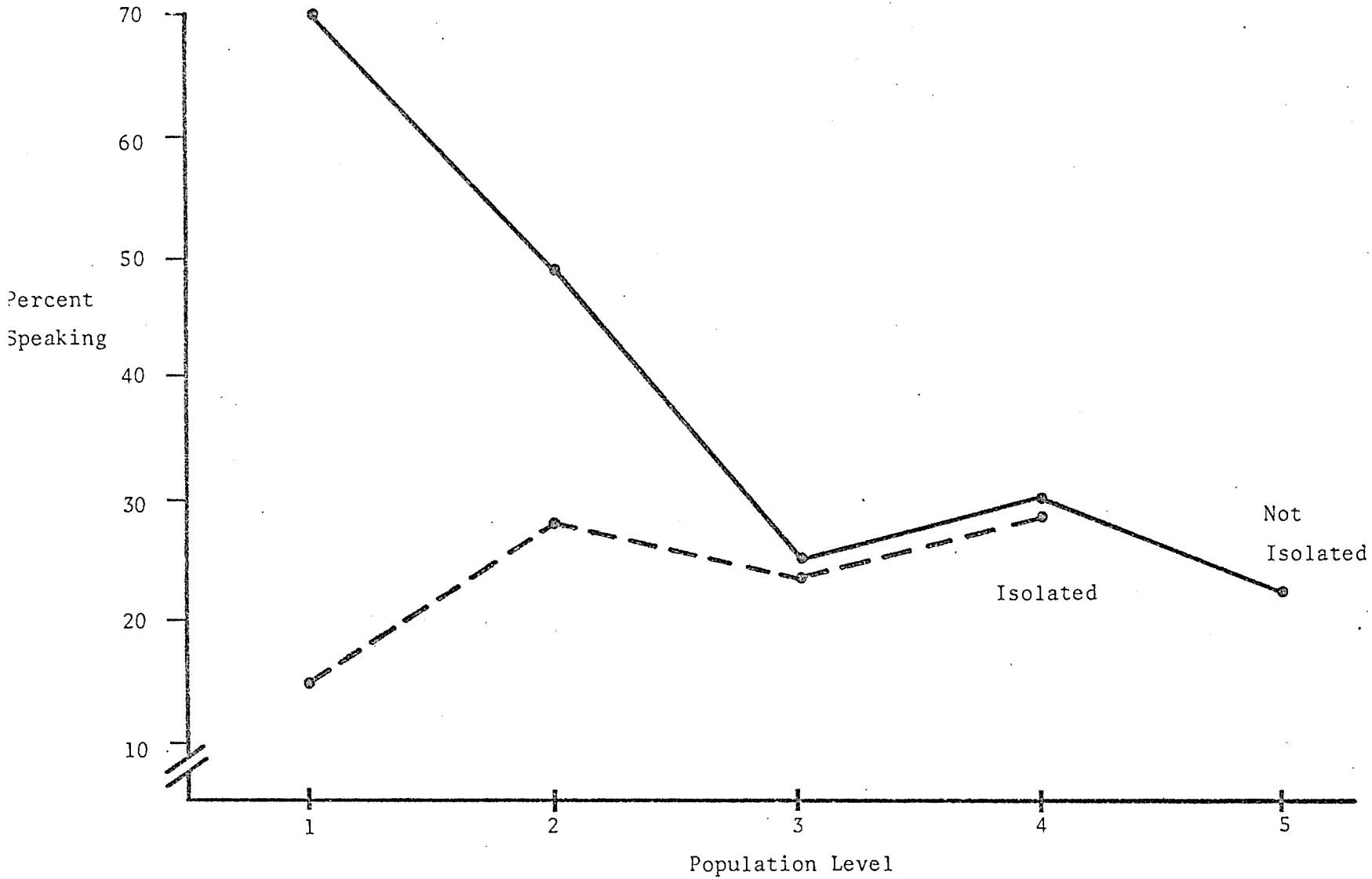

Figure 9.3 Percent of Subjects Speaking to the Investigator in Communities at Five Levels of Population Size and Two Levels of Isolation in the Dropped Envelopes Episode

linear analysis, changing the order of entry of terms into the model, was also conducted. Entering speaking X population as the first fitted effect reduced the deviance to 32.69 while adding speaking X distance reduced the deviance to 8.84 which, at 6 degrees of freedom, was no longer significant ($p > .10$). This indicated that knowledge of the main effects of both variables was sufficient to produce expected cell frequencies which were not significantly different from the observed cell frequencies. Reversing the order of these two effects did not result in any appreciable difference. Thus, the main effects of population level and distance (but not their interaction) appeared to be the most parsimonious model to describe these data.

Since there appeared to be no interaction between population level and isolation, and since each of these variables appeared to be linearly related to the helping and speaking measures, the results were summarized by regressing the speaking and helping variables upon population size (log) and driving distance from a large capital city. The regression of the helping variable yielded a nonsignificant multiple R of .05 ($p > .10$). The regression of the speaking variable yielded a multiple R of .22 ($p < .01$). The beta weight for the population size variable was $-.27$ ($p < .001$) while the beta weight for the isolation variable was $-.19$ ($p < .05$) indicating that both variables were weakly negatively related to speaking.

The quality of help-giving

Table 9.3

Log-Linear Analysis of Frequency Data for Speaking to the Investigator in the Dropped Envelope Episode Broken Down by Population level and Community Isolation

Model	Scaled Deviance	Df	Probability
Null fit	82.62	15	$p < .001$
Speaking + Population + Isolation	24.60	10	$p < .01$
+ Population x Isolation	23.18	7	$p < .01$
+ Speaking x Isolation	13.59	6	$p < .05$
+ Speaking x Population	5.695	3	$p < .20$
+ Speaking x Isolation x Population	.00	0	-

Although no differences were found between rural and urban areas in rates of helping in the dropped envelope episode, differences did emerge when the "quality" of help-giving was examined. To investigate this effect, the 33 cases in the data file in which helping occurred were analyzed separately. For these helping cases, the distribution of the words spoken variable appeared to be approximately normal (due to the removal of the majority of zeros) allowing the use of parametric statistics. For these 33 cases, the number of words spoken and whether the helper smiled or not (coded 0 = did not smile, 1 = did smile) were correlated with population size (log) and distance from a capital city. The resulting Pearsonian correlations appear in Table 9.4. Population was negatively correlated with the number of words spoken and whether the helper smiled, although only the former correlation attained (marginal) statistical significance. Inspection of the means for communities at various levels of population revealed that helpers in the two largest cities (Sydney and Brisbane) spoke, on average, only 1.8 words to the investigator (SD = 2.6). However, helpers in the smallest communities of less than 1,000 people spoke an average of 5.2 words (SD = 3.6).

Differences also occurred in the quality of help-giving between areas of low and high isolation. The Pearsonian correlation of .44 ($p < .025$) between distance from a capital city and the number of words used and the correlation of .29 ($p = .11$) between distance and smiling indicated that more isolated areas were characterized by a more friendly style of helping. Table 9.5 shows the mean number of words used by helpful subjects and the percent of helpers smiling in the largest cities, in communities less than 800 kilometers from a

Table 9.4

Pearsonian Correlations Between Population (log), Isolation, Number of Words Spoken by Helper and Helper Smiling Behaviour in the Dropped Envelope Situation (n=33)

	Number of words used by helper	Smiling
Population Size (log)	-.37*	-.14
Isolation	.44**	.29

* $p < .05$ (two-tailed)

** $p < .025$ (two-tailed)

capital city, and in communities 800 kilometers or more from a capital city. These data indicate that the mean number of words spoken and the percent of helpers smiling increased in a linear fashion with distance.

Effects of community factors

The next step in the analysis involved regressing the major dependent variable (whether the subject stopped to help pick up the envelopes) and the secondary variable (whether the subject spoke to the investigator) on the six community factors. Although these two dependent variables were only treated as dichotomies, statistical techniques such as multiple regression can still be utilized (for a justification, see Kerlinger & Pedhazur, 1973).

The results of the step-wise multiple regression analysis for the helping variable is displayed in Table 9.6. These results indicated that none of the six community factors were good predictors of helping: no beta weight was above .10 and none were statistically significant. Furthermore, the six community factors accounted for only a trivial 2 percent of the variance ($R = .15$, $p > .10$) in the helping measure.

The results of the step-wise multiple regression analysis for the speaking variable is presented in Table 9.7. Three significant predictors of speaking emerged from this analysis. The first predictor entered into the equation was the Tourism factor. It accounted for slightly over five percent of the variance in the speaking variable and its positive beta weight (.18) indicated that subjects in areas with high levels of tourism were more likely to

Table 9.5

Mean Number of Words Spoken by Helping Subjects and the Percentage of Helpers Who Smiled in Communities at Three Levels of Isolation in the Dropped Envelope Episode

Degree of isolation	Mean number of words spoken	Percent smiling
Large capital cities (n = 10)	1.80 (SD = 2.57)	60.0%
799 kilometers or less from a capital city (n = 13)	2.69 (SD = 2.60)	76.9%
800 kilometers or more from a capital city (n = 10)	5.50 (SD = 4.40)	90.0%

Table 9,6

Multiple Regression Analysis of the Effects of Six Community Factors on Helping in the Dropped Envelope Episode

Variable	Multiple R	R square	R^2 change	Simple r	Beta
Foreign-Born Heterogeneity	.09	.01	.01	.09	.10
Tourism	.12	.01	.01	.06	.10
Transient Black Population	.13	.02	.00	.04	.07
Urbanism	.14	.02	.00	.05	.06
Community Instability	.14	.02	.00	-.01	-.04
Social Class	.15	.02	.00	.02	.03

speak to the investigator. The second significant predictor was the Social Class factor. It accounted for a further 4 percent of the variance and its positive beta weight (.19) indicated that subjects in communities of lower social class were more likely to speak to the investigator. The third significant predictor was the Presence of a Transient Black Population factor. It accounted for a further 1.6 percent of the variance and its negative beta weight (-.16) indicated that subjects in areas characterized by a high proportion of Blacks, a high proportion of people who do not own their own home, and a high proportion of manual workers were less likely to speak to the investigator. Altogether, the six community factors accounted for 12 percent of the variance in the speaking variable ($R = .35$, $p < .001$).

Further explorations of the effects of these factors revealed that the impact of the tourism factor was most pronounced in the smaller towns. Table 9.8 presents Pearsonian correlations indicating the effect of Tourism on helping, speaking, and smiling separately for the smaller communities (4,999 people or less) and the larger communities (5,000 people or more). It can be seen in Table 9.8 that Tourism had little relationship to any of the three dependent variables in the areas of greater population. However, in the smaller communities, tourism was marginally significantly related to helping and was significantly related to both speaking and smiling behaviour. This pattern of results was not found for any of the other five community factors.

Table 9.7

Multiple Regression Analysis of the Effects of Six Community Factors on Speaking in the Dropped Envelope Episode

Variable	Multiple R	R square	R^2 change	Simple r	Beta
Tourism	.23	.05	.05	.23	.18*
Social Class	.30	.09	.04	.21	.19*
Transient Black Population	.33	.11	.02	-.13	-.16*
Urbanism	.34	.12	.01	-.14	-.08
Foreign-born Heterogeneity	.35	.12	.00	-.13	-.07
Community Instability	.35	.12	.00	.02	.04

* $p < .01$

Table 9.8

Pearsonian Correlations Between Tourism Factor and Helping, Speaking, and Smiling Behaviour of Subjects in Small Towns (4,999 people and less) and Larger Communities (5,000 people or more) in the Dropped Envelopes Episode

	Small communities (n = 93)	Large communities (n = 178)
Helping	.19*	-.06
Speaking	.29**	.11
Smiling	.31**	.03

* $p < .10$ (two-tailed)

** $p < .01$ (two-tailed)

Furthermore, the tourism factor also appeared to be related to the quality of help-giving as well. Among those subjects who offered help with the dropped envelopes, subjects in areas with high levels of tourism picked up substantially more envelopes than did subjects in areas low in tourism. The Pearsonian correlation between the Tourism factor and the number of envelopes picked up was .57 ($n = 33$, $p < .001$).

Discussion

Unlike the previous measures of helping described in Chapters Four through Seven, the helping measure used in this study - helping a pedestrian pick up envelopes spilled on the sidewalk - did not reveal any significant urban-rural differences. While previous studies found that rates of helping were generally lowest in Sydney and Brisbane, the two largest cities in the sample, these two cities had relatively high rates of helping in the present study: an average of 17 percent for the two. (However, this rate of helping was not significantly higher than that of communities at other levels of population size.) Likewise, isolation was found to have no significant effect on rates of helping. A similar result was obtained from the step-wise multiple regression analysis in which the six community factors accounted for only a trivial amount of the variance in helping behaviour. The reason for the nonexistence of any effects is most likely due to the overall low level of helpfulness exhibited by pedestrians in this study. With only 33 out of 271 subjects helping (12.2 %), there was probably not enough variance to reveal any significant relationships in the data. One might conclude that this particular measure was simply not sensitive

enough to capture any differences between pedestrians in urban and rural settings.

Differences were observed, however, in the quality of help-giving. There was a slight tendency for helpers in larger cities to give assistance which was less friendly than the assistance provided by helpers in smaller communities. This was evidenced by a marginally significant negative correlation between population level and speaking among helpers. Thus, while the actual rates of helping in this study were not consistent with the results of studies reported earlier in this volume, the quality of help-giving did follow a similar trend: the behaviour of subjects was more prosocial in the smaller communities and less positive in the large cities.

Differences were also observed in relation to another type of subject response: speaking to the investigator during the dropped envelope episode. A relatively large number of subjects (64, or 23.2 %) paused to say a few words to the investigator without actually giving or offering to give assistance. This form of response can be considered as being, broadly, prosocial in that it may reflect a positive desire for communication and involvement with the investigator. (None of the subjects in this study made rude or degrading comments to the investigator.) Analysis of these data revealed effects of both population level and isolation. First, subjects in more isolated areas were less likely to respond to the investigator in this way than were subjects in less isolated areas. Second, subjects in smaller communities were, on average, more likely to speak to the investigator than were subjects in larger

communities.

The finding that population level was inversely correlated with rates of speaking is consistent with the results of the previously reported studies in this volume. The finding that subjects in more isolated areas were less responsive is also consistent with prior studies. Inspection of Figure 9.3 indicates that people in isolated areas were more responsive only when community size was small, that is, less than 5,000 people. For communities larger than this, isolated communities had rates of responding which were very similar to those of less isolated communities. Thus, distance from a capital city only appeared to make a difference when city size was small. This interpretation is borne out by other data as well. For cities of 5,000 people or more, the Pearsonian correlation between distance from a capital city and speaking was .01 while the corresponding correlation for cities of 4,999 people or less was $-.32$ ($p < .05$). This point will be returned to momentarily.

Inspection of Figure 9.3 also reveals that the inverse relationship between population level and percent speaking did not hold for the isolated communities in the sample. In fact, for these communities, the relationship was actually positive (but not statistically significant). Indeed, the communities with the lowest rates of speaking to the investigator turned out to be the smallest, most isolated communities. This suggests that small communities differed considerably on this particular measure, depending largely upon their degree of isolation. While pedestrians in small, isolated communities showed little inclination to speak with the investigator (11%), pedestrians in small communities closer to large

capital cities were highly likely to do so (60%). One explanation for this pattern would be that residents of small, isolated communities exhibit a certain degree of shyness or suspiciousness when it comes to dealing with strangers. People in these types of areas would not be used to having many visitors in town, and outsiders in these areas would stand out as being somewhat unusual. Hence, the low rate of interaction with the investigator may reflect a certain mistrust about what the investigator was doing. On the other hand, the small communities nearer large cities would be quite used to receiving a high numbers of visitors passing through town. Furthermore, people in these areas might travel into nearby large cities more frequently where they would come into contact with large number of strangers. Thus, people in these areas should be used to dealing with strangers, and the presence of an out-of-towner on the sidewalk would be less likely to stand out as an usual event. Hence, people in these types of communities might be expected to react with less suspiciousness, distrust, or shyness, toward strangers, allowing more positive forms of interaction to develop.

