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# **The Spatial Clustering of Child Maltreatment:**

## **Are Micro-Social Environments Involved?**

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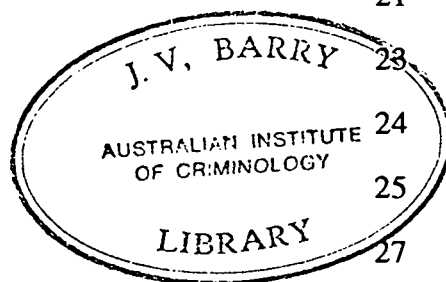
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# Contents

|  |    |
|--|----|
| 1. Are micro-social environments involved                    | 2  |
| 2. Initial study   | 3  |
| 3. Spatial patterning of social problems                     | 4  |
| The spatial perspective                                      | 4  |
| Clustering of child abuse                                    | 5  |
| Distribution of crime  | 6  |
| Unemployment   | 7  |
| 4. Current perspectives on neighbourhood effects             | 8  |
| The new urban ecology  | 8  |
| Socially impoverished neighbourhoods                         | 9  |
| What contributes to low morale neighbourhoods                | 10 |
| Neighbourhood influences on child and adolescent development | 11 |
| 5. Method  | 15 |
| Sample   | 15 |
| 6. Results   | 16 |
| Neighbourhood cohesion                                       | 16 |
| Sense of neighbourhood 'fit'                                 | 17 |
| A place to raise children                                    | 17 |
| Area encompassed by neighbourhood                            | 18 |
| Practitioner awareness of cluster areas                      | 18 |
| Are there areas of concentration of child maltreatment?      | 19 |
| Explanations for patterns                                    | 20 |
| Distinguishing features                                      | 21 |
| Social environment   | 23 |
| A place to bring up children                                 | 24 |
| 7. Comment   | 25 |
| 8. Bibliography  | 27 |

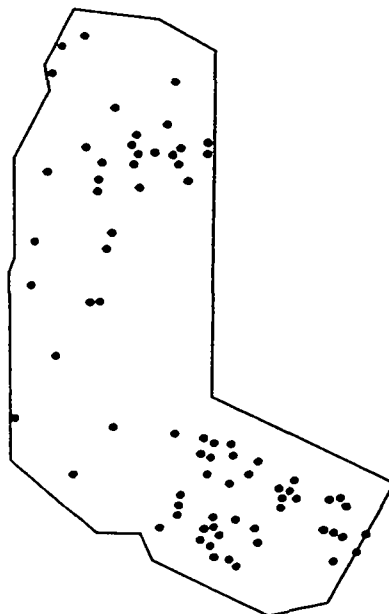


## THE SPATIAL CLUSTERING OF CHILD MALTREATMENT:

### Are Micro-Social Environments Involved?

Habits of mind can influence not only our reasoning processes but also the way in which relevant observations are framed. In social research the units of observation routinely employed to approximate a concept like 'neighbourhood' can go unchallenged until brought into question by a discrepant finding. So well established is the link between socio-economic conditions within census tracts and child maltreatment rates that variations in the latter would, on the basis of much research, be expected to be accompanied by differences in the former. The point of departure for the present study is an instance in which the aforementioned association was, at best, only marginally upheld (Vinson, Baldry and Hargreaves, 1996), bringing into question the long established operational definition of *neighbourhood* in terms of standard census units, such as urban Collectors' Districts in the Australian system. It was only when confirmed instances of child abuse within a Western Sydney suburb were spatially plotted and the pronounced clustering of such cases apparent in Figure 1 (below) revealed, that the possibility dawned that the limited neighbourhood effects apparent to that point had a great deal to do with the way the relevant geographic boundaries had been drawn. Thereafter the basic research question became 'Does the clustering of cases of child maltreatment reflect the operation of micro-social environments which encourage abuse?'

Figure 1 Spatial clustering of child abuse cases, suburb in Western Sydney



## Initial Study

A suburb of some 10 000 people and 3 500 households in Western Sydney was nominated by the New South Wales Department of Community Services as a locality with a relatively high rate of confirmed child abuse (22.5 per 1 000 children under 16 years of age) over a three year period. One census unit, in the southern area of the nominated suburb, had a comparatively high rate of 53.0 per 1 000 children, compared with a comparatively low rate of 8.1 per 1 000 in a comparison (northern) Collectors' District. The units were of virtually identical population size (approximately 880) and age distribution and had roughly equivalent scores on an Australia-wide 'Social Disadvantage' Index. The study turned on the comparison of survey responses of 51 'carers' in the southern (high risk) neighbourhood and 46 in the northern comparison neighbourhood.

Respondents were asked to indicate their degree of agreement with 18 statements in relation to their neighbourhoods. The items covered identification with and liking for the neighbourhood, patterns of friendships and association, sources of help and the presence of mutual support. Several questions canvassed the reasons for moving to the neighbourhood and the establishment of membership within it. Simple Likert-type scales assessed the locality as a place to raise children and each carer's particular experience of the neighbourhood in that regard. The ease or otherwise of getting around the locality and maintaining contact with relatives and friends, directly and by telephone, was assessed by means of a number of forced choice and open questions. The largest component of the questionnaire assessed the membership of nine sub-networks of each carer's support network. The nine sub-networks were: home, close family, distant family, close friendship, work, school/studies, neighbour, organisational and acquaintance. Carers were also asked to indicate whom they would talk to about five kinds of problems (personal, money, child rearing, household and work/educational).

The study findings have been presented in some detail (Vinson *et al* 1996). The one outstanding difference between the two localities was the structure of the networks of the two samples of residents. The picture decidedly was one of the insularity of parents in the higher risk area who, in the words of Salzinger *et al* (1983) 'lack the more varied discrepant input afforded by more distant parts of networks'. Without minimising the potential importance of this finding there was a remarkable absence of significant differences between the two areas over the many other assessment items used. What of the persistent importance ascribed by researchers to such factors as social support and social cohesion (Deccio, Horner and Wilson, 1994; Garbarino and Crouter, 1978; Garbarino and Sherman, 1980; Pilisuk, 1982; Seagull, 1987) and the perceived supportiveness of the residential neighbourhood to parenting (Garbarino and Sherman, 1980) in creating high risk areas? These factors failed to discriminate between the census unit with a high rate of child maltreatment and the one with a comparatively low rate. Confronted by the spatial patterning of abuse reflected in Figure 1, it was decided to re-analyse the existing data, this time on the basis of comparison of the survey responses of people resident within one of the *hot spot* or cluster areas, and those living elsewhere in the suburb. Details of those comparisons will be presented following a review of research relating to the spatial patterning of social problems and efforts to conceptualise appropriate ways of analysing such phenomena.

## Spatial Patterning of Social Problems

### The Spatial Perspective

The analysis of variation across space is one of the basic tools of science. Sherman, Gartin and Buerger (1989) begin their exploration of the criminology of place with this observation. Leads on the environmental causes of cancer have been revealed by the discovery of carcinogenic 'hot spots' -- locations with very high rates of cancer mortality (Mason *et al* 1985). During 1961-1982, 108 cancer cluster investigations were undertaken by the Centres for Disease Control in twenty-nine states in America and five foreign countries. Space/time clusters were identified, especially in relation to childhood leukaemia, the size of the populations in which the clusters occurred varying from less than a thousand to more than a million persons (Caldwell, 1990). Factors associated with automobile fatalities have been similarly highlighted by the study of locations with comparatively high mortality rates (Baker *et al* 1987). Gould, Wallenstein and Kleinman (1990) state that an unusually high numbers of suicides occurring in a small area within a limited time period have been reported from ancient times to the twentieth century (p.71). The researchers found that the clustering of teenage suicides in America is occurring to an extent that is significantly greater than would be expected by chance variation. A Poisson distribution technique has been developed for application to small areas, enabling the interpretation of the coincidence of suicides as a true cluster rather than an epiphenomenon of chance (Gibbons, Clark and Fawcett, 1990).