This interpretation is supported by the findings from the multiple regression analysis that areas high on the tourism factor had higher rates of speaking to the investigator. Furthermore, the effect of this factor was negligible in the larger cities in the sample, but stood out more clearly in the smaller communities of 4,999 people or less. Thus, residents of smaller towns which experience large numbers of tourists should be more used to seeing and dealing with strangers than residents of similar sized communities which receive few travellers and visitors. In this sense, tourism may function in a similar manner to distance from a

large capital city in making small town residents less isolated, less provincial, and more used to interacting with strangers, regardless of distance from a capital city or level of tourism. It seems reasonable that the effects of these two variables would only be pronounced in smaller communities. When cities reach a certain size (perhaps 5,000 people or more, as the data would suggest) the effects of population alone might ensure that local residents have a sufficient amount of contact with strangers. In this sense, population size may "swamp" the effects of the distance and tourism variables. This interpretation of the data is consistent with the two stereotypes of small town dwellers which were portrayed in Chapter One. On one hand small town residents have been described as friendly, open, and helpful (Korte, 1978; Milgram, 1970). On the other hand, small town residents have been described as being suspicious of others and as tending to adopt a "we-them" attitude toward outsiders. The present data suggest that there may be truth in both stereotypes as long as one distinguishes isolated from nonisolated small towns. However, this pattern of results, while interesting, was not observed in any of the other field studies reported in this volume.

Finally, it was noted that even though distance was negatively correlated with involvement with the investigator, those subjects who helped the investigator in more distant areas behaved more prosocially in terms of speaking a greater number of words and smiling more often. Thus, while most subjects in isolated areas generally avoided any kind of interaction with the investigator, subjects in distant areas who chose to give assistance did so in ways which were highly positive. This suggests that although most

distant ruralites are "choosy" about who they will help or interact with, once help is given it is delivered in a manner which is more friendly and less superficial than the help which is offered by urbanites. These interpretations will be returned to in Chapter Eleven.

Chapter Ten: A Study Based Upon Nonresponse Rates to the 1976 Australian Census

This study was based upon the planned, formal example of helping which was described in Chapter Four (see Figure 4.1). It is different from the five behavioural field studies which were described in previous chapters in that it used a pre-existing data set: nonresponse rates to the 1976 Australian census. This particular data set was chosen for a number of reasons. First, it would have been extremely difficult to develop and employ a helping measure in a field setting which had the characteristics of being both formal and planned by the subjects. Thus, to be true to the helping taxonomy developed in Chapter Three, and to meet the requirements of the overall logic of this line of research, it was necessary to include one study which did not involve a "spontaneous" face-to-face encounter between strangers.

The 1976 Australian census was chosen as an alternative data source because of its high quality and availability. Being a nearly complete enumeration of the Australian population (although most of the figures presented in census tables are based upon a 50% sample of completed questionnaires) its accuracy in estimating population characteristics is far superior to any survey or experimental technique based upon a much smaller sample of respondents. Furthermore, the various items on the census questionnaire are, as a matter of course, broken down by the Bureau of Statistics for local government areas in each state, and these breakdowns are readily available from the Bureau of Statistics offices in the capital cities. In addition to offering the breakdown of valid responses to

each of the 49 questions included in the 1976 census, the number of "not stated" responses for each item is also available.

The idea for using nonresponse rates was suggested by the study of House and Wolf (1978). In this study, refusal rates to a national election survey carried out by the University of Michigan Survey Research Center were used as a measure of uncooperativeness or unhelpfulness. As House and Wolf noted, surveys can generate behavioural data as well as attitudinal data, and their analysis was able to relate survey refusal rates to various city characteristics such as size, density, age, and crime rates in ways which were theoretically meangingful (this study was reviewed in more detail in Chapter 1).

Consideration of the Australian census suggests that it also might have generated useful behavioural data. A strong effort was made by the Australian government in 1976 to get as many households as possible to complete the census form. Prior to the date of the census-taking, advertisements appeared on television, in newspapers, and in other media giving information about the census and reminding people that it was mandatory that every household complete one census form. Census collectors visited individual households shortly after the night of the census-taking, and if they were unable to pick up the completed form at this time, returned at a future date. For any households experiencing difficulty in filling out or returning the census form, telephone numbers were available from which people could receive further information or make alternate arrangements. In fact, a national telephone number for this purpose was printed on the front of every census form (see

Figure 10.1).

Given the number of precautions taken by the Australian government, it seems reasonable to conclude that failing to submit a properly completed questionnaire, or failing to submit a questionnaire at all, in most cases reflected a degree of uncooperativeness, unconcernedness, or unhelpfulness toward the Australian federal government. In addition, failing to submit a correctly completed census form was a violation of federal law.

Similar conclusions have been drawn for the United States census. According to Warwick and Lininger (1975), sample surveys and even the 1970 census in the United States have been plagued by refusals and omissions because of suspiciousness, fear, and other forms of resistance, especially in central city areas. This interpretation is supported in Australia by reports that the relatively large number of items on the 1976 Australian census (and a few items in particular, such as the ones dealing with religion, income, and race) were objectionable to many people (Doubts over census questions, The Australian, July 3, 1981).

Method

Nonresponse data for a large number of census items were available. However, most of these figures were not useful for the present purposes. This was due to the fact that the household, not the individual, was the basic unit of enumeration in the Australian census, that is, one census form only was completed for each household. Thus, for a particular item, such as religion, the "not stated" category for a small town of 200 people might be 10 out of

CONFIDENTIAL APPENDIX A

State	
Div.	
S. Div.	
C.D.	
Enum. No.	

AUSTRALIAN BUREAU OF STATISTICS

CENSUS OF POPULATION AND HOUSING AUSTRALIA

30 JUNE 1976

HOUSEHOLDER'S SCHEDULE

The Census is taken under the authority of the *Census and Statistics Act* 1905-1973. Under this Act:

(a) it is *compulsory* to provide all the information requested (except religion),

(b) all the information you provide in this Schedule *will be kept secret* and seen only by sworn employees of the Australian Bureau of Statistics. It will be used only to produce statistics.

CENSUS 76

HOW TO FILL IN THIS FORM:

— Read the instructions on this page and at the top of page 1.

— Give details of *all* persons on pages 1-7 who spent the night of WEDNESDAY 30 JUNE 1976 in this household.

— Complete particulars of this dwelling on page 7.

— Please use ink or ball point pen.

— Read each question and any instructions carefully; give your answer and then follow the directions to the next question which applies. Most questions can be answered simply by placing a tick in an appropriate box.

e.g. Yes ☐ or No ☑ OR Yes ☑ or No ☐

— If you do not know the exact answer to a question give the best estimate you can.

— After filling in the Schedule, sign it on the front page.

— The completed Schedule should be ready to hand to the Collector who will call on THURSDAY 1 JULY 1976 or as soon as possible after that day.

— If you have any difficulties in completing the Schedule ask your Collector to help or telephone Perth 254411 for assistance.

Signature of Collector

I certify that to the best of my knowledge and belief this schedule has been correctly filled in.

Signature of Householder *Date*

Street, etc.

City, town or suburb *Postcode*

Figure 10.1 Front Page of Questionnaire Used in the 1976 Australian Census

100 households. However, there is no way to decide if these 10 "nonresponses" come from 10 separate responding individuals from 10 households of one person each, or if they come from 10 related individuals from a single household (perhaps a single mother with 9 children). The first possibility indicates a much higher level of "uncooperativeness" for an area since 10 separate individuals have refused to answer the question while in the second example only one individual has refused to answer, making the proper interpretation of this figure problematic. Hence, households with more residents (especially children) contributed more to the "not stated" category than did households with smaller numbers of residents.

Nevertheless, there are a number of items on the census questionnaire which refer to households, rather than to individuals. For these items, each household, regardless of the number of people in it, can contribute only one (non)response. For example, a question dealing with the source of water supply for the dwelling might yield a "not stated" figure of 10 out of a total of 100 households. The interpretation of this figure is straightforward: out of the 100 households (or occupied private dwellings) from which a census form was expected, 10 households failed to supply an answer to this question. The only ambiguity here comes from the fact that the households in the "not stated" category might have either failed to submit a census form at all, or might have failed to answer this single question only. This distinction, however, is not critical for the present analysis, for both failure to submit a census form at all and failing to complete the census form accurately and completely are considered here to be forms of uncooperative behaviour.

Data from eight questions were obtainable for this purpose. These questions dealt with the nature of the materials of which the outer walls of the dwelling were built, the total number of bedrooms in the dwelling, the number of other private dwelling units in the same building, the souce of water supply, the method of sewage disposal, the number of motor cars parked at the dwelling, the nature of occupancy (owner, tenant, etc.) and the total household income. The number of "not stated" responses as a percentage of the total number of households in the local government area were tabulated and used for data analysis.

Results

The percentage of not stated responses for the eight questions for the 55 local government areas in the sample were examined. These nonresponse rates varied from zero percent for certain questions in some small local government areas to a high of 22.9 percent for the household income question in one local government area. The question dealing with household income, on average, had the highest rate of nonresponse (Mean nonresponse percentage = 12.41, SD = 3.84) while the material of outer walls question had the lowest rate of nonresponse (Mean = 2.65, SD = 2.70). The nonresponse rates for the eight questions were then intercorrelated. The Pearsonian correlations between the percent of households in the "not stated" category for each of the eight questions are presented in Table 10.1. It is apparent that these inter-correlations are all positive and are generally very high: the mean inter-item correlation is .79 ($n = 55$, $p < .001$). These correlations were then used as input into a factor analysis program. The solution revealed

Table 10.1

Correlation Matrix for Nonresponse

Rates to Eight Census Questions (1976)

	Household income	N. of private dwelling units	Material of outer walls	Number of bedrooms	Source of water supply	Method sewage Disposal	N. of motor vehicles
Household income							
N. of private dwelling units	.50[1]						
Material of outer walls	.56	.87					
N. of bedrooms	.49	.85	.95				
Source of water supply	.60	.86	.93	.87			
Method of sewage disposal	.55	.85	.90	.86	.94		
N. of motor vehicles	.45	.84	.79	.72	.88	.85	
Nature of occupancy	.49	.88	.94	.90	.93	.92	.90

[1]All correlations are significant at the .001 level

a single factor with an eigenvalue greater than one. This single factor accounted for 82.5 percent of the variance in the eight nonresponse items. The commonalities, factor loadings, and eigenvalues for the factors are presented in Table 10.2 and Table 10.3.

A factor score was then computed for each city and town in the sample based upon the nonresponse rates to the eight questions. These nonresponse factor scores were used as the major dependent variable and were analyzed in a manner similar to the previously reported field data.

The mean nonresponse factor score for cities and towns at five levels of population size are presented in Table 10.4 and Figure 10.2. For this purpose, the same cut-off points used in earlier analyses were used here. Cities and towns were also divided into areas of low isolation (less than 800 kilometers from a capital city) and high isolation (greater than 800 kilometers from a capital city).

Inspection of this data revealed a number of trends. First, at each level of population size, isolated areas had higher nonresponse scores than less isolated areas, with this trend being most pronounced in the smallest towns. It is also apparent that small towns of less than 1,000 people tended to have the highest nonresponse rates, regardless of whether they were relatively isolated or not. As city size increased, nonresponse rates dropped, with the most dramatic change occurring between towns with less than 1,000 people and towns with between 1,000 and 4,999 people. The mean nonresponse scores continue to decline gradually until the larger cities are encountered. Then, for both isolated and not

Table 10.2

Eigenvalues and percent of Variance

Accounted for by Factors: Nonresponse Data

Factor	Eigenvalue	% of variance	Cumulative %
1	6.601	82.5	82.5
2	.680	8.5	91.0
3	.320	4.0	95.0
4	.174	2.2	97.2
5	.100	1.2	98.4
6	.056	0.7	99.1
7	.045	0.6	99.7
8	.024	0.3	100.0

Table 10.3

Factor Loadings and Communalities

For Eight Nonresponse Items

Variable	Factor Loading	Communality
Household income	.557	.310
N. of private dwelling units	.908	.825
Material of outer walls	.964	.928
N. of bedrooms	.911	.829
Source of water supply	.974	.950
Method of sewage disposal	.951	.904
N. of motor vehicles	.872	.760
Nature of occupancy	.973	.948

isolated areas, the mean nonresponse scores increase. For the isolated areas, the Pearsonian correlation between population level and the nonresponse factor was $-.51$ ($n = 22$, $p < .025$). However, for the less isolated cities and towns, nonresponse scores showed a stronger curvilinear trend, with the pearsonian correlation being $-.13$ ($n = 33$, $p > .10$).

To analyze this relationship more fully, the scores for isolated and nonisolated areas were combined and a one-way analysis of variance and test of linearity was performed upon the mean nonresponse scores for the 5 levels of population size. This analysis revealed a significant linear trend ($F = 9.42$, $df = 1/50$, $p < .005$) which accounted for 14.2 percent of the variance in nonresponse rates ($r = -.38$). However, a marginally significant deviation from linearity was also revealed ($F = 2.342$, $df = 3/50$, $p < .09$) which accounted for a further 10.6 percent of the variance

However, two of the assumptions underlying the use of the analysis of variance test were not met by these data: the distribution of nonresponse factor scores was not normal (skewness = 2.18) and the variances of the scores in the five levels of population size were not equal, with the towns at the smallest level of population having substantially larger variances. A logarithmic transformation of the data was attempted, but the resulting distribution was still substantially skewed. As an alternative procedure, factor scores which were exceptionally high were truncated and replaced with a maximum score of +1.50 in order to make the distribution more symmetrical. Although the distribution was still skewed, the deviation from symmetry was not as extreme

Table 10.4

Means and Standard Deviations of Nonresponse Factor Scores for Communities at Five Levels of Population Size and Two Levels of Isolation

Population Size		Isolation: 799 kilometers or less from a capital city	Isolation: 800 kilometers or more from a capital city
999 people or less	$\bar{X}$	.32	.98
	SD	1.53	1.19
	(N)	(7)	(7)
1,000 to 4,999 people	$\bar{X}$	-.46	-.03
	SD	.37	.34
	(N)	(8)	(5)
5,000 to 19,999 people	$\bar{X}$	-.32	-.21
	SD	.51	.28
	(N)	(8)	(6)
20,000 to 300,000 people	$\bar{X}$	-.61	-.00
	SD	.13	.35
	(N)	(8)	(4)
850,000 people or more	$\bar{X}$	-.02	-
	SD	.29	-
	(N)	(2)	-

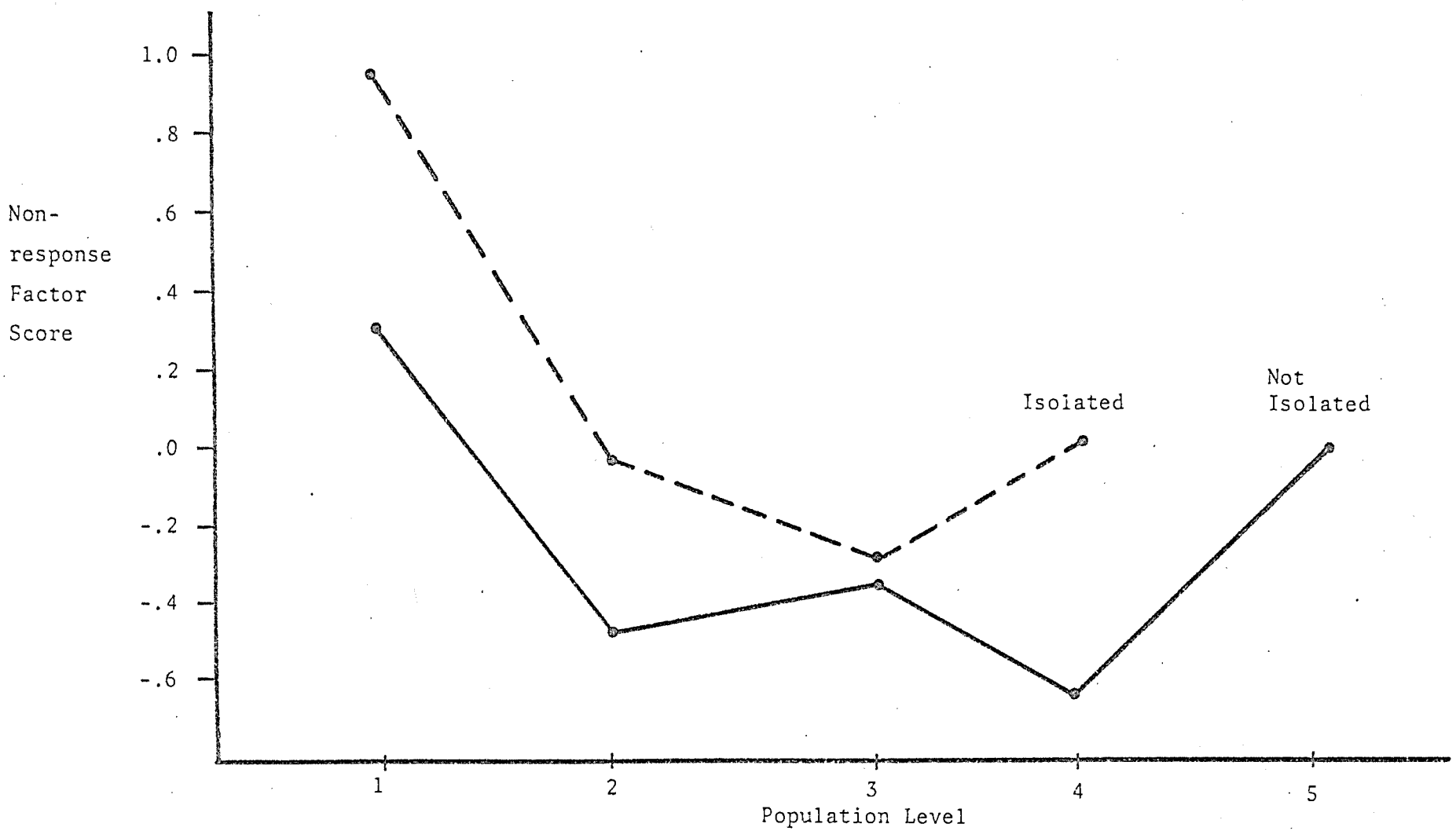

Figure 10.2 Mean Nonresponse Factor Scores for Communities at Five Levels of Population Size and Two Levels of Isolation

(skewness = 1.01). This transformation also helped to equalize the variances considerably. However, it did not appreciably change the pattern of results displayed in Figure 10.2 in any manner, and the test of linearity, rerun with the truncated data, revealed virtually identical results.