The adoption of similar rigour is being called for in the study of child abuse. Fryer and Miyoshi (1995) note that sporadic 'outbreaks' of child maltreatment sometimes have been described in anecdotal terms but that systematic attempts are needed to empirically define the concepts of 'outbreak' and 'epidemic' in the field of child protection. Accordingly, the researchers have examined 830 cases of confirmed child maltreatment occurring in the period 1986-1990 in 31 rural counties in America. The technique used has analysed temporal-spatial interactions in the distribution of cases in the sense of assessing their tendency to occur within prescribed intervals of time within geographic regions. The test of 'adjacency' was rather broad in that cases were considered geographically adjacent if they were located in the same county of the state of Colorado. Temporal adjacency was designated in analyses for cases separated by less than 3, 7, 14, 30 and 60 days. The logic of the cluster methodology used was that all 2 pairs of events were evaluated on the basis of the number spatially and temporally close, versus those substantially separated on either one of the parameters (p.364). 'Clustering' was measured by calculating the probability of obtaining the observed number of cases adjacent on both dimensions from all possible time and space permutations of cases for a Poisson distribution.

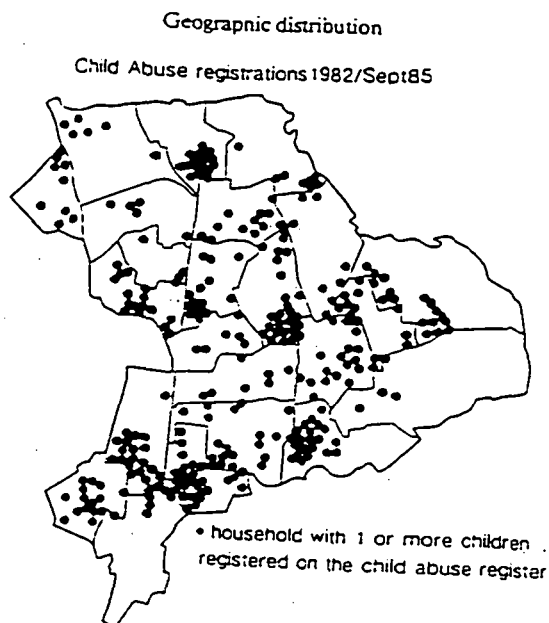
The number of time and space adjacencies observed was 183 for the shortest interval (3 days) versus 1 589 same county incidents separated by 60 days or less. The researchers concluded: 'Clustering is readily apparent, with a significant number of cases occurring in excess of what would be expected in the absence of clustering' (p.364). For each of the specified time units the differences between incidents expected and incidents observed were significant at the  $< .001$  level. While the spatial

unit used in this analysis (county) was larger than that under investigation in western Sydney, Fryer and Miyoshi indicate that their methods could be used for point pattern analyses using miles/kilometers for definitional purposes.

### Clustering of Child Abuse

Cotterill (1988) has studied the distribution of instances of child abuse (predominantly of a physical nature) within an inner-London borough. Households in which confirmed child abuse occurred in the period 1982-1985 were mapped and the clustering of such cases within the borough can be seen in the accompanying figure:

Figure 2



Cotterill gives the example of a particular ward which had an overall rate of child abuse of 1.7 per thousand, similar to the average for the borough, but upon examination the ward was found to contain an obvious and persistent concentration of child abuse which was diluted out in the calculation for the ward as a whole. The distribution of cases across the borough was examined for target areas, defined arbitrarily as five or more households with a registered case of child abuse in close proximity. Sixteen target areas were identified; the mean number of households per target area was  $13.5 \pm 2$  SD, range 7-20. These 16 areas contained 73% of the cases registered over the study period. The areas were of small size, none larger than one-half mile across. Of the 16 areas, 12 were housing estates (p.466). Over the three year study period 8 of the 16 target areas consistently accounted for 40% of all cases.

The use of the geographic distribution of known risk factors individually or in combination, as in the Jarman Score, did not appear to accurately predict where abuse would occur. In the opinion of Cotterill, this confirms Garbarino's finding that child abuse is not predicted solely by socio-economic deprivation. Taking a lead from Garbarino and Sherman (1980), Cotterill speculates that people within his 'target areas' may be isolated and experiencing difficulty in making friends. The author

concludes: 'It will also be necessary to study the distribution of child abuse in other urban and rural areas to confirm the clustering of child abuse noted in London and by Garbarino in the United States'.

### **Distribution of Crime**

A recurring problem of spatial analysis is that most studies in the ecological tradition have been confined to relatively large aggregations of people and space which, as Sherman *et al* (1989) point out, may mask important variation and causal properties within those aggregations. Influenced by emerging evidence that spatial variation in crime is most apparent at the sub-neighbourhood level of street blocks and multiple dwellings, Sherman *et al* have attempted to develop a sociology of place on the basis that place can be defined as 'a fixed physical environment that can be seen completely and simultaneously, or at least on its surface, by one's naked eyes' (p.31). The human population of places is usually too transient to constitute a collectivity, but Sherman *et al* argue that transiency does not prevent places from requiring such variable social organisational properties as customary rules of interaction, encouraged and discouraged activities, and even language spoken.

Sherman *et al* used units of analysis in their study of the criminology of place in Minneapolis that were certainly localised: they estimated the total number of places in the city to be 115 000, comprised of 6 000 intersections and 109 000 street addresses. Their analysis of crimes reported to the police revealed substantial concentrations, especially calls for predatory crime, in a relatively few 'hot spots'. Just over half of all calls to the police for which cars were despatched over one year were sent to just 3.3% of all addresses and intersections.

Study of the spatial distribution of crime has greatly benefited from British studies conducted in the 1980s. The patterns revealed are of interest here because, in the words of Hope and Hough (1988), there is a growing realisation that crime and problems of law and order are, in very large measure, 'local and pocketed' (p.39) and also because they are linked to the dynamics of neighbourhoods.

According to Trickett, Ellingworth, Hope and Pease (1995), three things are known about the distribution of crime: (i) a small proportion of offenders commits a large proportion of crime; (ii) a small proportion of victims suffers a large proportion of crime committed; (iii) a small number of areas experience an unequal amount of crime events (p.343). Farrell and Pease (1993) in their aptly titled report, 'Once Bitten, Twice Bitten ...', have demonstrated that in Britain during the 1980s approximately 14% of the population were the subject of burglary on two or more occasions in the preceding year, accounting for 71% of all burglaries. High crime areas -- so-called *crime hot spots* -- have higher levels of repeat victimisation (Bennett and Durie, 1996). Furthermore, there has been an increased inequality in the distribution of victimisation rates between areas during the 1980s, reflecting an increase in concentration of victimisation amongst victims.

It has been hypothesised that increases in the level of crime in an area articulate with certain dynamic changes in the structure and functioning of neighbourhoods. A case in point has been the well known 'broken windows' theory of James Hugh Wilson

and George Kelling (1982). They have theorised that certain levels of disorderly behaviour can trigger a spiral of neighbourhood decline, with increased fear of crime, migration of the law-abiding from the area, weakening of informal social control and, ultimately, increases in serious crime. If one follows the logic of this view, police should be assigned long-term to areas at risk to break the spiral, clamping down on the 'incivilities' which lead to decline.

Australian research has revealed a similar concentration of crime to that illustrated by the British crime survey findings. For example, a study of repeat burglary victimisation in Beenleigh by the Queensland Criminal Justice Commission (1997) has shown that even without adjusting for the greater likelihood that repeat victims will not report burglaries, just 0.4% of all residential properties in Beenleigh accounted for 11.6% of all reported break-and-enters. Just seven addresses, or 0.7% of all victim addresses accounted for 3.7% of all incidents. Using a software package known as *Spatial and Temporal Analysis of Crime*, and with the search radius set at 150 metres, over three consecutive six-month periods a number of 'stable' and 'unstable' hot spots were identified in Beenleigh, and they were significantly more likely than non-hot spot areas to experience repeat burglaries.