These truncated nonresponse factor scores were subjected to a 2-way analysis of variance using population level and isolation level as factors. This resulted in a 4 X 2 factorial design. For this purpose, the two capital cities at the fifth level of population size were either included with the cities at the fourth level of population or were omitted from the analysis. The results from both procedures were nearly identical, so only the results from the analysis with Sydney and Brisbane included will be presented. The analysis revealed a significant main effect for population level ($F = 4.40$, $df = 3/54$, $p < .01$) and a significant main effect for isolation ($F = 6.60$, $df = 1/54$, $p < .025$). The interaction was not significant ($F = .38$). These two significant main effects together accounted for 32 percent of the variance in the nonresponse factor scores (eta = .56).

One possible alternative explanation for these effects refers to the higher rates of illiteracy found in rural areas. It may be that the small rural towns showing the highest nonresponse rates also had the highest rates of illiteracy, implying that census forms were not left unanswered because of local "uncooperativeness", but simply because many of the local people were unable to fill them out properly due to educational limitations. To test this idea, an analysis of covariance was carried out to see if the effects of

population level and isolation would remain with the effects of three other variables partialled out. These variables were : the percent of people in the local government area who left school at 14 years of age or less, the percent of the workforce employed in manual occupations, and the percent of Aboriginals and Islanders residing in the area. Although no direct data were available on rates of illiteracy, it was assumed that these three variables should be correlated with illiteracy, and in combination, should be able to stand in for illiteracy in the analysis. (Black Australians would be more likely to be illiterate in English, the language in which census forms are written.)

Tests to check for the existence of covariate-factor interactions were made and revealed no significant interactions. The covariance analysis revealed that of the three covariates, only the percent manual variable was significantly related to nonresponse scores ($F = 7.19$, $df = 1/54$, $p = .01$). With the effects of these three covariates removed from the data, a significant main effect remained for population level ($F = 3.62$, $df = 3/54$, $p < .025$). Isolation was also significantly associated with nonresponse scores ($F = 4.46$, $df = 1/54$, $p < .05$). While a significant main effect was still obtained for the population factor, inspection of the "corrected" cell means revealed that the differences were not as great as in the previous analysis, and the amount of variance accounted for by the two main effects after the combined effects of the three covariates were removed, dropped to 23.7 percent (eta = .49). The three covariates accounted for 11 percent of the variance in nonresponse scsores (eta = .33).

The next step in the analysis involved using the factor scores from the community data file described in Chapter Four in a multiple regression analysis. The census scores were regressed upon the six community factors: Urbanism, Tourism, Foreign-Born Heterogeneity, Presence of a Transient Black Population, Social Class, and Community Stability in a step-wise fashion. The results of this multiple regression procedure are found in Table 10.4. The results of this procedure indicated that three factors, Urbanism, Tourism, and Foreign-Born Heterogeneity, were all significantly associated with the nonresponse factor scores. The Presence of a Transient Black Population variable was also marginally significantly related to nonresponse rates ($p < .10$).

Furthermore, the amount of variance these variables accounted for was moderately high: 33.5 percent ($R = .58$, $df = 4/48$, $p < .001$). The first variable included in the step-wise analysis, Urbanism, accounted for 13.5 percent of the variance in the nonresponse scores. Its negative beta-weight (-.37) indicated that areas of low urban development and complexity had higher rates of nonresponse. This result is similar to the result of the analysis of covariance reported above. The second variable entered into the regression equation was the Tourism factor. Tourism accounted for 7.9 percent of the variance in the nonresponse scores and the positive beta-weight (.29) indicated that areas high in tourism had higher rates of nonresponse. The third variable entered into the regression equation was Foreign-Born Heterogeneity. This variable accounted for a further 7.3 percent of the variance and its positive beta-weight (.27) indicated that areas with high levels of foreign-born heterogeneity tended to have higher nonresponse rates.

Table 10.5

Results of Step-wise Multiple Regression Analysis of the Effects of Six Community Factors on the 1976 Census Nonresponse Factor Score

Variable	Multiple R	R^2	R^2Change	Simple r	Beta
Urbanism	.37	.14	.14	-.37	-.37**
Tourism	.46	.21	.08	.29	.29*
Foreign-born Heterogeneity	.54	.29	.07	-.26	.27*
Transient Black Population	.58	.34	.05	.22	.23
Social Class	.58	.34	.00	.07	.08
Community Instability	.59	.34	.00	-.00	.04

* p<.05

** p<.01

The fourth variable entered into the regression equation was the presence of a Transient Black Population factor. This variable accounted for a further 4.8 percent of the variance, and its positive beta-weight (.23) indicated that areas with a large, transient Black population tended to have higher nonresponse rates.

Discussion

The results of this study indicated that nonresponse rates to eight questions on the 1976 Australian census are significantly associated with a number of social and geographical characteristics of cities. The analysis of covariance and multiple regression procedures described above indicated that areas with high rates of nonresponses can be described as areas having low levels of urban development, as being more distant from large capital cities, and as having more tourists and a high percentage of foreign-born residents, Blacks , people who do not own their own homes, and manual labourers.

First, most of these results appear easy to interpret. Areas with a high percentage of foreign-born residents would be expected to have higher rates of nonresponse. After all, the 1976 Australian census questionnaire was not easy to fill out, and it is likely that many people not used to the English language would have had exceptional difficulty in completing it properly. Regardless of educational attainment, people who have acquired English as a second language would be at a disadvantage here. This has been a problem in other countries, such as the United States, where census forms, as well as other government forms such as taxation forms, are

printed in Spanish as well as English to make compliance easier for the large Spanish speaking population there.

The fact that areas high on the Transient Black Population factor demonstrated higher nonresponse rates is also not surprising. Aboriginal and Islander people tend to do poorly in white, Western-style schools compared to other Australian children, and this is reflected in lower levels of ability in reading and writing in English (Berndt, 1977; Kearney & McElwain, 1976). Of course, English is also a second language for many Black Australians as well as foreign born Australians. Furthermore, it has been estimated that approximately one third of Black people living in Australia are without an permanent Western-style housing (Smith, 1980). This condition would make it difficult to deliver and pick up a census questionnaire to these "households" in the first place. Indeed, because of this problem it has been difficult to get accurate estimates of the number of Aborigines and Islanders living in Australia (Smith, 1980). Furthermore, the percent of workers in manual occupations variable also loaded highly on this factor. Many manual workers would be less educated and less used to filling out complicated forms of this nature than would white collar, professional workers. It is likely that people not used to this type of activity would become discouraged or annoyed with the amount of detailed information requested.

Nonresponse rates were also positively associated with the tourism factor. This finding might appear odd, for one might expect that people in areas with more tourists would be somewhat more sophisticated and less reluctant to complete the census

questionnaire. One very simple explanation for this finding is that areas which generally have a high number of travellers and tourists would be likely to have a large number of these people present on the night of the census-taking. In fact, one of the variables which loaded highly on this factor was the number of visitors in town on the night of the census-taking. It is likely that these people, because they are travelling, might not have brought their census forms with them or might not have received a census form before they initiated their journey. Many might not have returned home until after the census questionnaires had been collected. Furthermore, the difficulties of being "on the road" may have made filling out the census questionnaire too costly and bothersome.

Nonresponse rates were also related to the urban-ruralness of the areas as well. Local government areas scoring high on the Urbanism factor (that is, areas of greater size, complexity, and development) generally showed lower nonresponse rates. The major effect here appeared to be between small towns of less than 1,000 people and towns and cities with more than this number of people. It could be argued that small, rural towns, distant from a big city, might exhibit high rates of nonresponse for other reasons than a lack of cooperativeness toward the federal government. Mail service may be more unreliable in remote areas, and it may be more difficult for census collectors to check up on people in distant areas who did not return their form on the first date requested. In fact, the analysis of variance and covariance did indicate that cities and towns greater than 800 kilometers driving distance from a capital city had significantly higher nonresponse rates (using the truncated nonresponse scores). Small isolated towns, in fact, had the highest

nonresponse rates of all. However, the overall relationship between distance from a capital city and scores on the nonresponse factor was not particularly strong ($r = .21$, $n = 55$, $p > .10$). Furthermore, the relationship between city size and nonresponse scores still remained when degree of isolation was "controlled" for by examining isolated and nonisolated areas separately (see Figure 10.1). Hence, it appears that even though there may be a small effect of distance, which may reflect greater difficulty and unreliability in collecting census forms, urbanism still appears to have a significant effect upon nonresponse rates.

The overall relationship between city size and nonresponse scores appears to be curvilinear, with towns less than 1,000 having the highest nonresponse rate, towns and cities of intermediate size having the lowest rates, and the largest cities (Sydney and Brisbane) having an intermediate rate of nonresponse. Unfortunately, with only two cities in the largest category, it is difficult to draw a firm conclusion on this point, even though the test of linearity revealed a marginally significant nonlinear trend in the data ($p < .10$). Nevertheless, the finding that small towns have the highest rates of nonresponse to the 1976 Australian census requires explanation. If the assumption that nonresponse rates reflect an uncooperative, unconcerned, unhelpful attitude, then this indicates, contrary to the general pattern of the previous studies, that rural residents were the least helpful on this particular measure.

This may be due to an inclination on the part of rural people to "distrust" or be wary of outsiders, especially those representing "big city" organisations such as the Federal government. Suspicion and fear have been cited as reasons for some American respondents refusing to fill out census questionnaires (Warwick & Lininger, 1975). Rural people may be less used to government involvment in their day to day activities, and may have had less exposure to bureaucratic activities (such as filling out forms) than their urban counter-parts. Thus, they may be less inclined to cooperate with what may be seen as an unnecessary, perhaps illegitimate, and not terribly useful prying into their private affairs by a curious "big city" body. A certain resistance to what is seen as "big government intrusion" has, after all, been an important theme in National-Country politics for decades, and rural support for a candidate who appears to stand up to pressure from Canberra is the general rule. Further discussion of this particular helping measure in relation to the overall pattern of findings from the other field studies will take place in the next chapter.

Chapter Eleven: Summary and Implications

The first section of this chapter will consist of a summary of the six studies of helping behaviour presented in Chapters Five through Ten. General trends in the data will be highlighted, and the relationship of these findings to previous research will be discussed. Reasons for discrepant findings will also be considered. The next section will consider the theoretical implications of the data, in light of the discussion presented in Chapter Two. Attention will then be given to the usefulness of the taxonomic model employed in the present research, with emphasis being given to the question of the generalisability of the present findings. The final section of this chapter will consider further implications of the taxonomic model for both research and theorizing in the field of prosocial behaviour.

Summary of Findings

To allow a comparison of the results of the first 5 helping studies presented in Chapters five through nine, Figure 11.1 and Table 11.1 have been prepared. These show the percentage of subjects helping the investigator in communities at five levels of population size in the colour request study, the inaccurate directions study, the Multiple Sclerosis donation study, the hurt leg study, and the dropped envelopes study. A number of trends are revealed here. First, in all of the helping episodes other than the one involving dropped envelopes, there was a clear trend for helping rates to decrease as community size increased. A closer look at Figure 11.1 reveals that with most helping episodes, the rate of

helping was approximately the same in communities of up to 19,999 people (population level 1 to population level 3) with the major decline in helping rates beginning in communities of more than 20,000 people (population levels 4 and 5). Thus, it would appear that when communities reach a size of between 20,000 and 300,000 people, prosocial forms of behaviour between strangers are inhibited. The median size of communities in the sample at this level of population size was 28,483, indicating that even in cities of relatively small population size a decreased tendency to engage in helping behaviour was evident. It also can be observed in Figure 11.1 that the helping rate in the dropped envelope episode did not follow the same pattern as in the other studies, with helping rates being generally low regardless of community size.

It can also be seen in Figure 11.1 that there were consistent differences in the level of helping generated by each episode. Regardless of community size, the colour request generated the highest rate of helping. This was probably partially due to the fact that the assistance required was directly solicited, making the situation unambiguous for the subject. It is probably also due to the nonserious nature of the helping episode (its major defining characteristic in the helping taxonomy), making help-giving both easy to provide and perhaps even enjoyable. In this context, Staub (1978) has argued that nonserious forms of helping are likely to involve less cost on the part of helpers. The inaccurate directions episode generated the second highest level of helping, which possibly also reflects the fact that the situation was relatively unambiguous and helping was relatively easy to provide.

Table 11.1 Percent of Subjects helping in Communities at Five Levels of Population Size in Five Helping Episodes

	Population Level							
Helping episodes	1	2	3	4	5	Tau	two-tailed p value	n
Colour Request	82.4	81.1	84.6	71.9	55.4	-.21	p < .001	291
Inaccurate Directions	69.8	68.0	69.0	50.9	45.0	-.23	p < .001	288
Multiple Sclerosis Donation	43.9	39.1	37.7	22.8	9.4	-.27	p < .001	303
Hurt Leg	45.7	50.0	35.4	20.5	15.3	-.29	p < .001	226
Dropped Envelopes	15.2	11.7	6.6	11.5	17.9	.03	p > .10	271

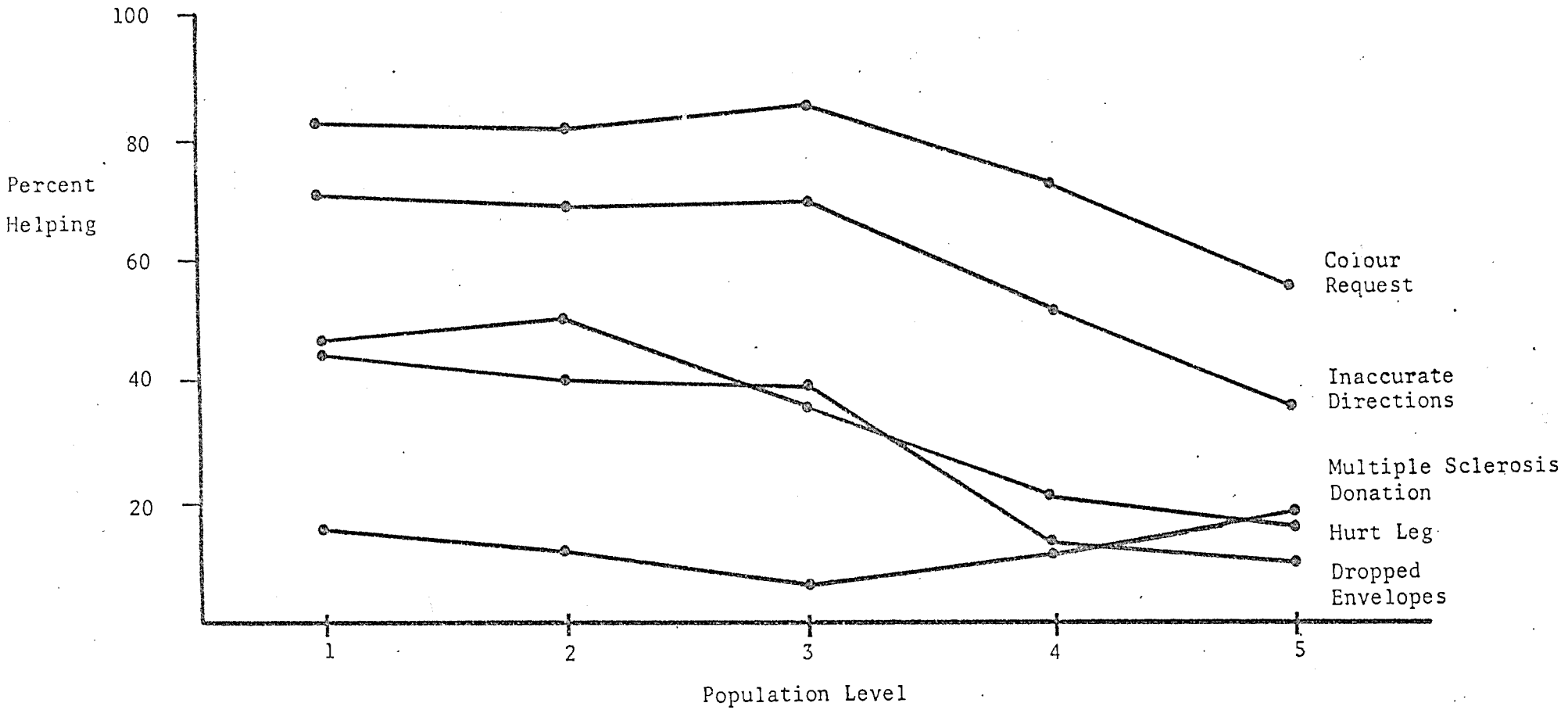

Figure 11.1 Percent of Subjects Helping in Five Studies in Communities at Five Levels of Population Size

The Multiple Sclerosis donation and the hurt leg episodes generated consistently lower levels of helping, regardless of the population size of the community. This is most likely due to the fact that the type of help required in these two studies was somewhat more difficult to provide. The major defining characteristic of the Multiple Sclerosis donation was that it was high on the giving dimension of the helping taxonomy. Research by Smithson, Amato, and Pearce (in press) indicates that people are much more reluctant to engage in forms of helping requiring "giving" than they are to engage in forms of helping involving "doing". Generally, the norm for giving appears to be less strong than the norm for doing, at least in Australian culture. In relation to the hurt leg episode, Staub (1978) argued that serious forms of helping are generally more costly to provide. Furthermore, it seems likely that serious situations, such as the present one, are likely to be more ambiguous and present bystanders with an unusual event requiring some sort of cognitive definition. Previous research has shown that situations of ambiguity inhibit help-giving (Clark & Word, 1972). Finally, helping rates were generally very low in the dropped envelope episode, possibly because the investigator's need for assistance was seen as being fairly low and no help was directly requested.

Figure 11.2 shows the mean Census nonresponse factor scores from Chapter Ten for communities at five levels of population size. It is apparent when comparing this figure to the previous one that the results of this study are quite different from the results of the five field studies. The highest mean factor score (representing a relatively high level of uncooperativeness in completing the

census) was found in the smallest communities, with larger communities generally having lower nonresponse scores (indicating less uncooperative behaviour). Using the original percentages of nonresponses to census questionnaires, rather than the factor scores, revealed a highly similar relationship, with the smallest towns having the highest percentage of residents leaving questions unanswered. (Reasons for these discrepant results will be considered shortly.)

Another way of summarizing the results of the six helping studies involves a comparison of the joint effects of both the population size and the isolation variables. These data appear in Table 11.2. In this table, the standardized partial regression coefficients for the population size and the isolation variables are presented for each of the six helping measures. In constructing this table, the scaled dependent measures were used when possible (i.e., in the colour request, hurt leg, Multiple Sclerosis donation, and census nonresponse studies). Dichotomous helping dependent variables were used for the inaccurate directions and the dropped envelopes studies. In the latter study, two dichotomous dependent measures were included: directly helping the investigator (the major dependent variable) and initiating conversation with the investigator (this was due to the fact that very few subjects actually helped the investigator in this study, but a larger number spoke to the investigator in a manner which could be considered, broadly, prosocial).

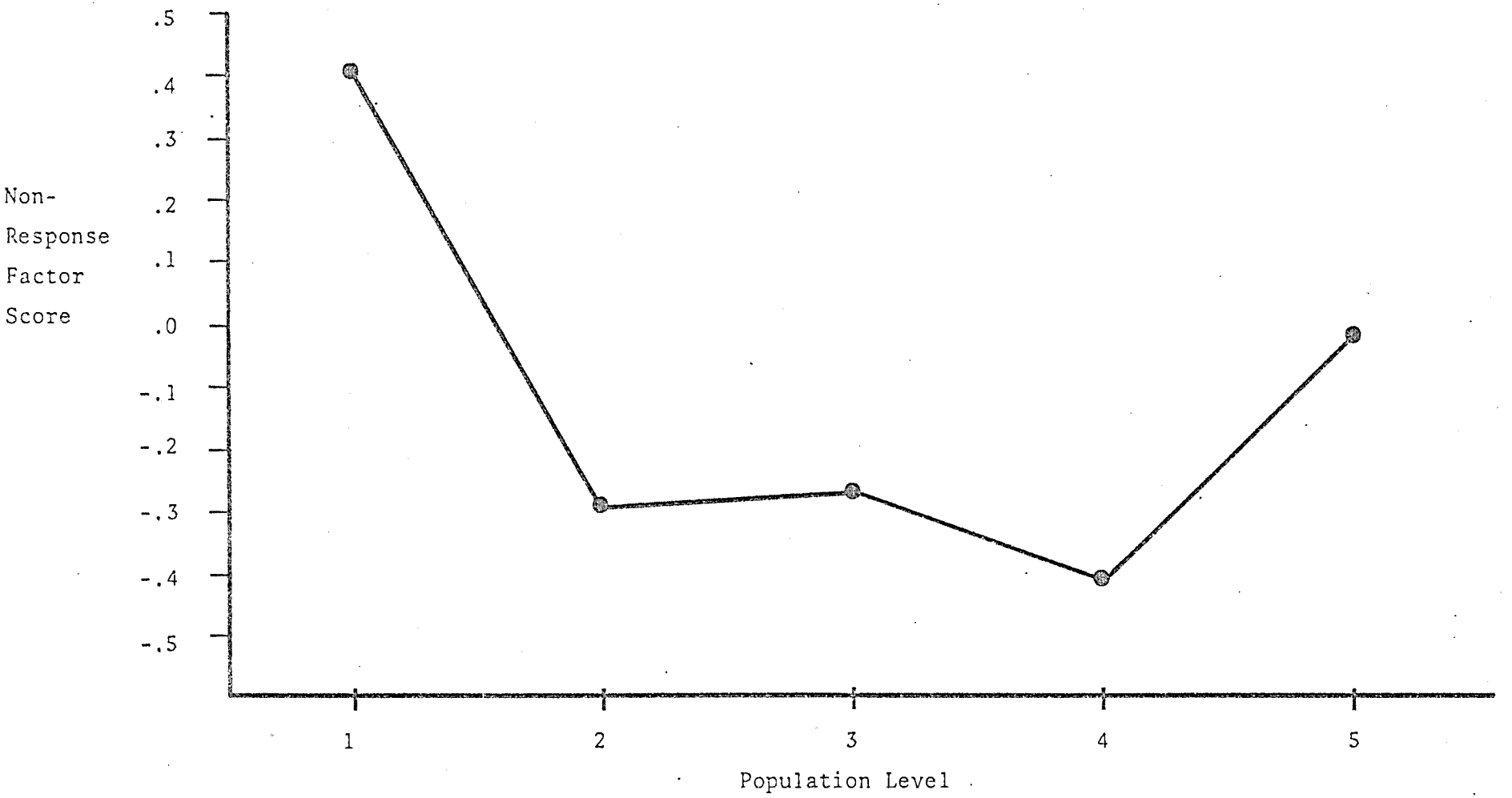

Figure 11.2 Mean Nonresponse Factor Score for Communities at Five Levels of Population Size

Table 11.2 Standardized Partial Regression Coefficients for the Population Size and Isolation Variables in Relation to Six Helping Episodes

	Helping Episodes					
Variable	Colour Request	Inaccurate Directions	Hurt Leg	Multiple Sclerosis Donation	Dropped Envelopes 1	Census Non-responses
Population Size (log)	-.47***	-.22**	-.20*	-.38***	-.01/-.26***	-.40*
Isolation	-.15*	-.04	.07	.09	-.04/-.19*	.31*

[1]First coefficient refers to direct help; second coefficient refers to speaking to the investigator

* $p < .05$

** $p < .01$

*** $p < .001$

Overall, inspection of the figure reveals that across the six studies, population size was negatively associated with helping. In the dropped envelopes episode, population size was not associated with helping but was negatively associated with speaking to the investigator. The major exception to this trend is in the census nonresponse study, where population size is negatively associated with nonresponse scores, indicating more prosocial responsiveness in the larger communities.

The results for the community isolation variable are mixed, with no significant associations occurring in the directions, hurt leg, and Multiple Sclerosis donation episodes. However, in the colour request study, isolation was negatively associated with helping and in the dropped envelopes study isolation was negatively associated with speaking to the investigator. Furthermore, isolation was positively associated with census nonresponse scores, indicating less cooperativeness in the more isolated communities. Therefore, in three out of six studies, community isolation was negatively associated with prosocial behaviour. In addition, although not reported in Table 11.2, isolation was negatively associated with the quality of help-giving in the inaccurate directions study (see Chapter 6). However, the coefficients for the isolation variable were generally quite low, indicating only a very weak effect.

A final comparison of the six studies is contained in Table 11.3 where the standardized partial regression coefficients are given for the six community factors and helping in each of the six studies. Inspection of this table reveals that the Urban

Development factor was negatively associated with helping in three studies (colour request, hurt leg, and Multiple Sclerosis donation) and was also negatively associated with nonresponse scores in the census study (indicating less uncooperative behaviour in larger communities). Foreign-Born Heterogeneity was negatively associated with helping in the colour request study and in the Multiple Sclerosis donation study, and was positively associated with nonresponse scores in the census study. Thus, helping levels were lower in more heterogeneous communties in three out of the six studies. This appears to support Wirth's (1938) argument regarding the importance of population heterogeneity in negatively affecting interpersonal behaviour in cities.

The effects of the other factors appear less important. Tourism had weak positive associations with helping in the colour request episode and with speaking in the dropped envelopes episode, but was positively associated with nonresponse scores in the census nonresponse study. The effects of the Social Class factor were also generally negligible, with subjects of low social class being somewhat less helpful in the directions study but somewhat more positive in the dropped envelopes study. The Transient Black Population factor had weak negative associations with two prosocial measures, and the Community Instability factor revealed no associations with any dependent measures. The latter finding thus provides no support for Gans (1968) assertion that residential instability is a major variable in determining the quality of interpersonal interactions in a community.

Table 11.3

Standardized Partial Regression Coefficients for Six Community Factors in Relation to Six Helping Episodes

	Helping Episodes					
Community Factor	Colour Request	Inaccurate Directions	Hurt Leg	Multiple Sclerosis Donation	Dropped Envelopes	Census Response
Urbanism	-.24***	-.09	-.30***	-.41***	.06 / -.08	-.37**
Foreign-born Heterogeneity	-.21***	-.15*	.09	-.02	.10 / -.07	.27*
Tourism	.15*	.04	.00	-.03	.10 / .18**	.29*
Social Class	.04	-.15*	-.02	.04	.03 / .19**	.08
Transient Black Population	-.11*	.02	.06	.08	.07 / .16*	.23
Community Instability	.03	.07	-.09	.01	-.04 / .04	-.04

* $p < .05$

** $p < .01$

*** $p < .001$

To summarize the preceeding material, three variables stand out as being of importance in the present research. The variable with the most consistent relationship to prosocial behaviour was the population size (Urban Development) variable. Generally its relationship with helping was negative, except in the census nonresponse study where its relationship was essentially positive (but with a weak curvilinear trend). Isolation and heterogeneity also stand out as being of some importance, although their relationships with prosocial behaviour were weaker and only apparent in three out of six studies each. Generally, however, levels of prosocial behaviour were lower in the more isolated communities and in the more heterogeneous communities.

Consistency with Previous Research

In Chapter One of this volume it was argued that research from a number of areas (field studies of helping behaviour, laboratory studies of urban and rural subjects, field studies of related prosocial behaviours such as affiliativeness, and child-developmental studies) suggested a greater prosocial responsiveness on the part of people in rural settings as opposed to urban settings. However, it was stated that this generalisation was a highly tentative one due to the considerable amount of contradictory evidence available and to a number of methodological weaknesses in previous research. The overall trend of the present series of studies, however, supports the notion that people in large cities are less prosocially responsive than people in small towns toward strangers. Therefore, the overall trend of the present research is consistent with previous studies indicating lower levels

of helpfulness in large cities (Amato, 1981; House & Wolf, 1978; Korte & Ayvalioglu, 1981; Korte & Kerr, 1975; Levine, Vilena, Altman, & Nadien, 1976; Merrens, 1973; Rushton, 1978; Takooshian, Haber & Lucido, 1977).

Although the major trend in the present series of studies was for population size to be negatively associated with helping behaviour, two studies did not show this result. In the dropped envelopes study, it is likely that the measure used was simply not sensitive enough to reveal differences between communities. As mentioned earlier, it is possible that subjects perceived the investigator's need for assistance to be rather low, since he was capable of picking up the envelopes within a few seconds by himself. Furthermore, no request was actually made by the investigator for assistance. Hence, this measure may have generated rates which were too low to capture any inter-community differences.

The explanation for the findings of the study based upon nonresponse rates to the Australian census is more complex. First, it is apparent that the measure used in this study was different from the other five measures in a number of ways. First, it involved the use of archival data rather than observational field data. Second, it was based upon an aggregate level of analysis rather than an individual level of analysis. Thus, the differences in the nature of the data may be responsible for the somewhat "deviant" results of this study.

A more interesting explanation involves the position of this helping measure in the multidimensional helping space developed in Chapter Three. Correctly and completely answering the questions on

the census questionnaire was a form of helping high on the formal, planned dimension of the taxonomy. Consideration of the two measures used to represent this dimension suggests that small town dwellers may be more helpful when the situation involves informal, casual, and spontaneous behaviour. However, a form of helping such as filling out a census form which is highly formalized, planned, and even bureaucratized, might be an alien form of helping with which people in smaller towns are not familiar. The formality and unfamiliarity of the task may have decreased the level of assistance provided by small town dwellers.

This tendency may have been reinforced by the fact that the assistance was being provided to the federal government. In-group/out-group considerations may be relevant in this context. It is likely that people from very small communities have fewer dealings with the government and may resent it more when the government intrudes into their everyday lives. As opposed to a person encountered on the local sidewalk (even if a complete stranger), the federal government may represent a distant bureaucracy to whom the small town dweller feels little sense of responsibility or obligation. This being the case, small town residents may have been doubtful or even suspicious about the purposes for which the census questions were being asked.

These considerations illustrate the potential usefulness of a taxonomic model such as the one described in Chapter Three to interpret research findings. While a general trend was observed in the present series of studies for

people in smaller communities to be more helpful, this did not hold for a form of helping which was highly formal and planned. This is consistent with the commonsense image of the small town resident as being helpful in a casual and spontaneous way.

Later development of the helping taxonomy presented in Chapter Three was described by Smithson and Amato (in press). In this research, a fourth dimension was discovered, the best interpretation of which appeared to be personal versus anonymous helping. Because this dimension was not included in the present research, all the forms of helping reported in this volume fall into the anonymous region of the helping space. However, a number of studies have been conducted investigating personal forms of behaviour between friends in urban and rural areas. The general finding from this line of research appears to be that people in large cities have just as many friends, see them as often, and are as intimate with them as are people in small towns (Reiss, 1959; Key, 1968; Sutcliffe & Crabbe, 1963; Kasarda & Janowitz, 1974; Franke, 1980). This suggests that rates of personal helping, the kind of help one is most likely to give to a friend, may be the same in large cities and small towns. If this is true, it means that the unhelpfulness of urbanites is also limited to those forms of helping in the "anonymous" region of the taxonomy.