## Unemployment

The recent geographic turn in poverty and unemployment research has drawn inspiration from the work of an American researcher, W. J. Wilson (1987). In his book, *The Truly Disadvantaged: The Inner City, the Underclass and Public Policy*, and other works, Wilson has traced the interconnections between different aspects of poverty and unemployment within a geographical context. He claims that joblessness perpetuates poverty, not only because it undermines the welfare of particular families, but also because it has become concentrated in space. As a consequence, an environment is created that isolates residents from the world of work and promotes a culture of dependency (Wilson, 1987; Massey and Shibuya, 1995; Williams, 1990). People growing up in an area of concentrated joblessness are less likely to gain work because they are less likely to know other people who have jobs (Wacquant and Wilson, 1989), a finding recently confirmed in inner-Sydney (Vinson, Abela and Hutka, 1997). The importance of Wilson's perspective has been further reinforced by a recent (1995) study by Gregory and Hunter of the increasing geographic concentration of poverty in Australia. The authors have examined income and employment data from each census between 1976 and 1991 to assess whether the economic distance between Australians from different parts of our cities (in terms of census areas) has widened in recent decades. The major finding has been that the areas have become dramatically less equal over fifteen years, both in terms of income and employment levels.

## Concept of Cluster

It can be seen that, with varying degrees of intellectual sophistication and refinement of methodology, the relative concentration of many social and medical problems in space has attracted the interest of researchers. Rothman (1990) states that as long as diseases have been recognised it has been apparent that many of them are manifested in clusters. Interest in those clusters resides not so much in the mere aggregation of



cases but rather in populations that have a high rate of disease. Experience in epidemiology should remind us that clustering can also be observed for variables that are not causes but serve as markers for the causes. The scientific reason to study disease clusters is to learn about clustering of the causes (Rothman, 1990,p.S7): 'The payoff from clustering research comes from the specific hypotheses that emerge to explain the observed pattern of excess occurrence' (p.S9). Legionaire's disease, acquired immuno-deficiency syndrome, phocomelia and minemata disease are diseases for which knowledge of the space-time aggregation of cases facilitated the identification of causal explanations.

These observations from the field of medical research are a reminder that uncovering clusters of problematic conditions only represent a starting point and that our primary concern should be with what helps to explain the spatial concentration of a phenomenon. One difference, however, between medical science and inquiry into the distribution of welfare problems is the former's greater capacity to formulate precise hypotheses of the kind advocated by Rothman. The difference lies partly in the relative states of knowledge of the respective disciplines but also the nature of what it is sought to explain, ranging from a single causal agent to a situation or complex of inter-connected factors. The aims here will be (i) to document the spatial concentration of child maltreatment within a relatively small neighbourhood, itself a rare occurrence in the literature, and (ii) using a combination of insights garnered from previous research and the available survey data, attempt by quantitative and qualitative means, to identify factors that discriminate between 'cluster' and 'non-cluster' neighbourhoods.

## **CURRENT PERSPECTIVES ON NEIGHBOURHOOD EFFECTS**

### **The 'New' Urban Ecology**

Recent developments in urban ecology have fostered interest in sub-neighbourhood or 'micro-ecological' levels of analysis. For example, the work of Bursik and Grasmick (1993, p.10) recognises that people live in nested levels of communities, the smallest level being based on the propinquity of residents and the common use of local facilities. Thus is constituted the 'face block' level of interaction, with the residential block being a key source of main acquaintances and with informal means of social control being to the fore.

A common finding in urban studies is that residents make safety-related differentiations within their neighbourhood. The typical finding is that as they move closer to home residents experience fewer crime-related problems and feel more able to exercise informal social control (Taylor 1997, p.117). Taylor describes such phenomena in terms of the 'collective psycho-geography' of residents on a block, or a small cluster of residents in one part of the block. Where residents are better acquainted with neighbourhoods within block or partial block settings, they experience more control, fewer problems, and feel more responsible for events (p.121). The precise etiology of these patterns is not known, but a situation of non-attachment may evolve with circular effects. Non-attachment may be fostered by and, in turn, influence local behaviour patterns, social dynamics, and beliefs and understandings about the local area (called 'cognitive mapping strategies' – Taylor, p.138). If

residents in the area have a sense of the locality being in decline they may progressively withdraw from interactions with, and reliance on, neighbours, and develop a generalised suspicion about them.

### **Socially Impoverished Neighbourhoods**

What contributes to low morale neighbourhoods? A feature of recent research in this area has been the refinement of measurement and the use of more sophisticated methodology. However, it has been the classical studies of Garbarino and Associates which have shown that, in order to understand the forces that impede healthy child development, we must go beyond family life and investigate high risk environments. For example, Garbarino and Sherman (1980) argued that concentrations of socio-economically distressed families are most likely to be high risk for child maltreatment. They claimed that socio-economic status accounts for about 40% of the variation across neighbourhoods. High risk neighbourhoods can also take another form, namely socially impoverished areas that have a higher rate of child maltreatment than would be predicted, knowing their socio-economic character.

To further their understanding of this latter form of social environment, Garbarino and Sherman compared such an area with a low risk one. Mothers in the low risk area rated their neighbourhood as a better place to raise children than did mothers in the high risk area. 'The picture that emerges from the high risk area is one of very "needy" families competing for scarce social resources' (p.194). Garbarino and Sherman cited work by Collins and Pancoast (1976) in which the concept 'free from drain' was invoked to describe people who could afford to give and share because the balance of needs and resources markedly favoured that possibility. Low risk areas seem free from drain in many respects: people keep up their houses and their families; they can afford to become involved in neighbourly exchange without fear of exploitation. In high risk environments parents are inclined to seek an advantage by getting what they can from others while giving as little as they can get away with: 'There is ambivalence about neighbourly exchanges and a recognition that, overall, the neighbourhood exerts a negative effect on families (as illustrated by the low rating given to the neighbourhood as a place to raise children)'.

Another source of data for Garbarino and Sherman was an interview study of family stresses and supports conducted within the two comparison areas already described. The risk assessments made by parents was significantly correlated with the overall rating of the neighbourhood as a place to raise children. The less 'risky' the neighbourhood, the more positively the mothers in that neighbourhood rated it as a context in which to rear children. Parents, the authors say, are sensitive to the way neighbourhood factors establish a particular climate for families and parent/child relations.

Coulton, Korbin and Su (1996) are among the growing number of researchers recently to have expressed regret about the usual reliance on census indicators of socio-economic status as a proxy for neighbourhood conditions and processes (p.7). Similar views have been expressed by Zuravin and Taylor (1987). Research on community contexts for families and children typically requires some form of geographic boundary. Coulton *et al* state that the choice of boundaries may have a

phenomenological basis -- each resident's sense of a boundary that is personally meaningful -- or it may be based on interactional or statistical information. With regard to the last of these boundaries, the common approach in Australia and elsewhere has been to use combinations of census collectors' units, or their equivalent. Given the concern now being expressed about the degree to which such units resemble the space that is meaningful to residents, *block groups*, consisting of several contiguous street blocks, are more often being used as proxies for neighbourhoods because their size is more consistent with 'walking distance' and because they represent the most immediate environmental influence on families with young children. Face-to-face interaction and direct knowledge of the area is possible. Coulton *et al's* 1996 study measured aspects of neighbourhood context for children that had emerged as themes from ethnographies contrasting high and low risk neighbourhoods for children. Using factor analytic methods, aggregate measures of acceptable reliability were devised for facility availability, usage and quality, block club activity, expected neighbour retaliation for intervention with children, neighbourhood quality, mobility, positive change, disorder, victimisation and identity. Most of the scales showed significant differences in the expected direction when neighbourhoods with high and low rates of child maltreatment were compared. Respondents in high risk areas were more likely to expect retaliation when they intervened with children and to rate their neighbourhood quality as poor. Scores on scales measuring residential mobility, disorder and threat of victimisation were higher in high risk areas, and residents of high risk areas were less likely to have an identity for their neighbourhood. High risk neighbourhoods had lower scores on facility availability but the facilities were used more often.

### **What Contributes to Low Morale Neighbourhoods?**

As efforts are pursued to gain a better understanding of the forces shaping socially impoverished neighbourhoods, the perspectives developed by Garbarino and his Associates are being subjected to considerable conceptual refinement. Advantage has been taken of the previously mentioned British Crime Survey data to study the macro and micro level dimensions of neighbourhoods with low social cohesion and where residents experience life as being less than satisfactory. A sample used by Sampson (1991) was drawn from polling districts because they were considered to be relatively small homogeneous units which approximated the concept of neighbourhood or local community. Sampson's analysis has concentrated on small local areas where social cohesion is low.

The measure of *local friendship/acquaintanceship* used was the proportion of residents who reported that most of the people in the area were either friends or acquaintances. Social cohesion was tapped by a question which asked 'What kind of neighbourhood would you say you live in? Is it one where people mostly help each other, or where people mostly go their own way?' *Collective satisfaction* was measured by the number of respondents who said they were 'very satisfied' and *residential stability* by the proportion of residents who had lived in the neighbourhood for twenty years or more.

A number of macro-level control variables were included in the regression analyses to provide a strict test of the independent effects of community stability and specified intervening factors. These control variables included family structure, socio-economic

status, age composition/life cycle, unemployment rate, and fear of crime. After account had been taken of such variables it was found that residential stability had the largest direct effect on acquaintanceship, both in the community at large and in the 'adjacent neighbours' (immediate vicinity) levels (p.53). As expected, fear of crime significantly dampened the formation of friendship ties and acquaintanceship networks. Social cohesion appeared to be affected by friendship/acquaintanceship networks, leading to the conclusion that 'the data indicate that the density of friendship/acquaintanceship mediates the prior effects of community residential stability on social cohesion' (p.54). In turn, social cohesion was directly related to levels of satisfaction across the 526 communities studied. Socio-economic status had a similar positive effect on satisfaction, while fear of crime reduced satisfaction. These findings, in general, confirmed theoretical expectations that 'community sentiment is lower in urbanised poor, heterogeneous areas that have high levels of fear and social disorganisation' (Sampson, 1991, p.55). There were counterpart findings at the individual level. Local ties were found to have the largest effect of all factors on individual satisfaction with community. In addition, the social cohesion of a neighbourhood increases an individual's satisfaction with the community.

### Neighbourhood Influences on Child and Adolescent Development

Just how does an 'unsatisfactory' neighbourhood exert an influence on the lives of residents? Does that influence flow primarily from the co-location of a majority of poor people, as the classic child abuse studies would suggest, or is it the *absence of affluence* and the life orientations and opportunities associated with it, which is the crucial factor? With respect to child and adolescent development, Jencks and Mayer (1990) have developed a useful taxonomy of ways in which neighbourhoods might exert their influence. They have identified:

- (i) '*contagion*' theories, based primarily on the power of peer influences to spread problem behaviour;
- (ii) theories of '*collective socialization*', in which neighbourhood role models and monitoring are important ingredients of a child's socialisation;
- (iii) '*competition*' theories, in which neighbours compete for scarce neighbourhood resources;
- (iv) theories of '*relative deprivation*', in which individuals evaluate their situation or relative standing *vis -a- vis* their neighbours (Mayer and Jencks, 1989, cited in Brooks-Gunn, Duncan, Klebenov, and Sealand, 1993, p.355).

Brooks-Gunn *et al* (1993) have used two data sets to examine how both neighbourhood and family characteristics influence outcomes at two age points – early childhood and late adolescence. The first analysis sample consisted of 895 low birth weight pre-term infants born in eight medical centres across the United States. The second analysis sample focused on more than 2 000 women who were observed between the ages of fourteen and nineteen. Both samples afforded the opportunity to study whether the socio-economic characteristics of neighbourhoods are associated with important developmental outcomes of children and young people. Of particular

interest is whether neighbourhood effects operate differently for families with different characteristics (pp.360-361). For example, residing in very poor neighbourhoods may have particularly detrimental effects for well-off adolescents via the contagion effect -- that is, the sheer numbers of possible friends who are dropping out of school or becoming pregnant. On the other hand, children from poor families may fail to benefit from better-off neighbours for a variety of reasons, including the possibility that low family-level resources may be too constraining, or affluent schoolmates may set discouragingly high academic standards.

The studies used employed two broad domains of development -- cognitive/school functioning and social/emotional functioning. In the pre-school period the cognitive tests used measured skills associated with school readiness that are also associated with subsequent school functioning. The focus of one of the studies on low birth weight babies was incidental to the desire to understand the nature of neighbourhood effects: despite the fact that the mean levels of outcomes such as IQ and behaviour problems are lower for low birth weight infants, associations between family-level variables and outcomes are the same for normal birth weight and low birth weight infants (p.363).

The first analysis was a relatively simple one of exploring associations between the fractions of low-income and affluent neighbours and the four developmental outcomes. All of these correlations had the expected signs and were highly significant in the statistical sense, except for the link between low-income neighbours and the results on a *behavioural problems index* used. There was no evidence that increasing the ratio of moderate-income neighbours to those of low income was associated with better developmental outcomes in early childhood; what was confirmed were significant associations between having more affluent neighbours and better scores on all of the development outcomes. At the level of the family, income and mother's education were powerful predictors of the four developmental outcomes but very important from the point of view of local area influences was the fact that the effects of affluent neighbourhoods on childhood IQ, teenage births and school leaving persisted even after adjustments to differences in the socio-economic characteristics of families (p.374). 'Taken as a whole, our results indicate that the number of affluent, high-occupational status and, perhaps, two-parent families are key dimensions of neighbourhood economic and social structure most likely to affect children and adolescent behaviour over and above family resources. In light of the *non-significance* of neighbourhood poverty and male joblessness, and the significance of affluent neighbours ... we believe that our results are more consistent with the social control theories of Wilson and others that stress the importance of the resources and role models provided by affluent neighbours' (p.377).

Thus, a major distinction in the work of Brooks-Gunn *et al* (1993) is between the effects of the presence of low-income families (so-called *contagion theories*) and the absence of affluent families (so-called *collective socialisation theories*, such as those proposed by Wilson, 1991). 'Both of our data sets provide considerable evidence of the latter and, at best, inconsistent evidence of the former.' (Brooks-Gunn, p.384). The presence of affluent neighbours was associated with outcomes at both ages, a result which the authors interpreted as being indicative of role model effects. While the study clearly shows that neighbourhood factors can be important, family-level factors are also significant. The most important family-level variable is the increasing of incomes of

families with young children. Income is a more potent predictor of outcomes than family-level variables like maternal education.

Why is it that children in single parent homes are at a higher risk of being abused than are children in dual caretaker homes? One hypothesis is that lack of a partner entails difficulties in meeting the time-consuming and stressful demands of child rearing and that increases the risks of abuse (Krishnan and Morrison, 1995). A second assumption is that abuse is the result of economic deprivation, a characteristic of single parent households. The two hypotheses are referred to as the 'parent absent hypothesis' and 'economic deprivation hypothesis'. The evidence for and against these hypotheses was an important part of Krishnan and Morrison's (1995) study of variations in child abuse rates in Alberta, Canada. They comment at the outset that the reliance in previous studies on census data has prevented empirical examination of both macro and micro level dimensions of child maltreatment. The unit of analysis in the Krishnan and Morrison study was the District Office, of which there were 48 for the province of Alberta. The District Office was the smallest geopolitical unit with data on child maltreatment, but the authors caution that the use of administrative units as an approximation to 'community' or 'neighbourhood' is not ideal.

It was found that: (i) per cent population aged 0-19 years, (ii) unemployment rate, (iii) per cent single parent families, and (iv) a particular region (the north-west), all had positive relationships with child maltreatment. A regression analysis was then undertaken and it was found that, after controlling for other factors, the effects of (i), (ii) and (iii) above were small and statistically not significant. The finding with respect to female labour force participation was consistent with the finding of other multi-variate studies which have found the variable in question to have a weak and negative effect on child maltreatment. The unemployment rate clearly was the best predictor of the child maltreatment rate ( $B=.46$ ). This variable contributed 26% to the variance explained by the model: 'Overall, the findings suggest that maltreatment among children is particularly related to general socio-economic stress that is reflected by the level of unemployment' (Krishnan and Morrison, 1995, p.109).