It is important to note, however, that the isolation variable (an alternative way of conceptualising the extent to which a community is urban or rural) was generally negatively associated with helping. This indicates that if population size is held constant, communities which are more rural because of their greater

isolation may be less helpful places than communities which are less isolated, and hence, more urban. This means that categorising a community as urban or rural on the basis of population size can lead to an entirely different conclusion about the relationship between urbanism-ruralism and prosocial behaviour than categorising it on the basis of its degree of geographical isolation. This suggests that researchers should be considerably more careful in future studies in their conceptualisation of urbanism and ruralism. It is interesting to note that among the four field studies reviewed in Chapter One which reported significantly lower rates of helping among rural subjects, one was conducted in small towns in the American midwest (Forbes & Gromoll, 1977), one was conducted in small towns in Oklahoma (Hanson & Slade, 1977), and one was conducted in small towns in far north Queensland, Australia (Amato, 1978). In each of these studies, the small towns sampled may have been considerably more geographically isolated than the small towns sampled in other research, for example, on the east coast of the United States (eg., Korte & Kerr, 1975; Levine, et al., 1976). This may be part of the reason why these three studies found people in rural areas to be significantly less helpful than people in urban areas. Failure to consider the multidimensional nature of urbanism-ruralism could conceivably result in a number of contradictory and confusing research findings.

To expand upon this point, previous researchers, and theorists, have generally treated urbanism as a unidimensional construct, with population size being seen as determining the other structural and social psychological aspects of city life. Even Wirth (1938), who analyzed cities in terms of population size, density, and

heterogeneity, implied that all three characteristics generally vary together. Yet, while large cities are almost certainly heterogeneous, small towns can very substantially in their degree of homogeneity/heterogeneity, depending upon historical factors and settlement patterns. Likewise, geographical isolation has rarely been considered in the literature, although it would appear to be an implicit component of the concept of ruralism. The relationship of isolation to city size is similar to that of heterogeneity, in that large cities cannot, by definition, be isolated. Nevertheless, small towns can vary substantially in their degree of isolation depending upon their proximity to a major metropolitan area. Thus, small towns can be seen as exhibiting substantially more variance on a number of characteristics than has generally been acknowedged in the past. This suggests that studies involving a comparison between a single large city and a single small town can be quite misleading in that the small town studied may be similar or dissimilar to the large city in terms of isolation and heterogeneity. The main point which is being argued here is that urbanism/ruralism is a complex, multidimensional concept which cannot be reduced to a simple population size continuum. The empirical demonstration that with city size held constant, geographical isolation and population heterogeneity exhibit independent influences on prosocial behaviour, can be seen as an important contribution of the present research.

Theoretical Implications

A discussion of the theoretical implications of the present series of studies must necessarily be somewhat brief, for the major aim of this research was not to test alternative hypotheses derived

from competing theoretical perspectives. Indeed, it may be the case that no "critical test" of alternative theoretical explanations is possible, for many of the perspectives reviewed in Chapter Two in this thesis make highly similar predictions about levels of helping among people in urban and rural environments. Nevertheless, the data described in this volume do have implications, either direct or indirect, for a number of the perspectives and explanations put forward for urban-rural differences in prosocial responsiveness. Each of these will be considered.

First, the data from the six helping studies are broadly consistent with the information overload perspective, in that helping rates were generally lower in the more "overloaded" urban settings. However, it is interesting to note that helping rates began to decline in cities of only slightly more than 20,000 people. Past discussions of overload (Milgram, 1970) have implied that overload will not occur until population size is quite large. The fact that helping rates were lower even in moderately sized communities indicates that if the overlaod explanation is to be relevant, it may be necessary to reconceptualize the overload notion somewhat. Thus, one might conceive of partial overload under conditions of moderate social/environmental stimulation as opposed to the earlier image of overload as an all-or-nothing short-circuiting reponse to intense levels of stimulation. It may also be the case that a consideration of the immediate physical and social environment might reveal that cities of around 20,000 people are more similar to large metropolitan areas than they are to very small towns.

The fact that helping rates were also lower in moderately sized communities presents problems for the deindividuation perspective. Deindividuation, as discussed by Zimbardo (1969), implies an extreme loss of self-restraint under conditions of crowding, arousal, and intense stimulation. It is unlikely that nonhelpers in moderately sized communities were deindividuated in the sense with which Zimbardo used the term. However, it is possible that cities of more than 20,000 people foster conditions of anonymity which cannot be attained in communities of fewer people. Since anonymity has been found to be associated with lower helping rates (Solomon, et al., 1981), the anonymity aspect of the deindividuation perspective may still be of relevance.

The urban-stress pathology model, however, does not appear to account for the data very well. While rates of helping in the largest cities were generally lowest, as the model suggests, rates of helping in moderately sized communities were also substantially lower than in small towns. It is unlikely that cities of only slightly more than 20,000 people create high levels of urban stress in the form of noise, crowding, and pollution for their inhabitants. Thus, the urban stress-pathology model cannot account very well for the gradual falling off in the rate of helping in the communities of intermediate size.

The diffusion of responsibility perspective is generally consistent with the data presented in this volume. As Latané and Darley (1970) argued, an increase in group size results in a corresponding decrease in the likelihood that a given individual will intervene. Since levels of pedestrian density were positively

associated with community size, it would be expected that helping rates should regularly decline as community size increases, due to the greater number of potential helpers available.

In this sense it can be seen that the social inhibition perspective differs from information overload theory, deindividuation theory, and the urban-stress pathology model in that it views one critical community characteristic, the presence of other people, as being related to helping in a manner such that gradual change in the independent variable is related to gradual change in the dependent variable. The other three perspectives have more often been presented as "critical mass" theories in the sense that a sufficiently large urban concentration is seen as being required to bring about the anticipated shift in the prosocial orientation of the urbanite. Of course, there may be no inherent reason why these theories could not be presented differently, suggesting notions of partial overload, partial deindividuation and anonymity, or moderate reactions to moderate levels of stress. The fact that these perspective have been presented in all-or-nothing terms probably reflects the concern of most theorists working in this area to describe life in very large cities as opposed to medium-sized communities.

The setting mood perspective is also generally consistent with the data from the six helping studies reported in this volume. It is likely that as community size increased, the emotional reactions of subjects to their environments involved lower levels of pleasure, higher levels of arousal, and lower levels of dominance - conditions which may have produced decreasing levels of prosocial involvement

with strangers. This perspective then, is similar to the social inhibition perspective in that it suggests a gradual change in the prosocial behaviour or people in communties of various sizes.

The social-structural perspective of Wirth (1938) also received support from the studies described in this volume. In three out of six studies, population heterogeneity (in terms of the number of foreign-born and bilingual residents) was negatively associated with helping. This finding is also consistent with those studies of helping behaviour which found lower helping rates for dissimilar others (eg., Karabenik, Lerner & Bochner, 1973). Thus, while certain aspects of Wirth's analysis of urbanism have been strongly criticized (eg., Gans, 1962, 1968; Fischer, 1976) it appears that at least one major aspect of Wirth's theory is consistent with the present data.

The in-group/out-group perspective received mixed support from the data reported here. While this perspective predicts a lower rate of helping among rural people, the majority of studies reported in this volume found higher rates of helping among people from small towns. However, the in-group/out-group perspective was supported by the results of the sixth study based upon nonresponse rates to the 1976 Australian census. As argued earlier, it may have been the case that small town residents perceived the federal government as being an extreme out-group and thus felt less obligation to provide assistance. This perspective appears to also be the only one which can account for the finding that in three studies (in terms of actual helping rates) and in one further study (in terms of the quality of help-giving), people in more remote, isolated areas were

significantly less helpful than people in less isolated communities. Thus, it is likely that people in isolated areas are less familiar with dealing with strangers and outsiders. As such, their in-groups may be less expansive than those of people living in less isolated communities where large numbers of strangers are frequently encountered. Further research may help to clarify the kinds of in-group/out-group distinctions made by people living in small communities and isolated areas and the implications this has for helping behaviour.

The pace-of-life explanation for lower rates of helping in urban areas received no support from the present series of studies. Walking speed was not significantly correlated with helping behaviour in any of the five behavioural field studies reported in this volume. Furthermore, explanations based upon the assumption of differences in population structure between urban and rural areas were not supported by the present research. Although samples from areas of high and low population differed in age and sex distributions in a number of studies, neither age nor sex were significantly associated with helping in any study. Furthermore, communities differed substantially in terms of social class, amount of tourism, presence of a transient Black population, and residential instability. Yet none of these variables were substantially or consistently correlated with levels of helping behaviour. The finding that community instability had no relationship with helping in any of the six studies thus provides no support for Gans (1968) contention that residential instability, rather than population size, density, and heterogeneity, is responsible for the impersonal and superficial forms of behaviour in

urban areas. Finally, the present data are not able to speak to the explanation based upon perceptions of crime rates.

Further research may help to differentiate more clearly between various theoretical explanations, indicating which can account for inter-community variation in levels of helping behaviour most adequately. However, it is suggested here that the various theoretical perspectives discussed in this volume should be viewed as complementary, rather than as competing explanation for urban unhelpfulness. It is likely that people in large cities are inhibited from helping for a variety of reasons. For example, urbanites at times may be exposed to high levels of social stimulation, experience stress during exposure to downtown noise and rush hour traffic, and feel unpleasant and even unsafe when walking through deteriorating inner city areas. At other times the urbanite may indeed feel "lost in the crowd". At such times, the experience of anonymity may weaken the usually operative normative pressure to lend assistance to others, and it may be very easy to diffuse responsibility onto other potential helpers. Alternately, urban dwellers may frequently find themselves in situations in which a person in need is of a different "race" or speaks a different language - a situation in which urban individuals may feel uncomfortable or be uncertain as to the appropriate form of response. All of these various aspects of urban living may place certain constraints on the likelihood that the urbanite will exhibit prosocial forms of behaviour.

Before concluding this discussion, it should be pointed out that the research presented in this volume has not made it possible to establish whether the observed differences in rates of helping behaviour between people in urban and rural areas are primarily due to temporary effects of urban and rural environments or whether they are the result of internalized personality or attitudinal differences between urbanites and ruralites. As discussed in Chapter One, this question has generally not been addressed by earlier research in this area. Although the various theoretical perspectives outlined in Chapter Two have proposed different answers to this question, no empirical research has allowed a resolution one way or the other. Research to determine the extent to which the unhelpfulness of big city dwellers is an internalized disposition which generalizes across a number of different environmental settings would be a useful and interesting project to carry out at some future date.

Implications of the Taxonomy for Theory and Research

In this section, the relevance of the taxonomic approach adopted in this volume to other aspects of the study of helping behaviour will be considered. It is argued here that the existence of a cognitively-based taxonomy of helping episodes has implications which go beyond the present research on urban-rural differences in helping reported in this volume. The topic of urban and rural helping will therefore be set aside for the remainder of this discussion so that more general issues can be raised.

An obvious organising advantage of a taxonomy, in any field of inquiry, is that it allows researchers to establish the range, and limitations, of theoretical and empirical generalisations. Yet, while the developement of empirically-derived classificatory schemes has been a major preliminary step in the natural sciences like chemistry and biology, this activity has received little attention in many areas of social psychology. This may be partially due to the fact that social psychology has modelled itself more after the parametric sciences than the structural sciences (Backman, 1979). The absence of taxonomic concerns may also be due to the greater difficulty inherent in classifying social behaviours, which are dependent upon the definitions of social actors for their meanings, as compared to the physical, more "objective" subject matter of the natural sciences. Thus, while it is a relatively straightforward task to cluster the phenotypic charactersitics of living organisms into their basic types, it is a more difficult problem to identify the salient underlying structural similarities in social behaviour. The relatively recent development of rigorous, descriptive quantitative techniques like multidimensional scaling and the availability of computer packages to implement them has probably led to an increased interest in this type of research activity in social psychology.

The need for a taxonomic classification of one's subject matter to guide theory and research seems obvious. Intuitively, it is apparent that the kind of help given when intervening in emergencies is different from the kind of help given when donating money to charities, providing emotional support to friends and family, or doing small favors for strangers. Yet social psychologists have

persisted in refering to all of these behaviours, and more, as "helping" and have continued to make the decision quite arbitrarily as to which kind of helping to include in their research. The result has been a large number of research pieces which examine the effect of some variable such as empathy on helping, but give no specification as to how empathy might be differentially involved in one form of helping as opposed to another.

It is argued here that serious attention to the perceived characteristics of helping types would allow researchers to make more precise generalisations about the factors involved in specific helping processes. This would result in a contingency model of helping in which certain processes and variables are held to be relevant for helping episodes lying in one region of the space but less relevant for helping episodes lying in other regions. It is anticipated that explanations for helping may differ substantially as one considers the full range of helping types.

In this section, three implications of this "meta-theoretical" contingency model will be discussed. These involve: (1) Establishing the perimeters of theoretical generalisations and the delineation of "relevancy domains" for classes of variables. (2) Comparing the results of separate empirical studies and resolving apparent contradictions in the literature. (3) Consideration of person by situation interactions.

Theoretical generalisations and the helping taxonomy

First, a taxonomy can be useful in establishing the limitions of theoretical generalisations about helping behaviour. One example refers to attribution theory. According to Weiner (1980), attributing the cause of another's need to uncontrollable factors increases the amount of sympathy experienced for the victim which in turn leads to a greater likelihood that help will be given. Like most theories, this formulation is assumed to hold good for a large range of helping episodes. His comment, "The model outlined...is expected to generalise across a variety of help-giving situations" (p. 197) is typical of much of the theoretical material on helping. But how can this "variety of help-giving situations" be established? What is required is some sort of organising model to guide the choice of replication contexts.

It is likely that there are many situations in which knowing the cause of another's dependency is not relevant to the decision to offer help. In this context the seriousness dimension of the helping taxonomy can be considered. It could be hypothesized that attribution processes are most salient when seriousness is low or moderate, and less salient when seriousness is high. For example, when someone's life is in danger, a bystander's inference that the victim is responsible for his own misfortune, and the negative evaluation this entails, are likely to be over-ridden by sympathetic concern for the victim's extreme distress or the conviction of the bystander's personally held norms. Research supporting this hypothesis was conducted by Smithson, Amato, and Pearce (in press). In this study, based upon a questionnaire simulation of an automobile accident, attributions about the cause of the victim's distress (either his own fault due to careless driving or not his

own fault due to a punctured tire) were found to be related to a desire to help the victim in a nonserious situation in which there was no personal injury. However, in a more serious accident in which the victim was said to be physically injured, attributions about the cause of the accident were unrelated to a desire to help the victim. A similar conclusion was reached by Staub (1978) who argued on the basis of a pilot study that an observer's attributions about a victim's responsibility for his or her distress are of less salience when the victim's need is serious.

Another example refers to those theories of helping (such as cognitive-developmental theory) which emphasize stable, intra-psychic structures, traits or abilities. It is likely that these theories have greater salience for forms of helping which are planned rather than spontaneous. In a completely spontaneous situation, the individual may be forced to make a decision very quickly. Often these situations involve strangers or events which are unfamiliar to the individual. In highly ambiguous situations like these, it is not likely that individuals will have time to assess their own beliefs and values or consider the match between their own personalities and abilities and the help required. Instead, the individual is more likely to rely upon situational cues such as the behaviour of others, the degree of cost involved, or his/her mood in deciding whether to give assistance. However, with planned forms of assistance, there is less immediacy involved, allowing the individual time to think over and consider all the implications of helping. Since the individual is "at a distance" from the helping situation, it is unlikely that situational variables will be of much salience. Instead, the individual's

decision will more likely reflect his or her interests, beliefs, values, and competences. Research supporting this notion was provided by Benson, et al (1980) who found that intrapsychic variables, such as religiosity and social responsibility, predicted a variety of "nonspontaneous" forms of helping, such as doing volunteer work or tutoring people without remuneration. This reasoning suggest that entire classes of variables (such as situational versus intrapsychic variables) may have limited domains of relevancy.

The development of a contingency model of helping behaviour in which certain classes of variables and types of explanations are systematically related to certain categories of helping would seem a desirable direction for future study. It may turn out that certain variables or theories are more general in that they have relevance for a wide range of helping situations. Others may turn out to be quite narrow in focus. Nevertheless, the accuracy of predictions about behaviour in specific situations would be improved by taking into consideration the nature of the helping episode and its place in the taxonomic scheme. Such a procedure would be comparable to that which exists in most other scientific fields of study.

Comparing separate studies and resolving inconsistencies

Social psychologists have been aware of the difficulty involved in generalising research findings across qualitatively different types of helping. For example, Bar-tal (1976) claims that emergency and non-emergency situations arouse different social norms, motives, and hence response sets (p. 51). However, while the distinction

between emergency and non-emergency types of helping is an obvious one, researchers have largely been in the dark regarding the salient distinguishing features of most other forms of helping, and hence, the degree to which they can be meangingfully compared.

Lack of attention to the qualitative differences between different forms of helping has probably led to a number of apparently contradictory findings in the literature. One example would be the findings regarding sex differences in helping. While a large number of studies have found no differences between males and females in rates of helping, a number of other studies have found just such differences. As Bar-tal (1976) has suggested, "A possible explanation for this discrepancy lies in the nature of the required act of help manipulated in the studies" (p, 61).

A search through the literature reveals that studies reporting significantly higher rates of helping for males than females have used measures such as calling a garage (Gaertner & Bickman, 1971), picking up a hitch-hiker (Pomazal & Clore, 1973), fixing a flat tire (Bryan & Test, 1967) picking up a dropped package (Page, 1977), assisting a collapsed person on the subway (Piliavin & Piliavin, 1972) and driving a stranger in distress to his home (Shotland & Huston, 1979). All of these measures involve active, doing, spontaneous, anonymous forms of assistance. This trend is reinforced by an analysis of archival data undertaken by Lay, Allen, and Kassirer (1974) who found that of the 101 recipients of the Carnegie Hero Medal, 96 were male. Most of the situations for which the medal was awarded involved emergency situations such as drownings, burning buildings or automobile accidents. Only a small

number of studies have reported significantly higher rates of helping for females. However, these studies generally used forms of helping which were more planned, formal, personal, and were less likely to involve direct intervention. These include: donating to a charity (Nadler, Romek, Shapira-Friedman, 1979), yielding to a dependent partner in a simulation game (Schopler & Batson, 1967), and helping a younger child with a difficult task (O'Bryant & Brophy, 1976). Other studies have found females students rated higher on "service" (Hartshorne, May & Maller, 1929), considerateness and social responsibility (Bronfenbrenner, 1961). In addition, a variety of studies indicate that females score higher on empathy measures than males (Hoffman, 1977).

Thus, it may be that situations which elicit spontaneous, anonymous, active, doing forms of assistance (such as providing emergency intervention or physical help) may activate a norm which is more salient for males than for females. Females, however, may be more attuned to situations which require planned, personal, sharing forms of assistance (sharing possessions, providing emotional support and comfort, etc.). This might reflect different perceived competencies resulting from the differential socialisation patterns of our culture.

The point of this example is to suggest that before results of studies can be meaningfully compared, the nature of the helping task must be taken into account. Apparent contradictory findings may turn out to be less contradictory than imagined if the helping situations used have very different characteristics. Also, the example regarding sex differences suggests that different groups of

individuals may have preferences for different forms of helping. This point leads to a consideration of the problem of specifying person by situation interactions.

Personal characteristics and helping episode characteristics

Another area in which the present model may prove useful is in the search for personal variables relevant to helping. Some approaches, such as that of Pomazal and Jaccard (1976) imply that an individual's beliefs, values, motivations, and normative expectations about certain types of helping can be strong predictors of helping behaviour, but only when the type of helping is narrowly specified (eg., donating blood). This contrasts with other investigators (eg., Rushton, 1980, Staub, 1974, 1978) who have tried to find personality traits which predict helping behaviour across wide varieties of situations.

The present model suggests a middle-range approach, one which recognizes that personal characteristics (such as personal norms, prosocial values, and personality characteristics) may predict behaviour in certain regions of the multidimensional space but not in others. Some research suggests that individuals have preferences for certain types of helping (Gergen, Gergen, & Meter, 1972). Data presented by Smithson, Amato, and Pearce (in press) indicated that people intending to have careers in the helping professions of social work and clinical psychology had preferences for planned-personal and personal-doing forms of helping. This notion is consistent with Staub's (1978) position regarding the activating potential of situations for personal, prosocial goals. Staub argued

that a person's behaviour in a particular situation is a function of both the goals the person holds and the extent to which a given situation activates these goals. As he stated:

> Even if certain people have similar goals, the range of applicability of their goals can vary. For example, some people may apply their concern about other's welfare only when physical need is involved....We have to develop measurement devices that will determine not only the existence and intensity of various personal goals, but also the specific ranges in which they are applicable (p. 47).

A helping taxonomy like the present one may be useful in specifying the ranges of situations in which a person's prosocial goals, personal standards, perceived competencies, values, or personality might lead to helping. For example, some people may be eager to help family and friends in personal and intimate situations, but feel little compulsion to provide anonymous help to strangers. Likewise, others may be quite helpful in day-to-day situations, yet feel that it is best not to become involved in emergency situations. Furthermore, some people are continually involved in formal, planned, organisational forms of helping while others actively avoid this type of involvement. If the cognitively-based taxonomy presented in this volume has isolated salient characteristics which people use to classify helping episodes, then it should aid in finding the ranges

within which people's concerns and tendencies are likely to operate. This line of thought is consistent with past research which indicates that behavioural consistency is usually found only across very similar situations (Mischel, 1968). Of course, the extent of similarity is a question which must be decided by the actor, not the observer.

Conclusion

In conclusion, it is suggested that the taxonomic approach adopted in this volume may have relevance for a number of theoretical and research areas in social psychology other than helping. In the present series of studies, the helping taxonomy developed in Chapter Three of this volume was used to select six helping measures which were substantially different from each other on three major dimensions. Collection and analysis of data revealed that with four of the six measures, urbanites were less helpful than ruralites. Therefore, the effect appeared to be a general one. However, it was then possible to use the taxonomy to make statements about the limitations of this effect. Thus, urban unhelpfulness was not apparent in the helping episode representing a planned, formal type of assistance, and may not be apparent with personal and intimate forms of assistance. Such a general procedure for interpreting and integrating research findings could be useful in a number of other research areas as well.

The failure of researchers in this, and in other areas of social psychology, to consider the location of their behavioural measures in a larger episode space has probably led to the production of a substantial amount of contradictory and inconsistent findings which are difficult to integrate conceptually. In some cases, more precise theoretical refinements are necessary to clear up existing inconsistencies. In these theoretical refinements, taxonomic considerations often play a major role. In most cases, however, it would make sense to develop working taxonomies of behavioural domains before large numbers of studies are conducted in an area, thus assisting the theoretician in his or her struggle to conceptually integrate entire fields of research. For example, research on the behavioural effects of crowding has produced contradictory findings, with some studies showing negative effects and some studies showing no effects or even positive effects of high density situations. A taxonomic organisation of crowding situations, as seen from the point of view of the person in the situation, might be useful in helping to determine why high density situations produce a variety of reactions in people exposed to them. Applied to a number of diverse research areas, such a procedure may be useful in overcoming the general problem of noncumulative research which social psychology has faced in the last several decades.

REFERENCES

Adams, B.N. Interaction theory and the social network. Sociometry, 1967, 30, 64-78.

Alexander, C. The city as a mechanism for sustaining human contact. In J. Helmer & N.A. Eddington (Eds.) Urbanman: The psychology of urban survival. New York: The Free Press, 1973.

Allen, B. & Wilder, J. In-group/out-group behaviour and perceived similarity. Journal of Personality and Social Psychology, 1975, 48, 603-617

Altman, I. The environment and social behavior: Privacy, personal space, territory, and crowding. Monterey, CA: Brooks/ Cole, 1975.

Amato, P.R. City versus country: Friendliness and helping behaviour in Queensland. Paper presented at the Annual Conference of the Sociological Association of Australia and New Zealand, Brisbane, 1978.

Amato, P.R. City size, sidewalk density and friendliness toward strangers. Journal of Social Psychology, 1980, 111, 151-152.

Amato, P.R. Urban-rural differences in helping: Behavior in Australia and the United States. Journal of Social Psychology, 1981, 114, 289-290.

Amato, P.R. The effects of environmental complexity and pleasantness on prosocial behaviour: A field study. Australian Journal of Psychology, 1981, 33, 285-295.

Amato, P.R. The impact of the built environment on prosocial and affiliative behaviour: A field study of the Townsville

city mall. Australian Journal of Psychology, 1981, 33, 297-303.

Amato, P.R. & McInnes, I. Affiliative behaviour in diverse environments: A consideration of pleasantness, information rate, and the arousal - eliciting quality of settings. Unpublished manuscript, Department of Behavioural Sciences, James Cook University of North Queensland, 1981.

Appley, M.H. & Trumbull, R. On the concept of psychological stress. In M.H. Appley and R. Trumbull (Eds.) Psychological stress. New York: Appleton, 1967.

Appleyard, D. & Lintell, M. The environmental quality of city streets: The residents' viewpoints. In N.C. Kalt and S.S. Zalkind (Eds.) Urban problems: Psychological inquiries. New York: Oxford University Press, 1976.

Ashton, N.L. & Severy, L.J. Arousal and cost in bystander intervention. Personality and Social Psychology Bulletin, 1976, 2, 268-272.

Backman, C. Epilogue: A new paradigm? In G. Ginsburg (Ed.) Emerging strategies in social psychological research. New York: Wiley, 1979.

Baker, R.J. & Nelder, J.A. The GLIM system (Release 3) Generalised linear interactive modelling. Oxford: Numerical Algorithms Group, 1978.

Barker, R.G. Ecological psychology: Concepts and methods for studying the environment of human behaviour. Stanford, California: Stanford University Press, 1968.

Baron, R.M. & Rodin, J. Personal control as a mediator of crowding. In A. Baum, J.E. Singer & S. Valins, Advances in environmental psychology. Volume 1. The urban environment. Hillsdale, New Jersey: Lawrence Erlbaum, 1978.

Barron, F. Complexity-simplicity as a personality dimension. Journal of Abnormal and Social Psychology, 1953, 48, 163-172.

Bar-tal, D. Prosocial behavior. New York: John Wiley & Sons, 1976.

Benson, P.L., Dehority, J., Garman, L., Hanson, E., Hochschwender, M., Lebold, C., Rohr, R. & Sullivan, J. Intrapersonal correlates of nonspontaneous helping behavior. Journal of Social Psychology, 1980, 110, 87-95.

Berkowitz, L.A. A laboratory investigation of social class and national differences in helping behavior. International Journal of Psychology, 1966, 1, 231-240.

Berkowitz, L. & Friedman, P. Some social class differences in helping behaviour. Journal of Personality and Social Psychology, 1967, 5, 217-225.

Berlyne, D.E. Conflict, arousal and curiosity. New York: McGraw Hill, 1960.

Berndt, R.M. (Ed.) Aborigines and change. Australia in the '70s. New Jersey: Humanities Press, 1977.

Bickman, L., Teger, A., Gabriele, T., McLaughlin, C., Berger, M., & Sunaday, E. Dormitory density and helping behaviour. Environment and Behaviour, 1973, 5, 465-490.

Billig, M. Social psychology and intergroup relations. London: Academic Press, 1976.

Billig, M. & Tajfel, H. Social categorization and similarity in intergroup behavior. European Journal of Social Psychology, 1973, 3, 27-52.

Blalock, H.M. Social statistics. New York: McGraw-Hill, 1960.

Blumer, R. Symbolic interactionism. Englewood Cliffs: Prentice Hall, 1969.

Booth, A. Urban crowding and its consequences. New York: Praeger, 1976.

Bornstein, M.H. & Bornstein, H.G. The pace of life. Nature, Feb. 19, 1976, 259, 557-559.

Bott, E. Family and social networks. London: Tavistock, 1971.

Brehm, J.W. A theory of psychological reactance. New York: Academic Press, 1966.

Bronfenbrenner, U. Some familial antecedents of responsibility and leadership in adolescents. In L. Petrulo and B.L. Bass (Eds.), Leadership and interpersonal behavior. New York: Holt, 1961.

Bryan, J.H. & Test, M.A. Models and helping. Journal of Personality and Social Psychology, 1967, 6, 400-407.

Bultena, G. Rural-urban differences in familial interaction. Rural Sociology, 1969, 34, 5-15.

Calhoun, J.B. Population density and social pathology. Scientific American, 1962, 206, 139-146.

Campbell, D.T. Ethnocentric and other altruistic motives. In D. Levine (Ed.) Nebraska symposium on motivation. Lincoln: University of Nebraska Press, 1965.

Carroll, J.D. & Chang, J.J. The MDS (x) series of multidimensional scaling programs: INDSCAL program. Report No. 36, University of Edinburgh Program Library Unit, 1977.

Carroll, J.D. & Chang, J.J. The MDS(x) series of multidimensional scaling programs: PREFMAP program. Report No. 38, University of Edinburgh Program Library Unit, 1977.

Christian, J.J. The pathology of overpopulation. Military Medicine, 1963, 128, 571-603.

Clark, R.D. & Word, L.E. Why don't bystanders help? Because of Ambiguity? Journal of Personality and Social Psychology, 1972, 24, 392-401.

Cohen, S. Environmental load and the allocation of attention. In A. Baum, J.E. Singer & S. Valins. Advances in environmental psychology, volume 1. The urban environment. Hillsdale, New Jersey: Lawrence Erlbaum, 1978.

Cohen, S. & Lezak, A. Noise and inattentiveness to social cues. Environment and Behavior, 1977, 9, 559-572.

Cohen, S. & Spacapan, S. The aftereffects of stress: An attentional interpretation. Environmental Psychology and Nonverbal Behavior, 1978, in press.

Cohen, S. & Weinstein, N. Non-auditory effects of noise on behaviour and health. Journal of Social Issues, 1981, 37, 36-70.

Commonwealth Department of Aboriginal Affairs, Fact Sheet Number 2, November, 1979.

Comrey, A.L. A first course in factor analysis. New York: Academic Press, 1973.

Cook, T.D. & Campbell, D.T. Quasi-experimentation. Design and analysis issues for field settings. Chicago: Rand McNally, 1979.

Cunningham, M. Weather, mood, and helping behaviour: Quasi-experiments with the sunshine samaritan. Journal of Personality and Social Psychology, 1979, 37, 1947-1956.

Darley, J. & Batson, D. From Jerusalem to Jericho: A study of situational and dispositional variables in helping behavior. Journal of Personality and Social Psychology, 1973, 27, 100-108.

Darley, J.M. & Latané, B. Bystander intervention in emergencies: Diffusion of responsibility. Journal of Personality and Social Psychology, 1968, 10, 202-214.

D'Atri, D. Psychophysiological responses to crowding. Environment and Behavior, 1975, 7, 237-252.

Doland, D.J. & Adelberg, K. The learning of sharing behavior. Child Development, 1967, 38, 695-700.

Doubts over census questions. The Australian, July 3, 1981.

Doxiadis, C.A. Ekistics. An introduction to the science of human settlements. New York: Oxford University Press, 1968.

Dreman, S.B. & Greenbaum, C.W. Altruism or reciprocity: Sharing behaviour in Israeli kindergarten children. Child Development, 1973, 44, 61-68.

Duncan, O.D. Community size and the urban-rural continuum. In P.K. Hatt and A.J. Reiss (Eds.), Cities and society. New York: The Free Press, 1957.

Dye, T.R. Population density and social pathology. Urban Affairs Quarterly, 1975, 11, 265-275.

Evans, G.W. & Jacobs, S.V. Air pollution and human behaviour. Journal of Social Issues, 1981, 37, 95-125.

Falbo, T. Multidimensional scaling of power strategies. Journal of Personality and Social Psychology, 1977, 35, 537-547.

Faris, R. & Dunham, H.W. Mental disorders in urban areas (2nd ed.) Chicago: Phoenix Books, 1965.

Feldman, R.E. Response to compatriot and foreigner who seek assistance. Journal of Personality and Social Psychology, 1968, 10, 202-214

Feldman, R.H.L. & Rezmovic, V. A field study on the relationship of environmental factors to helping behavior. Journal of Social Psychology, 1979, 108, 283-284.

Festinger, L., Pepitone, A. & Newcomb, T. Some consequences of deindividuation in a group. Journal of Abnormal and Social Psychology, 1952, 47, 382-389.