Notwithstanding the emphasis placed by Krishnan and Morrison (1995) on general socio-economic stress, neglectful families are even less likely than their low income neighbours to interact with neighbours or to perceive them as helpful (Coulton, Korbin, Su and Chow, 1995). Ethnographies of neighbourhoods with public housing have found that parenting success is compromised by the fact that mothers seldom know their neighbours, feel that they do not share common values with their neighbours, and find few neighbourhood organisations in which to participate (Coulton *et al* 1995, p.1264). Highly mobile communities have been shown to have a lower density of acquaintanceships which, in turn, seems to limit their ability to control crime, socialise their youth, and take care of members with special needs.

Coulton *et al* have hypothesised that the child maltreatment rate of a locality is related to the following structural characteristics of neighbourhoods: economic status, population movement, age and family structure, and the proximity of the neighbourhood to other areas of poverty concentration. The indicators employed in the study included --

- % poor persons
- % residents unemployed
- % who move between censuses
- % households in current residence less than ten years
- % households with children that are female headed
- number of children (0-12)/number of adults (21 +)
- adult male (21-64)/adult female (21-64)
- % residents classified as black
- maltreatment of children/1 000 children population (0-17 yrs)
- % population over 65 yrs

Family, age and gender structure were viewed as affecting the resources available for families and children.

Factor scores representing the three dimensions of community social organisation and a measure of geographic location were used as independent variables in a model, with child maltreatment rate as the dependent variable. The model explained approximately half the variance in the maltreatment rates among census tracts (p.1271). The *impoverishment* factor (embracing the conditions of poverty, unemployment, female head of households and population loss) had the greatest effect on maltreatment rates. Another factor tagged the *childcare burden factor* had a significant but lesser effect than impoverishment. Involved here was a combination of many children per adult, few elderly residents and a low proportion of adult males: that is to say, a considerable risk of child maltreatment exists in areas with a limited number of adults available to supervise, care for and support children and to involve themselves in neighbourhood social institutions. Another factor tagged *instability* (areas with greater movement) also contributed in a relatively minor way to the rate of child maltreatment. Finally, the geographic location of a census tract relative to concentrated areas of poverty also appears to affect maltreatment rates independent of the community social organisation factors.

Overall, the findings lend support to the earlier observations of Garbarino and colleagues in their studies in Chicago and Nebraska (Garbarino and Crouter, 1978; Garbarino and Kostelny, 1992). The findings suggest the importance of attempting to understand child maltreatment against a background of community level social organisation and accompanying social resources, social control and solidarity (p.1274).

What are the processes through which impoverishment, instability, extreme child care burden and concentration of poverty produce the high rates of maltreatment? Coulton *et al* (1995) state that more research is needed to explore the transactions among variables at multiple ecological levels. Still, their own ethnographic study of residents in high risk areas is suggestive of some of those processes. Residents of high maltreatment neighbourhoods report distrust among neighbours and observe that adults are reluctant to intervene when they see children engaging in dangerous or unruly behaviour: 'In turn, their fear of violence and the feeling that one's neighbours are "undesirable" further limit their neighbourhood interactions. Many residents who can afford to leave do, taking with them resources, skills and pro-social influences' (p.1274).

## METHOD

As several of the researchers whose work has been reviewed have stated, a *cluster* is not simply a self-evident visual pattern but must be defined in measurable operational terms. In the present instance, an attempt has been made to identify clusters of child maltreatment cases at a level below standard census counting units. An operational definition was required and this took the form of a scaled template encompassing 200 square metres of territory within the suburb under study. A 'cluster' was said to occur when such a space contained at least three or more addresses at which confirmed cases of child maltreatment had occurred over a three-year period. Our 1995 random sample of households was based on the complete enumeration of residences. Thirty-nine carers who had been interviewed in 1995 and who lived within the boundaries of the cluster areas defined by the aforementioned template procedure have, for the purposes of the present study, been categorised as *cluster area residents*, and their responses to a range of psycho-social items have been compared with the responses of the remaining 177 residents of the suburb included in the initial random sample. The items available for the comparison of 'cluster' and 'non-cluster' residents included Buckner's (1988) eighteen item scale for measuring neighbourhood cohesion, including the dimensions of *attraction to neighbourhood*, *neighbouring* and *psychological sense of community*. The scale enables single item comparisons as well as overall scores; a number of items concerning attraction to and ease of settlement within, and attitudes towards, the immediate neighbourhood; and items of the kind which several researchers since the early work of Garbarino and associates have found highly pertinent concerning the ease or otherwise of raising children within the immediate neighbourhood.

### Sample

Twenty-seven (69.2%) of the sample of 39 carers living in cluster areas were women, compared with 143 (80.3%) of the remaining 178 carers drawn from the rest of the suburb. The country of birth profile of both groups was similar, with 71.8% of the cluster sample being Australian-born compared with 67.4 % of the non-cluster group. There were slightly more carers of southern European origin in the non-cluster sample, and Aboriginal and Torres Strait Islanders accounted for approximately 10% of the cluster group and 5% of the non-cluster sample. In terms of level of education attained there was no difference between the two groups, in that a little over 50% of the members of each had not completed secondary school education with equal proportions of both groups having completed post-school education. The age profiles of the groups also were similar, but for a slightly greater percentage of the non-cluster respondents being under thirty (29.2% compared with 23.7%) and more of the carers living in the cluster areas being in their thirties (57.9% compared with 48.3%). Gross weekly household incomes were also very similar:

|                        | Cluster % | Non-cluster % |
|------------------------|-----------|---------------|
| \$430 or less per week | 56.4      | 52.3          |
| \$500 or less per week | 56.6      | 62.4          |



## RESULTS

### Neighbourhood Cohesion

Whereas Buckner's (1988) neighbourhood cohesion scale failed to discriminate between the 'high' and 'low' risk areas in our previous study, it is clear from Table 1 that the cluster area residents are significantly more likely than other residents to entertain negative perceptions of their neighbourhood in several of the aspects covered by the scale. For ease of exposition, Table 1 shows the percentages disagreeing with the statements which, in all but two cases, affirm the presence of *cohesion* in one or another of the three fundamental senses discussed by Buckner (see *Method* section). The wording of Items 5 and 15 are negative in the sense of implying non-cohesion, but they have been scored so as to maintain a consistent direction of scores in the table: that is to say, the 'disagreement' scores for Items 5 and 15 actually indicate the extent of agreement with these two negative statements.

The two items on which the most statistically significant differences occurred (2 probabilities of  $<.001$ ) both centre on the idea of attachment to one's local area. Cluster area residents were decidedly less likely to feel that they belong to their neighbourhood, and they are much more likely to express the wish, given the opportunity, to move out of it. This perception of non-attachment has been found in several studies to be especially salient in affecting people's sense of safety and comfort within local areas, and this point will be taken up in the discussion. Meanwhile, there can be few signs more indicative of weak attachment to a locality than saying that, given the chance, one would wish to leave. Another difference between the two groups which was significant at the  $<.01$  level was the disagreement expressed by about half (46.2%) of the cluster area residents with the statement that they valued friendships and associations with other people in their neighbourhood. This was about double the proportion of 'other' residents who felt the same way. This devaluing of neighbours, as we have seen, echoes the findings of studies of socially impoverished areas and the negative feelings many people living in such locations have towards neighbours.

Three other items reveal differences at, or approaching, the  $<.05$  level of significance. Cluster area residents again expressed their non-attachment to their neighbourhood when about half of them denied attraction to it (Item 1), and they were more likely than non-cluster residents to deny visiting neighbours in their homes (Item 3) and to deny feelings of loyalty to other people in the neighbourhood (Item 10). In sixteen of the eighteen items a higher proportion of 'cluster' than 'other' residents *disagreed*, and the overall differences between the two groups were significant at the  $p=.04$  level (Kruskal--Wallis test).