Fisher, C. The Urban Experience. New York: Harcourt Brace Jovanovich, 1976.

Fischer, C.S. Sociological comments on psychological approaches to urban life. In A. Baum, J.E. Singer and S. Valins (Eds.), Advances in environmental psychology, volume 1, the Urban Environment. Hillsdale, New Jersey: Lawrence Erlbaum, 1978.

Forbes, G. & Gromoll, H. The lost-letter technique as a measure of social variables: Some exploratory findings. Social Forces, 1971, 50, 113-115.

Forgas, J.P. The perception of social episodes: Categorical and dimensional representations in two different social milieus. Journal of Personality and Social Psychology, 1976, 34, 199-209.

Forgas, J. Social episodes. London: Academic Press, 1979.

Franck, K.A. Friends and strangers: The social experience of living in urban and non-urban settings. Journal of Social Issues, 1980, 36, 52-71.

Frederiksen, N. Toward a taxonomy of situations. American Psychologist, 1972, 27, 114-124.

Freedman, J. Crowding and behavior. San Francisco: W.H. Freeman and Company, 1975.

Freedman, J.L., Heshka, S., and Levy, A. Population density and pathology: Is there a relationship? Journal of Experimental Social Psychology, 1973.

Freedman, J., Klevansky, S. & Ehrlich, P. The effects of crowding on human task performance. Journal of Applied Social Psychology, 1971, 1, 7-25.

Gaertner, S. & Bickman, L. Effects of race on the elicitation of helping behavior: The wrong number technique. Journal of Personality and Social Psychology, 1971, 20, 218-222.

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

Gans, H.J. The Urban Villagers. New York: The Free Press, 1962.

Gans, H.J. Urbanism and suburbanism as ways of life. In R.E. Pahl (Ed.) Readings in urban sociology. Oxford: Pergamon Press, 1968.

Garfinkel, H. Studies in ethnomethodology. Englewood Cliffs, New Jersey: Prentice Hall, 1967.

Gelfand, D.M., Hartmann, D.P., Walker, P. & Page, B. Who reports shoplifters? A field-experimental study. Journal of Personality and Social Psychology, 1973, 25, 276-285.

Gergen, K.J., Gergen, M.M. & Meter, K. Individual orientations to prosocial behavior. Journal of Social Issues, 1972, 28, 105-130.

Glass, D.C. & Singer, J.E. Urban stress: Experiments on noise and social stressors. New York: Academic Press, 1972.

Glass, D.C. & Singer, J.E. Behavioural after effects of unpredictable and uncontrollable aversive events. In I.L. Janis (Ed.) Current Trends in Psychology. New York: William Kaufman, 1977.

Glenn, N.D. & Hill, L. Rural-urban differences in attitudes and behavior in the United States. The Annals of the American Academy of Political and Social Science, 1977, 429, 36-50.

Goode, W.J. Marital satisfaction and instability. International Social Science Journal, 1962, 5, 507-526.

Gottlieb, B.J. The development and application of a classification scheme of informal helping behaviors. Canadian Journal of Behavioural Science, 1978, 10, 105-115.

Griffit, W. & Veitch, R. Hot and crowded: Influences of population density and temperature on interpersonal affective behavior. Journal of Personality and Social Psychology, 1971, 17, 92-98.

Hall, E.T. The hidden dimension. Garden City, New York: Anchor Books, 1969.

Hansson, R.O. & Slade, K.E. Altruism toward a deviant in city and small town. Journal of Applied Social Psychology, 1977, 7, 272-279.

Hansson, R.O., Slade, K.M. & Slade, P.S. Urban-rural responsiveness to an altruistic model. Journal of Social Psychology, 1978, 105, 99-105.

Harris, M.B. & Meyer, F.W. Dependency, threat and helping. Journal of Social Psychology, 1973, 90, 239-242.

Hartshorne, H., May, M.A., & Maller, J.B. Studies in the nature of character; volume II: Studies in service and self-control. New York: MacMillan, 1929.

Hartwig, F. with Dearing, B.E. Exploratory Data Analysis. Beverly Hills: Sage Publications, 1979.

Henkel, R.E. Tests of significance. Beverly Hills, California: Sage, 1976.

Hoffman, M.L. Sex differences in empathy and related behaviors. Psychological Bulletin, 1977, 84, 712-720.

Holahan, C.J. Effects of urban size and heterogeneity on judged appropriateness of altruistic responses: Situational vs. subject variables. Sociometry, 1977, 40, 378-382.

Horin, A. Aboriginal campaigner is forced to leave town. The National Times, November 1 to 7, 1981.

House, J.S. & Wolf, S. Effects of urban residence on interpersonal trust and helping behavior. Journal of Personality and Social Psychology, 1978, 36, 1029-1043.

Huston, T.L., Ruggiero, M., Conner, R. & Geis, G. Bystander intervention into crime: A study based on naturally-occurring episodes. Social Psychology Quarterly, 1981, 44, 14-23.

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

Isen, A.M. Success, failure, attention and reaction to others: The warm glow of success. Journal of Personality and Social Psychology, 1970, 15, 294-301.

Isen, A., Clark, M. & Schwartz, M. Duration of the effect of good mood on helping: "Footprints in the sands of time." Journal of Personality and Social Psychology, 1976, 34, 385-393.

Isen, A.M. & Levin, P.F. Effects of feeling good on helping: Cookies and kindness. Journal of Personality and Social Psychology, 1972, 21, 384-388.

Jacobs, J. The death and life of great American cities. London: Jonathan Cape, 1961.

Jansen, G. Adverse effects of noise in iron and steel workers. Stahl and Eisen, 1961, 81, 217-220.

Jorgenson, L. & Dukes, A. Deindividuation as a function of density and group membership. Journal of Personality and Social Psychology, 1976, 34, 24-29.

Kagan, S. & Madsen, M.C. Cooperation and competition of Mexican, Mexican-American, and Anglo-American children of two ages and four instructional sets. Developmental Psychology, 1971, 5, 32-39.

Kahl, J.A. The American class structure. New York: Holt, Rinehart and Winston, 1957.

Kammann, R., Thomson, R., Irwin, R. Unhelpful behavior in the street. City size or immediate pedestrian density. Environment and Behavior, 1979, 11, 245-250.

Kaplan, J. A legal look at prosocial behavior: What can happen if one tries to help or fails to help another. In L. Wispe (Ed.) Altruism, sympathy and helping. Psychological and Sociological Principles. New York: Academic Press, 1978.

Kaplan, R. Some methods and strategies in the prediction of preference. In E.H. Zube, J.G. Fabos & R.O. Brush (Eds.), Landscape assessment: Values, perceptions, and resources. Stroudsburg, Pa.: Dowden, Hutchinson & Ross, 1974.

Kaplan, S., Kaplan, R. & Wendt, J.S. Rated preference and complexity for natural and urban visual material. Perception and Psychophysics, 1972, 12, 354-356.

Karabenick, S.A., Lerner, R.M. & Beecher, M.D. Relation of political affiliation to helping behavior on election day, November 7, 1972. Journal of Social Psychology, 1973, 91, 223-227.

Kasarda, J.D. & Janowitz, M. Community attachment in mass society. American Sociological Review, 1974, 39, 328-339.

Kazdin, A.E. & Bryan, J.H. Competence and volunteering. Journal of Experimental Social Psychology, 1971, 7, 87-97.

Kearney, G.E. & McElwain, D.W. (Eds.), Aboriginal Cognition: Retrospect and prospect. New Jersey: Humanities Press, 1976.

Kelly, G.A. The psychology of personal constructs. New York: Norton, 1955.

Kerlinger, F.N. & Pedhazur, E.J. Multiple Regression in Behavioural Research. New York: Holt, Rinehart and Winston, 1973.

Key, W.H. Rural-urban social participation. In S.F. Fava (Ed.), Urbanism in world perspective. New York: Crowell, 1968.

Kirmeyer, S. Urban density and pathology: A review of research. Environment and Behavior. 1978, 10, 247-269.

Konecni, V.J. Some effects of guilt on compliance: A field replication. Journal of Personality and Social Psychology, 1972, 23, 30-32.

Korte, C. Effects of individual responsibility and group communication on help-giving in an emergency. Human Relations, 1970, 24, 149-159.

Korte, C. Helpfulness in the urban environment. In A. Baum, J.E. Singer & S. Valins (Eds.) Advances in environmental psychology vol. 1: The urban environment. Hillsdale, New Jersey: Lawrence Erlbaum, 1978.

Korte, C. Constraints on helping in an urban environment. In J.P. Rushton & R.M. Sorrentino (Eds.), Altruism and helping behavior. Hillsdale, New Jersey: Lawrence Erlbaum, 1980.

Korte, C. & Ayvalioglu, N. Helpfulness in Turkey: Cities, towns and urban villages. Unpublished manuscript, 1980.

Korte, C. & Grant, R. Traffic noise, environmental awareness, and pedestrian behavior. Environment and Behavior, 1980, 12, 408-420.

Korte, C. & Kerr, N. Response to altruistic opportunities in urban and nonurban settings. Journal of Social Psychology, 1975, 95, 183-184.

Korte, C., Ypma, I. & Topper, A. Helpfulness in Dutch society as a function of urbanization and environmental input level. Journal of Personality and Social Psychology, 1975, 32, 996-1003.

Koyama, J. Rural-urban comparison of kinship relations in Japan. In R. Hill & R. Konig (Eds.), Families in east and west. The Hague: Mouton, 1970.

Kraut, R.E. Effects of social labeling on giving to charity. Journal of Experimental Social Psychology, 1973, 9, 551-562.

Krebs, D.L. Empathy and altruism. Journal of Personality and Social Psychology, 1975, 32, 1134-1146.

Krupat, E. & Coury, M. The lost letter technique and helping: An urban non-urban comparison. Paper presented at American Psychological Association Convention, Chicago, September 1975.

Krupat, E. & Guild, W. Defining the city: The use of objective and subjective measures for community description. Journal of Social Issues, 1980, 36, 9-28.

Kruskal, J.B. & Wish, M. Multidimensional scaling. Beverly Hills: Sage Publications, 1978.

Labovitz, S. The assignment of numbers to rank order categories. American Sociological Review, 1970, 35, 515-524.

Latané, B. & Dabbs, J.M. Sex, group size, and helping in three cities. Sociometry, 1975, 38, 180-194.

Latané, B. & Darley, J.M. Group inhibition of bystander intervention. Journal of Personality and Social Psychology, 1968, 10, 215-221.

Latané, B. & Darley, J.M. The unresponsive bystander: Why doesn't he help? New York: Appleton-Crofts, 1970.

Latané, B. & Rodin, J.A. A lady in distress: Inhibiting effects of friends and strangers on bystander intervention. Journal of Experimental Social Psychology, 1969, 5, 189-202.

Lau, S. & Blake, B.F. Recent research on helping behavior: An overview and bibliography (ms 1289). Washington, D.C.: Journal supplement abstract service of the American Psychological Association, 1976.

Lay, C., Allen, M., & Kassirer, A. The responsive bystander in emergencies: Some preliminary data. The Canadian Psychologist, 1974, 15, 220-227.

Lazarus, R., Longo, N., Mordkoff, A.M. & Davidson, L.A. A laboratory study of psychological stress produced by a motion picture film. Psychological Monographs, 1962, 76, 34.

Lazarus, R., Opton, E.M., Nomikos, M.S. & Rankin, N.O. The principal of short-circuiting of threat: Further evidence. Journal of Personality, 1965, 33, 622-635.

Levine, M.E., Vilena, J., Altman, D. & Nadien, M. Trust of the stranger: An urban/small town comparison. Journal of Psychology, 1976, 92, 113-116.

Loether, H.J. & McTavish, D.G. Inferential statistics for sociologists. Boston: Allyn and Bacon, 1974.

Lowin, A., Hottes, J., Sandler, B. & Bornstein, M. The pace of life and sensitivity to time in urban and rural settings: A preliminary study. Journal of Social Psychology, 1971, 83, 247-253.

Madsen, M.C. Developmental and cross-cultural differences in the cooperative and competitive behaviour of young children. Journal of Cross-Cultural Psychology, 1971, 2, 365-371.

Madsen, M.C. Cooperative and competitive motivation of children in three Mexican subcultures. Psychological Reports, 1967, 20, 1307-1320.

Madsen, M.C. & Shapira, A. Cooperation and challenge in four cultures. Journal of Social Psychology, 1977, 102, 189-195.

Mandel, B. That's life in the big city. San Francisco Sunday Examiner and Chronicle, November 29, 1981.

Mann, L., Newton, J.W. & Innes, J.M. A test between deindividuation and emergent norm theories of crowd aggression. Journal of Personality and Social Psychology, 1982, 42, 260-272.

Mathews, K.E. & Canon, L.K. Environmental noise level as a determinant of helping behaviour. Journal of Personality and Social Psychology, 1975, 32, 571-577.

McKee, M. & Robertson, I. Social problems. New York: Random House, 1975.

McLean, E. & Tarnopolsky, A. Noise, discomfort, and mental health. Psychological Medicine, 1977, 7, 19-62.

Mehrabian, A. & Russell, J.A. An approach to environmental psychology. Cambridge, Massachusetts: M.I.T. Press, 1974.

Mercer, M. Living in cities. Harmondsworth, Middlesex: Penguin, 1975.

Merrens, M.R. Nonemergency helping behavior in various sized communities. Journal of Social Psychology, 1973, 90, 327-328.

Midlarsky, E. Aiding under stress: The effects of competence, dependency, visibility, and fatalism. Journal of Personality, 1971, 39, 132-149.

Midlarsky, E. & Midlarsky, M. Some determinants of aiding under experimentally induced stress. Journal of Personality, 1973, 41, 305-327.

Midlarsky, M. & Midlarsky, E. Status inconsistency, aggressive attitude, and helping behavior. Journal of Personality, 1976, 44, 371-391.

Milgram, S. Behavioural study of obedience. Journal of Abnormal and Social Psychology, 1963, 67, 371-378.

Milgram, S. The experience of living in cities. Science, 1970, 167, 1461-1468.

Milgram, S. The individual in a social world. Reading, Mass.: Addison-Wesley, 1977.

Milgram, S. & Hollander, P. The murder they heard. Nation, 1964, 198, 602-604.

Miller, S.M. & Riessman, F. The working class subculture: A new view. Social Problems, 1961, 9, 86-97.

Mischel, W. Personality and assessment. New York: Wiley, 1968.

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

Mixon, D. If you don't deceive, what can you do? In N. Armistead (Ed.) Reconstructing Social Psychology. Harmondsworth, Middlesex, England: Penguin, 1974.

Moore, B., Underwood, B. & Rosenhan, D.L. Affect and altruism. Developmental Psychology, 1973, 8, 99-104.

Muir, D.E. & Weinstein, E.A. The social debt: An investigation of lower-class and middle-class norms of social obligation. American Sociological Review, 1962, 27, 532-539.

Nadler, A., Romek, E. & Shapiro-Friedman, A. Giving in the Kibbutz. Journal of Cross-Cultural Psychology. 1979, 10, 57-72.

Newman, J. & McCauley, C. Eye contact with strangers in city, suburb and small town. Environment and Behavior, 1977. 9, 547-558.

O'Bryant, S.L. & Brophy, J.E. Sex differences in altruistic behavior. Developmental Psychology, 1976, 12, 554-555.

Page, R.A. Noise and helping behavior. Environment and Behaviour, 1977, 9, 311-334.

Pearce, P. & Amato, P. A taxonomy of helping: A multidimensional scaling approach. Social Psychology Quarterly, 1980, 43, 368-371.

Pearce, P.L. & Promnitz, J. Road side rest areas: Studies from two Australian states. Australian Road Research, 1982, 11, 153-168.

Piliavin, J.A. & Piliavin, I.M. Effects of blood on reactions to a victim. Journal of Personality and Social Psychology, 1972, 23, 353-362.

Piliavin, I.M., Rodin, J. & Piliavin, J.A. Good samaritanism: An underground phenomenon. Journal of Personality and Social Psychology, 1969, 13, 289-299.

Pomazal, R.J. & Clore, G.L. Helping on the highway: The effects of dependency and sex. Journal of Applied Social Psychology, 1973, 3, 150-164.

Pomazal, R.J. & Jaccard, J.J. An informational approach to altruistic behavior. Journal of Personality and Social Psychology, 1976, 33, 317-326.