Table 1: Perceived characteristics of neighbourhood, (i) cluster areas (ii) remainder:

|  | Cluster area<br>'disagree' |      | Remainder<br>'disagree' |      | Significance                |
|--|----------------------------|------|-------------------------|------|-----------------------------|
|  | No                         | %    | No                      | %    |                             |
| Overall, I am very attracted to living in this neighbourhood   | 18                         | 46.2 | 53                      | 29.8 | $\chi^2 = 3.84...p<.05$     |
| I feel like I belong to this neighbourhood   | 22                         | 56.4 | 45                      | 25.3 | $\chi^2 = 14.60...p<.001$   |
| I visit my neighbours in their homes   | 21                         | 53.8 | 70                      | 39.3 | $\chi^2 = 3.31$ .(app.sig.) |
| The friendships and association I have with other people in my neighbourhood mean a lot to me                                    | 18                         | 46.2 | 44                      | 24.7 | $\chi^2 = 7.30...p<.01$     |
| Given the opportunity, I would like to move out of this neighbourhood  | 33                         | 84.6 | 100                     | 56.2 | $\chi^2 = 10.90...p<.001$   |
| If the people in my neighbourhood were planning something I'd think of it as something that 'we', rather than 'they', were doing | 20                         | 51.3 | 68                      | 38.4 | NS                          |
| If I needed advice about something I could go to someone in my neighbourhood   | 19                         | 48.7 | 6                       | 42.9 | NS                          |
| I think I agree with most people in my neighbourhood about what is important in life   | 9                          | 23.1 | 54                      | 30.3 | NS                          |
| I believe my neighbours would help me in an emergency  | 3                          | 7.9  | 11                      | 6.2  | NS                          |
| I feel loyal to the people in my neighbourhood   | 12                         | 31.6 | 31                      | 17.4 | $\chi^2 = 3.64$ (bord.sig.) |
| I borrow things from my neighbours   | 22                         | 56.4 | 91                      | 51.1 | NS                          |
| I would be willing to work with others on something to improve my neighbourhood  | 1                          | 2.6  | 8                       | 4.5  | NS                          |
| I plan to remain a resident of this neighbourhood  | 15                         | 38.5 | 52                      | 29.2 | NS                          |
| I like to think of myself as similar to the people who live in this neighbourhood  | 14                         | 35.9 | 49                      | 27.5 | NS                          |
| I rarely invite neighbours to my house to visit  | 23                         | 58.9 | 98                      | 55.1 | NS                          |
| A strong feeling of friendliness exists in this neighbourhood  | 10                         | 25.6 | 44                      | 24.9 | NS                          |
| I regularly stop and chat with people in my neighbourhood  | 13                         | 33.3 | 48                      | 26.9 | NS                          |
| Living in this neighbourhood gives me a sense of community   | 18                         | 46.2 | 56                      | 31.6 | NS                          |

## Sense of Neighbourhood 'Fit'

A series of questions ascertained: the duration of residence within the neighbourhood; whether or not carers and their families had chosen to take up residence there, and how easy or difficult it had been to get used to the neighbourhood. A higher proportion of the cluster residents (38.4%) than general community residents (28.7%) had lived in their neighbourhood for less than two years, but the difference was not statistically significant. However, almost half as many again (59.0%) of those living in the cluster areas compared with the remaining carers (40.1%) said that the choice of residence had not been theirs ( $\chi^2$  (1df):  $p < .05$ ). The 'cluster' residents (38.5%) were one-and-a-half times as likely as other carers (24.1%) to say, for a variety of reasons including the unfriendliness of neighbours, that their settlement within the neighbourhood had been 'hard', and the difference between the groups bordered on statistical significance ( $\chi^2$  (1df) = 3.4):

**Table 2: Ease or difficulty of settling in to your neighbourhood**

|        | Cluster areas |       | Non-cluster areas |       |
|--------|---------------|-------|-------------------|-------|
|        | No.           | %     | No.               | %     |
| 'Hard' | 15            | 38.5  | 42                | 24.1  |
| 'Easy' | 24            | 61.5  | 132               | 75.9  |
|        | 39            | 100.0 | 174               | 100.0 |

In the circumstance of such significant proportions reporting their neighbourhood's unattractiveness and unfriendliness, memories of how one came to settle in the area are open to the possibility of distortion. The retrospective nature of the present data does not permit clarification of the extent to which current dissatisfactions have coloured people's memories of the process of settling in to their respective neighbourhoods.

## A Place to Raise Children

Carers resident in cluster areas were decidedly more inclined to rate their locality as a 'poor/very poor' location in which to raise children. They were almost twice as likely (41.0%) as non-cluster area carers (21.9%) to express this view:

**Table 3: Neighbourhood as a place to raise children**

| Rating         | 'Cluster' residents |       | 'Other' residents |       |
|----------------|---------------------|-------|-------------------|-------|
|                | No.                 | %     | No.               | %     |
| Poor/very poor | 16                  | 41.0  | 39                | 21.9  |
| Other          | 23                  | 59.0  | 139               | 78.1  |
|                | 39                  | 100.0 | 178               | 100.0 |

The difference between the two groups was statistically significant ( $\chi^2$  (1df): < .02). Indeed, while the numbers become rather small, the comparison in terms of the rating 'very poor' is even more striking, this being the term chosen by 8/39 (20.5%) of cluster area residents compared with 13/178 (7.3%) of those residing in other neighbourhoods.

What factors lie behind the relatively harsh judgement of the cluster neighbourhoods? In characterising their areas as places within which to raise children there was one theme which distinguished cluster and non-cluster carers: namely, allusions to the 'dangerous'/'criminal' environment and/or 'unacceptable' lifestyles of neighbours. These elements were referred to by 15/39 (38.5%) of cluster area respondents compared with 43/177 (24.3%) of the remainder. There was no difference in the percentage of both groups referring to unsupervised children, a perception which in overseas research has been found to be more characteristic of socially impoverished areas. The present finding may be an artefact of confining respondents to one main reason for rating their neighbourhood as helpful or unhelpful in child rearing. It may be that judgements in terms of the unacceptable behaviour of neighbours would, if elaborated upon, include as a consequence the poor supervision of their children. This is a consideration which has been taken up in the qualitative study of cluster areas (see later section).

### **Area Encompassed by 'Neighbourhood'**

When respondents were asked to indicate the boundaries of their neighbourhood on a map, it was clear that they had in mind an area more akin to the street block of the new urban ecology literature than the larger census boundaries which have previously been standard in child abuse research. Three-quarters of the cluster residents (76.9%) and two-thirds (65.7%) of the remainder traced 'neighbourhoods' with a radius of no more than three suburban blocks. Slightly fewer than nine out of ten (88.5%) of all respondents set their neighbourhood boundaries *within* their suburb, with no significant difference between the cluster and non-cluster groups in this respect.

### **Practitioner awareness of cluster areas**

In an earlier section reference was made to Garbarino and Sherman's (1980) classic study of socially 'impoverished' neighbourhoods. The concept of *drain* was invoked to describe the ways in which a lack of resources of many kinds limited residents' capacity to 'give and share' and attend to the appearance of their homes, and participate in neighbourly exchange without fear of exploitation. The residents of impoverished neighbourhoods are sensitive about the harmful impact of the local environment on their children.

To what extent are human service practitioners and local community activists aware of the cluster areas identified in the present study as areas of concentration of child abuse, and do they believe these localities have social characteristics which distinguish them from the remainder of the suburb in which they are located? An additional small study focusing on these questions was undertaken in late 1998 and early 1999. Structured interviews were held with twelve respondents eleven of whom

had regular professional or community organisational involvements in the suburb, the other sample member's acquaintance with the area being based on less regular contact as part of a wider social work service to a region. Four staff members of a state child protection agency were interviewed, as were four members of a Health Centre based in the suburb in question, two social workers (mental health and family counselling), a neighbourhood development officer, and two members of the community prominent in local affairs.

In the interviews, respondents were asked whether child maltreatment is evenly distributed throughout the suburb or is it concentrated in some areas, the basis for the opinion expressed, and why the pattern is as it is?; if there is variation in the distribution of child maltreatment - all respondents said that is the case - then do the sub-populations concerned have distinguishing characteristics?; do the social environments differ from the remainder of the suburb?; how difficult or easy is it to bring up children in the identified area(s)?