Population and dwellings in local government areas and urban centres (New South Wales and Queensland) 1976 census. Australian Bureau of Statistics.

Proshansky, H.M., Ittelson, W.H. & Rivlin, L.G. Freedom of choice and behavior in a physical setting. In H.M. Proshansky, W.H. Ittelson & L.G. Rivlin (Eds.), Environmental Psychology: People and their physical settings (2nd ed.). New York: Holt, Rinehart & Winston, 1976.

Rawls, J.R., Trego, R.E., McGaffey, C.N., & Rawls, D.J. Personal space as a predictor of performance under close working conditions. Journal of Social Psychology, 1972, 86, 261-267.

Redfield, R. The folk society. The American Journal of Sociology, 1947, 52, 293-308.

Reiss, A.J. Rural-urban and status differences in interpersonal contacts. American Journal of Sociology, 1959, 65, 182-195.

Rosenthal, A.M. Thirty-eight witnesses. McGraw-Hill, 1964.

Rosenthal, R. (Ed.) Quantitative assessment of research domains. San Francisco: Jossey-Bass, 1980.

Roskam, E.E. & Lingoes, J.C. The MDS(X) series of multidimensional scaling programs: MINISSA program. Report No. 32, University of Edinburgh Program Library Unit, 1977.

Rotton, J. Sex, residential location, and altruism. Psychological Reports, 1977, 40, 102.

Rushton, J.P. Urban density and altruism: Helping strangers in a Canadian city, suburb, and small town. Psychological Reports, 1978, 43, 887-900.

Rushton, J.P. Altruism, socialisation, and society. Englewood Cliffs, New Jersey: Prentice-Hall, 1980.

Russell, J.A. A circumplex model of affect. Journal of Personality and Social Psychology, 1980, 39, 1161-1178.

Russell, J.A. & Mehrabian, A. Approach avoidance and affiliation as functions of the emotion - eliciting quality of an environment. Environment and Behavior, 1978, 10, 355-389.

Schmitt, R.C. Density, delinquency and crime in Honolulu. Sociology and Social Research, 1957, 41, 274-276.

Schneider, F.W. & Mockus, Z. Failure to find a rural-urban difference in incidence of altruistic behavior. Psychological Reports, 1974, 35, 294.

Schopler, J. & Bateson, N. The power of dependence. Journal of Personality and Social Psychology, 1965, 2, 247-254.

Schopler, J. & Stokols, D. A psychological approach to human crowding. Morristown, New Jersey: General Learning Press Modular Studies, 1976.

Schreiber, S.T. & Glidewell, J.C. Social norms and helping in a community of limited liability. American Journal of Community Psychology, 1978, 6, 441-453.

Schutz, A. On phenomenology and social relations. Chicago: University of Chicago Press, 1970.

Schwartz, S.H. & Clausen, G.T. Responsibility, norms and helping in an emergency. Journal of Personality and Social Psychology, 1970, 16, 299-310.

Seligman, M.E.P. Helplessness: On depression, development, and death. San Francisco: Freeman, 1975.

Shapira, A. & Madsen, M.C. Cooperative and competitive behaviour of Kibbutz and urban children in Israel. Child Development, 1969, 40, 609-617.

Shapira, A. & Madsen, M.C. Between and within-group cooperation and competition among Kibbutz and nonKibbutz children. Developmental Psychology, 1974, 10, 140-145.

Sherbenox, E.L. & Flango, V.E. An empirical test of size as a measure of urbanism. Urban Affairs Quarterly, 1976, 12, 3-20.

Sherrod, D.R. & Downs, R. Environmental determinants of altruism: The effects of stimulus overload and perceived control on helping. Journal of Experimental Social Psychology, 1974, 10, 468-479.

Shotland, R.L. & Huston, T.K. Emergencies: What are they and do they influence bystanders to intervene? Journal of Personality and Social Psychology, 1979, 37, 1822-1834.

Simmel, G. The metropolis and mental life. In K.H. Wolff (Ed.) The Sociology of Georg Simmel. New York: The Free Press, 1950.

Singer, J.E., Brush, C.A. & Lublin, S.C. Some aspects of deindividuation: Identification and conformity. Journal of Experimental Social Psychology, 1965, 1, 356-378.

Singer, J.E. & Lundberg, U. Stress on the train: A study of urban commuting. In A. Baum, J.E. Singer & S. Valins, Advances in environmental psychology (volume 1) The urban environment. Hillsdale, New Jersey: Lawrence Erlbaum, 1978.

Smith, L.R. The Aboriginal population of Australia. Canberra: A.N.U. Press, 1980.

Smithson, M. & Amato, P. An unstudied region of helping: An extension of the Pearce-Amato cognitive taxonomy. Social Psychology Quarterly, 1982, (in press).

Smithson, M., Amato, P. & Pearce, P. Helping: Toward an organizing taxonomy. Oxford: Pergamon Press (in press).

Solomon, H., Solomon, L.Z., Arnone, M.M., Maur, B.J., Reda, R.M. & Roth, E.O. Anonymity and helping. Journal of Social Psychology, 1981, 113, 37-43.

Sorokin, P.A. & Zimmerman, C.C. Principles of rural-urban sociology. New York: Henry Holt & Co., 1929.

Statistical Section Newsletter Number 5. Department of Aboriginal Affairs, 1978.

Staub, E. Positive social behavior and morality, vol 1: Social and personal influences. New York: Academic Press, 1978.

Staub, E. & Baer, R.S. Stimulus characteristics of a sufferer and difficulty of escape as determinants of helping. Journal of

Personality and Social Psychology, 1974, 30, 279-284.

Stokols, D. In defense of the crowding construct. In A. Baum, J.E. Singer & S. Valins, Advances in Environmental Psychology volume 1: The urban environment. Hillsdale, New Jersey: Lawrence Erlbaum, 1978.

Suedfeld, P., Bochner, S. & Wneck, D. Helper-sufferer similarity and a specific request for help: Bystander intervention during a peace demonstration. Journal of Applied Social Psychology, 1972, 2, 17-23.

Sundstrom, E. Crowding as a sequential process: Review of research on the effects of population density on humans. In A. Baum & Y. Epstein (Eds.) Human response to crowding. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1978.

Sutcliffe, J.P. & Crabbe, B.D. Incidence and degrees of friendship in urban and rural areas. Social Forces, 1963, 42, 60-67.

Tajfel, H. Social and cultural factors in perception. In G. Lindsey & E. Aronson (Eds.), The handbook of Social Psychology, 2nd ed. Reading, Massachusetts: Addison-Wesley, 1969.

Tajfel, H. Experiments in intergroup discrimination. Scientific American, 1970, 223, 96-102.

Tajfel, H. The psychological structure of intergroup relations. In H. Tajfel (Ed.) Differentiation between social groups. London: Academic Press, 1978.

Tajfel, H. & Billig, M. Familiarity and categorization in intergroup behavior. Journal of Experimental Social Psychology, 1974, 10, 159-170.

Tajfel, H., Flamant, C., Billig, M.Y., & Bundy, R.P. Societal categorisation and intergroup behavior. European Journal of Social Psychology, 1971, 1, 149-178.

Takooshian, H., Haber, S. & Lucindo, D.J. Who wouldn't help a lost child? You, maybe. Psychology Today, 1977, 10, 67.

Toennies, F. Gemeinschaft & Gesellschaft. In T. Parsons, E. Shils, K.P. Naegele & J.R. Pitts, (Eds.) Theories of Society. New York: The Free Press of Glencoe, 1961.

Triandis, H.C., Vassilou, V. & Nassiakou, M. Three cross-cultural studies of subjective culture. Journal of Personality and Social Psychology, Monograph Supplement, 1968, 8, 2.

Trippett, F. Small town U.S.A.: Growing and groaning. Time Magazine, 1 September 1980, 71-72.

Turner, J. Social comparison and social identity: Some prospects for intergroup behavior. European Journal of Social Psychology, 1975, 5, 5-34.

Turner, J. Social categorization and social discrimination in the minimal group paradigm. In H. Tajfel (Ed.) Differentiation between social groups. London: Academic Press, 1978.

Underwood, B., Berenson, J.F., Berenson, R.J., Cheng, K.K., Wilson, D., Kulik, J., Moore, B.S. & Wenzel, G. Attention, negative affect, and altruism: An ecological validation. Personality and Social Psychology Bulletin, 1977, 3, 54-58.

Valins, S. & Baum, A. Residential group size, social interaction, and crowding. Environment and Behavior, 1973, 5, 421-440.

Warwick, D.P. & Lininger, C.A. The sample survey: Theory and Practice. New York: McGraw-Hill, 1975.

Wayne, J. The case of the friendless urbanite. In A. Powell (Ed.) The city: Attacking modern myths. Toronto: McClelland and Stewart, 1972.

Weiner, B. A cognitive (attribution) - emotion - action model of motivated behavior: An analysis of judgement of help-giving. Journal of Personality and Social Psychology, 1980, 39, 186-200.

Weiner, F. Altruism, ambience, and action: The effects of rural and urban rearing on helping behaviour. Journal of Personality and Social Psychology, 1976, 34, 112-124.

Wellman, B. Who needs neighbourhoods? In A. Powell (Ed.) The city: Attacking modern myths. Toronto: McClelland and Stewart, 1972.

West, S.G., Whitney, G. & Schneider, R. Helping a motorist in distress. The effects of sex, race, and neighborhood. Journal of Personality and Social Psychology, 1975, 31, 691-698.

Whitehead, G.I. III & Metzger, S.C. Helping behaviour in urban and nonurban settings. Journal of Social Psychology, 1981, 114, 295-296.

Whiting, B.B. & Whiting, J.W.M. Children of six cultures: A psychocultural analysis. Cambridge, Massachusetts: Harvard University Press, 1975.

Wirth, L. Urbanism as a way of life. In P.K. Hatt & A.J. Reiss (Eds.) Cities and society. New York: The Free Press, 1957.

Wispé, L.G. Positive forms of social behaviour: An overview. Journal of Social Issues, 1972, 28, 1-20.

Wispé, L. Toward an integration. In L. Wispe (Ed.) Altruism, sympathy, and helping. Psychological and sociological principles. New York: Academic Press, 1978.

Yinon, Y., Sharon, I., Azgad, Z., & Barshir, I. Helping behaviour of urbanites, moshavniks, and kibbutzniks. Journal of Social Psychology, 1981, 113, 143-144.

Zajonc, R.B. Social Facilitation. Science, 1965, 149, 269-274.

Zimbardo, P.F. The human choice: Individuation, reason, and order, versus deindividuation, impulse, and chaos. In W. Arnold & D. Levine (Eds.) Nebraska Symposium on motivation. Lincoln, Nebraska: University of Nebraska Press, 1969, 237-307.

Zubek, J.P. (Ed.) Sensory deprivation: Fifteen years of research. New York: Appleton-Century-Crofts, 1969.

Zuckerman, M. Dimensions of sensation seeking. Journal of Consulting and Clinical Psychology, 1971, 36, 45-52.

Appendix A: List of 62 Helping Stimuli

1. You give what change you have to a student who approaches in a library asking for 50 cents to make some xerox copies.

2. At the request of your instructor you volunteer to give time to a publicity campaign to acquaint the community with the role of the university.

3. Donating food to an appeal for the poor.

4. Volunteering to collate materials for your instructor to use in a course you are taking (the instructor has asked for volunteers).

5. Stopping to pick up a hitch hiker standing along the side of the road.

6. Sharing a small amount of money you have just won in a game with a friend of yours.

7. Mailing a wallet containing a small amount of money back to its owner after you have found it lying on the street.

8. While filling out a questionnaire for a research organisation you hear two children in the next room begin to fight; you go in to break up the fight because it sounds like one child is getting badly beaten.

9. Making a phone call for a woman to her husband after she has approached you in a shopping centre claiming to have just sprained her ankle.

10. Mailing a package for a person you do not know after s/he has approached you on the street claiming that s/he has to catch a train.

11. You are working in a small shop and point out to a customer who has just purchased something that s/he has given you too much money for the item.

12. You are asked by a pedestrain if you have dropped some money on the ground which s/he has just found; since you haven't, you reply that it is not yours.

13. Giving the time to a stranger on the street.

14. Agreeing to give a new blouse a number of washings as part of a testing program for a new product conducted by a market research organisation.

15. While walking through a building you see a technician receive a powerful electric shock while working on some electrical equipment; you help the unconscious person by giving direct help or by calling for aid.

16. Stopping your car to help a motorist standing by his/her car on the side of the road with a flat tyre.

17. You agree to be interviewed by a researcher who presents him/herself at your front door.

18. A person you have met once, briefly, asks you to help him/her by distributing political attitude questionnaires to people; you agree.

19. After taking part in a psychology experiment, the researcher asks you to stay on and perform a numbering task as a favor; you agree.

20. Saving milk cartons, washing them out, and turning them in to a group of university students collecting them for an art project.

21. While waiting for a bus you see a person fall over clutching his knee in pain; you run over to help.

22. Helping a stranger pick up computer cards after you have accidentally knocked them out of his/her hands while walking down the street.

23. Helping a young child with a task that is too difficult.

24. Sharing a small amount of food (nuts) with an acquaintance of yours.

25. Donating money to a charity box.

26. Calling a garage for a stranger who has accidentally called you with his/her last ten cent piece and has a car that will not start.

27. Helping a stranger pick up pencils s/he has dropped in an elevator you are both riding.

28. As part of a study, you are discussing problems of urban living with another student over an intercom; when the student tells you s/he is suffering from an epileptic seizure, you rush in to help.

29. Stopping to help a lost child who is crying, alone on the street.

30. While playing a game involving the betting of money, you give another player (who you have never met before) who is almost broke enough money to keep playing (one dollar).

31. At the request of an acquaintance you volunteer time to bind storybooks for poor children.

32. Filling out a questionnaire for a fellow student who is doing a study.

33. Mailing a lost letter that you have found on the street for the person who wrote it, even though you do not know him/her.

34. Volunteering to participate in a psychology experiment after your lecturer has asked for volunteers.

35. Volunteering to counsel high school students after your lecturer has asked for volunteers.

36. Donating blood to a blood bank.

37. You are participating in an experiment in which you receive a mild electric shock; you are in control of the level of shock that both you and your partner will receive; you set your partner's level very low even though it means your level of shocks will be higher (and more painful).

38. A woman in a discount store asks you to give her a hand with a stuck shopping cart.

39. Signing your favorite colour for a student who approaches you in a shopping mall and is working on a class project.

40. Giving change for a 20 cent piece to a stranger who approaches you on the street.

41. You point the way to a stranger who has approached you on the street asking for directions.

42. Helping a stranger look for a lost contact lens on the hallway floor of a university building.

43. While filling out a questionnaire for a market research organisation, you hear the investigator fall off a chair in the next room; you rush in to help.

44. Giving 20 cents to a stranger who approaches you on the street claiming to need the money for bus fare.

45. You overhear one person talking to another person giving directions; since you realize the directions are incorrect, you step over and correct him.

46. You agree to chaperone a small group of children from the juvenile detention centre on a trip to the zoo.

47. Donating time to spend with a mentally retarded boy.

48. Helping a person pick up groceries that have fallen out of the bottom of a broken bag outside a supermarket (you don't know the person).

49. While in a waiting room a stranger comes through with a big armload of books; you get up and open the closed door for this person.

50. You are approached by a deaf person who hands you a note asking that you make a phone call for him/her; you make the call.

51. Coming to the aid of a person who collapses, apparently unconscious, while riding a bus.

52. An appeal is made to you from a medical person to donate bone marrow for a seriously ill patient (a stranger); although it is a painful process, you agree.

53. Volunteering to contribute time to read to a blind university student.

54. You stop to help a person on the street who is reading a city map and is obviously lost by giving directions.

55. You work extra hard for your supervisor at work, knowing that s/he is eligible for a prize if productivity is up.

56. Informing a passerby on the street that s/he has unknowingly dropped a small package.

57. Turning the lights off on a parked car which has an open window (you don't know the owner).

58. Coming to the aid of a stranger lying on the sidewalk ahead of you, clutching his/her chest.

59. On a university campus, a stranger approaches you and asks you to return some books to the library; although it is out of your way, you agree.

60. A woman approaches you on the street and asks you to give her a hand getting her male friend to a first aid station; you agree.

61. Giving money to a multiple sclerosis fund when a collector knocks on your door.

62. Breaking up a fight between two university students.