### **Are there areas of concentration of child maltreatment?**

#### **Southern section**

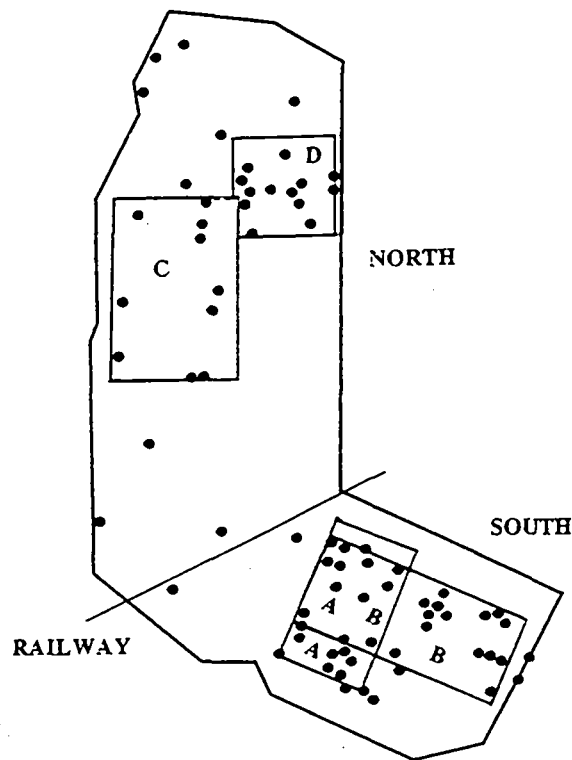
The respondents showed considerable discernment and, if our sample of maltreatment 'hot spots' reflects an enduring pattern, considerable knowledge of the spatial distribution of child abuse in the southern section of the suburb. Five of the thirteen respondents indicated the area designated A as being one focal area; the extension of that area in an easterly direction (B) accounted for the opinions of a further six respondents. One of the remaining two respondents simply encircled the whole of the southern section while the other identified only a northern part of the suburb.

#### **Northern section**

Ten of the thirteen respondents indicated a 'concentration' of child maltreatment cases within the northern section. Four people each identified two main areas (C and D). Two respondents marked the whole of the northern section. Two others marked either one or two streets as well. Nine of the ten people who identified concentrations in the northern sector also identified areas in the south. All thirteen respondents identified at least one concentration in either the north or south; nine identified an area in both zones and four in one or the other zone.

Overall there was a high degree of concordance between the areas within the suburb that our respondents thought to be problematic and the clusters identified on the basis of confirmed notifications. Not surprisingly, the overlap was particularly striking in the case of the four child protection agency personnel but was hardly less so with the other groups, including the two residents who played leadership roles in local affairs.

**Figure 3** Community Workers' perceptions of child abuse 'cluster areas'



### Explanations for pattern

All of the professionals interviewed gave their experience in handling child abuse cases, together with allied social problems coming to their attention, as the basis for designating the above-described sites as priority areas. The two residents relied on their observations of local children and their parents.

Nine of the thirteen respondents associated the main concentrations of child maltreatment they identified with the distribution of public housing in the suburb. In part, this observation reflected a perception about the difficulties experienced by public housing tenants before they were allocated housing in the suburb. One professional observed 'New residents often come from families of origin where they have not received much support. There are histories of abuse and violence within their own homes and, as a consequence, they are deficient in what they can give to their own children; they have not had examples of adequate parenting displayed in their own upbringing; they lack literacy skills and have financial and employment problems'. A colleague put it more succinctly: 'Some people have problems before they come here. They beget another generation of youngsters of similar disposition'.

A social worker commented: 'Where you have a number of needy people or families living in a particular area they find it difficult to connect with other people' Another worker pointed to the presence of a substantial number of single parents in the identified areas with the associated difficulty of low incomes. 'They are families

under pressure". Other comments emphasised the consequences of that 'pressure' : "In addition to the common background of low socio-economic status, particularly on the Housing Estate, there are dependencies of various kinds, including drink and drugs, and a level of domestic violence which has adverse consequences for children.' This commentator then touched on a theme which is taken up a little later in this discussion: 'Conflict and violence are characteristic of these areas'.

Another indirect consequence of the presence of public housing in the suburb and particularly within the identified areas, was thought by several respondents to be the transience of the residents. ' The problems could have something to do with the high turnover of residents. Some people come to this area in the expectation that they will move elsewhere. They are not comfortable here. They don't really feel that they have exercised any choice in the matter and that makes them feel stressed,' commented one worker. Another held similar views: 'There is a more transient population in the 'high risk' areas; many residents seek help in documenting their case to be transferred.'

### **Distinguishing features**

There may have been a considerable degree of consensus about the location of 'cluster areas', but opinions about the character of life within those areas varied from the extreme position of one experienced child protection officer that 'It's Sarajevo and deteriorating ' to the view expressed by a local community leader that ' I'm not conscious of any great differences but I am conscious of the fact that they have a bad reputation'. The tone of some commentators placed their remarks somewhere in between, acknowledging local difficulties on the one hand, but asking how distinctive those difficulties really are, on the other. The varying interpretations placed on the experiences they have had seem to constitute two 'truths' about the high risk areas. The two perspectives involved - essentially that they are areas characterised by violence, clannishness, addiction, unsociability, and child neglect, Vs. cooperativeness, 'normalcy' and interest in improving community life - seem to be linked with the main focus of workers' professional or community roles. Where those roles emphasise therapeutic or social control work with individuals and families, the impressions of the localities are of the 'darker' variety; where community-building is the main focus, it is the other more optimistic 'truth' which is emphasised, namely, the people resources and potential of the area.

We will now illustrate these variations in perspective but the one theme which was present in the comments of all respondents was the level of violence in the areas in question. Estimates as to its intensity ranged from a war-like state to suggesting that it may be no more severe than one encounters in other areas. The child protection officers were among those most conscious of aggression and violence in the designated localities. Because of an alleged deterioration in the general standards of conduct in the designated areas (fighting, drink and drug misuse, trafficking in drugs, domestic violence ), it was claimed that judgements of defective parenting have been adjusted downwards over the past decade. 'We live with things now that we would have found unacceptable ten years ago', said one child protection officer.

A community health worker also couched her opinions in terms of an increasing degree of community conflict. 'In the last couple of years compared with seven years

ago, there have been more people complaining that they are being harassed by, or experiencing conflict with, other locals. They are worried about the impact of fights and conflict on their children. Our clients say they are having real difficulty in coping with the level of tension. They are seeking reports which they can use to get out of the neighbourhood.' One problem is said to be that residents lack the skills to contain their conflict. 'If people clash with one another within the (identified) areas it can quickly become a 'full-on' blue. It's not a contained thing,' said one of the local residents. A community health worker sees the proneness to aggression as being part of a generalised incapacity to develop problem solving strategies. 'Many people here have a narrow range of such strategies, including the lack of means for dealing with conflict without resorting to aggression. People get on together about the same as they do anywhere else. Bullying, gangs, children, can be the basis for conflict.' A child protection officer spoke of personal differences being speedily converted into 'clan fights.' A health worker based in another area simply expressed apprehension about visiting the southern half of the suburb. 'There are security problems; you have to think more about locking premises and the like. A couple of colleagues have been attacked when visiting,' she said.

A local community leader acknowledged some aspects of the darker picture of life in the 'at risk' localities but attributed the problems to conditions which could be put right by concerted action. 'There is nothing for the kids to do so they resort to going around in gangs and engaging in 'break and enters'. They witness their parents using drink and drugs and imitate them. The areas we're talking about are the ones where drugs can easily be purchased. A small proportion of the parents have just allowed their lives to deteriorate to the point where they have stopped caring. For as long as people believe that they can get away with selling drugs or neglecting their children there's no real pressure or incentive to pull their lives into better shape. There is suitable land available and we need to create recreational opportunities for children. Public transport should be made cheaper so that parents can take their children to centres where there are recreational facilities and other things of interest. The community clean-up campaign (known as Project Pride) should continue to lift local morale and reduce the hazard of discarded needles and bottles. Aboriginal people try to share positive aspects of their culture and they should be warmly encouraged to continue to do that.'

A second resident who is the initiator of a community scheme balanced comments about some shortcomings in the neighbourhoods in question with a more optimistic view of the local social environment. 'If an adult tries to do something about children's misconduct, that person is likely to be attacked. However, even if we take some of the 'roughest' of the residents, they will not hesitate to ask if there is some favour they can do for others, like doing their shopping.' This respondent pointed to the evidence of a band of supporters who regularly attend meetings about the safety of children travelling to and from school, to make her point that there are many caring parents in the areas designated as being problematic. The neighbourhood development officer saw a positive consequence of some of the estate design features which were criticised by other respondents. 'The duplexes and small blocks seem to have encouraged a high degree of interaction between residents and the bonds formed between people, especially where they have children of a similar age, have resulted in social occasions like barbecues and Christmas parties. These patterns often endure, especially among the longer term residents. Local movements, like the



children's transport safety group, the citizen action group, and community clean-up and 'anti-drug sniffing' campaigns, testify to the capacity of locals to work together on shared problems.'

### **Social environment**

Many of the foregoing comments bear on the issue of the social environment existing within the 'at risk' areas. Respondents were asked more explicitly about the degree of neighbourliness within the areas and about residents' attachment to their neighbourhoods.

While some of those questioned had strong, unified views on these matters, it was equally likely that co-existing but contrasting themes would be acknowledged. A community health worker was one of the respondents with a single minded view of the issue. 'This (designated area) is not a neighbourly place. You avoid some routes to public transport and are constantly looking over your shoulder. You might have residents jeer at you from their homes or whistle or yell at you from cars. 'Full on' abuse can be heard coming from many homes. It's like having 'work in your face' as you walk to transport. Because everyone is struggling they don't have a lot to give to others. So far as attachment is concerned, some people say that it's not a bad place and anyone who tries can make it here; others say they hate the place and wish they hadn't been placed here. This group can't wait to get out.' The previously mentioned health worker who is based outside of the suburb and emphasised the need for security when working in the southern zone, had an overall impression of residents living in isolation of one another. 'A visitor gains the impression of no one being around, doors are shut, and blinds drawn. People turn inwards rather than to one another. They are not particularly attached to the locality, or even to neighbours.'

Two other health workers saw the situation as being more complex. The first commented 'The situation is complicated; from time to time the people do help one another but then there is the trend of the last few years towards so much conflict. The two things co-exist. Some of those who are seeking relocation enjoyed living here for quite awhile but the events of recent years have put them off.' Her colleague had somewhat similar thoughts: 'It's dichotomised - some people have their very good neighbours, and they have their bad neighbours, with neighbourhoods aligning themselves with one party or the other around disputes. On the surface there are signs of non-attachment, things like careless disposal of garbage and general indifference to the appearance of where one lives. But many people are strongly attached to their homes and the locality in which they live.'

Respondents with a primary interest in the social development of the suburb took an altogether more optimistic view of the neighbourliness of residents of the 'at risk' areas and their attachment to where they live. One of the community leaders spoke of the willingness of locals to help their neighbours out and said that while there may be the 'odd exception', residents were generally quite happy to remain. The other community leader spoke of 'only 0.3% not liking it here and wanting to go elsewhere.' The neighbourhood worker saw attachment to the areas of residence being a function of how long people had lived there. 'It depends on whether you are using the allocated housing as a staging post or whether you have decided to settle.'

## **A place to bring up children**

With the possible exception of one of the community leaders, the respondents all said that it would be difficult to raise children in the areas they had identified. The remarks of one health worker summarised many of the sentiments expressed by professional staff: 'It would be difficult. It's a pressure cooker situation. The child may be the focus of disputes or, indeed, the one who precipitates disputes by encroaching on someone's space. Tension surrounds the child. We see instances of school avoidance resulting from children not wanting to travel via certain streets.' Other respondents also mentioned the harmful consequences of peer pressure on children and the lack of facilities for them. One of the community leaders thought the question came down to the attitudes of parents: 'If parents are caring and devoted to their role, then it's possible to bring kids up quite well. If they are negligent, then a different result will follow.'

## COMMENT

The foregoing account of a single site demonstrates the potential utility to efforts to prevent child maltreatment, of examining patterns of confirmed abuse *within* suburbs and *across* the census counting units which have long held sway in ecological studies of child maltreatment. The present findings indicate three things:

- (i) the spatial clustering of officially notified and confirmed instances of abuse;
- (ii) an association between living within those cluster areas and a lack of attachment to one's neighbourhood, local friendships, and the people residing there, together with the judgement that it is a poor place in which to bring up children, partly because of the 'dangerous' environment and 'unacceptable' life styles of residents;
- (iii) the remarkable ability of a small sample of community workers and local leaders to identify the cluster areas and give an account of the social environment which, in many respects, echoed the account given by the residents who were interviewed in an earlier survey.

Of particular interest was the suggestion that community workers and local leaders, whose primary role is community building, recognise neighbourhood shortcomings but also characterise 'at risk' areas in terms of strengths and potential strengths. This duality of characterisation is reminiscent of the classic observation made many years ago on the character of *Little Communities* by the eminent Anthropologist, Robert Redfield (1967; pp.133-137). Faced with the contrasting pictures of the same village drawn by himself and another Anthropologist, Oscar Lewis, Redfield was forced to the following conclusion:

The community may have more than one face; it may, within the guidance of any descriptive concept, be understood not simply as just 'this' but also 'that'. .....I think we may well conceive of the process by which understanding of human wholes is advanced as a kind of dialectic of viewpoint, a dialogue of characterizations. 'This', but on the other hand 'that', is the orderly swing of the mind toward truth.

If the pattern of spatial distribution of child maltreatment uncovered by the present study were to be repeated in other Australian suburbs, that insight would invite more refined prevention strategies than has been the practice to date. Directing scarce resources at larger aggregations of families (Local Government Areas, whole suburbs, or census counting units), would appear less efficient than working within, say, a small number of street blocks in which there is known to be a concentration of cases of child maltreatment. Child protection authorities would have to be willing to make available on conditions that protected the anonymity of individual cases, the data needed for this simple mapping exercise. However, one of the major revelations of the present research is the fact that experienced practitioners with a knowledge of the suburb in question, can draw the outlines of cluster areas with a degree of precision that makes their estimates a workable proxy for the official data. Again, it would be useful to know whether those insights were born of the character of the region involved on this occasion or whether similar results would obtain elsewhere.

It is beyond the scope of the present study to specify in detail all of the elements that would be involved in the attempted remediation of the 'hot spots' which have been identified. In the broadest terms, the 'darker' perspective of the more family and individual oriented service providers would inform many of the direct services that would need to be provided, for example, to markedly aggressive, drug dependent, and unemployed adults. So far as the children's needs can be separated from the multi-stranded problems of their neighbourhoods, one of the community health

workers had some useful prescriptions : 'More pre-school centres, child care, parent support - that's how you will avoid filling the gaols in fifteen years time. We are seeing so many children coming through who are displaying learning difficulties and serious behavioural problems, and 99.4% of them are boys aged between four and ten years. These are the ones who in years to come will fill our detention centres and gaols.'

Many of the problems identified within the 'at risk' areas are of a social/environmental nature and it is here that the more 'optimistic' perspective of the community builders would need to come into play. Existing local leaders and potential leaders with roots in the local area and an authentic desire to work with others to improve conditions, need to be identified and supported, as also do the existing and fledgling local organisations. These are the standard ingredients of a community development approach which sees a problem like child maltreatment as being embedded within an unsupportive community. In combination with an array of appropriate direct services, like the ones mentioned above, community building could be a powerful influence, as it is proving to be in some other areas with a substantial public housing presence. However, our findings would suggest that changing the concentration of public housing would also assist measures aimed at improving the social environment of the cluster neighbourhoods, yielding positive results for the families and individuals living in them.

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