NEIGHBOURHOOD RESPONSE TO COMMUNITY MENTAL HEALTH FACILITY LOCATIONS

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ABSTRACT

The focus of this thesis is upon aggregate neighbourhood response to community mental health facilities. The mentally ill are increasingly being moved out of large institutional treatment settings to receive care from a range of small-scale facilities in the community. Opposition to facility locations has impaired the effectiveness of the community mental health movement and had important ramifications for the social and spatial structure of modern urban areas. Opposition represents a form of neighbourhood response to the perceived externality impacts of facilities exercised as communities act to protect their investment in the neighbourhood environment by territorially excluding the mentally ill. A thorough understanding of this aggregate group-based response is of critical importance to the continued operation of the community mental health movement as well as to our understanding of modern urban sociospatial structure.

This thesis develops and tests an operational model of neighbourhood response. This model specifies a multi-stage process of facility impact and externality field perception which serves to determine neighbourhood response and ultimately, adjustments to the urban landscape. This process is related to a number of contextual variables representing the population surface of a host neighbourhood, the externality surface generated by a facility, and individual stake in the conflict issue. This model was tested using a sample of residents from Toronto, Ontario.

The findings indicate that community mental health facilities are perceived as having little impact upon residential neighbourhoods; some concern is apparent, however, over the effect of facilities upon residential property values. Perceived facility desirability tends to decrease with proximity to facilities, indicating the existence of an externality field conforming to a distance-decay relationship; the intensity and extent of this field is nonetheless highly constrained. The externality fields serve to arouse only a limited degree of opposition to facility locations. The propensity for response is related to perceived facility desirability, and increases with advanced proximity to the facility. No significant relationships between the perception and response processes and the analysis variables could be detected.

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CHAPTER 1

INTRODUCTION

Increasing numbers of the mentally ill are being moved out of large institutional treatment settings to receive care within the community. The community mental health movement is seeking to re-socialize the mentally ill by providing care within a variety of smaller-scale community-based facilities such as group homes, social-therapeutic centres, and outpatient clinics. By providing care within the context of normalized community environments, it is felt that the successful re-integration of the mentally ill into society will be expedited. The effectiveness of the community mental health movement has been checked in many instances by opposition to the placement of community mental health facilities in residential neighbourhoods. Opposition to facility locations has had many implications not only for the continued operation of the community mental health movement but also for sociospatial structure in large urban areas in general. Of concern in this thesis is the question of opposition to proposed facility locations in residential neighbourhoods. Opposition has produced increasing facility concentrations in areas with minimal propensity to resist facility introductions; such areas frequently contain high proportions of commercial and industrial land uses as well

as disproportionate concentrations of community mental health, and other urban public facilities. The community in these instances ceases to provide a normalizing environment for the re-socialization of the mentally ill and becomes merely a dumping ground for society's unwanted. Frequently the net result is the ghettoization of the mentally ill in an urban "asylum without walls" (Wolpert et al., 1975).

In this thesis, the focus of examination is upon opposition to community mental health facilities. It is suggested that opposition to such facilities is related to the perceived externality effects associated with community mental health facilities. Previously, two approaches have characterized the analysis of this particular problem. This first approach has been to emphasize the psychology of the individual and his or her perceptual processes, concentrating on the role of beliefs about, and attitudes towards the mentally ill. The second approach has been to regard opposition to community mental health facilities as a more aggregate structural, or group-based form of territorial exclusion. This thesis seeks to examine neighbourhood opposition to community mental health facilities using the latter approach.

In order to justify the adoption of this approach, it is necessary to examine the nature of opposition to community mental health facilities. Specifically, opposition may be regarded as a form of neighbourhood response to the perceived externality effects of the facility in question. While the individual psychology approach would argue that personal attitudes towards the mentally ill condition

the perceived externality effect of the facility and the individual's behavioural response, the aggregate approach chosen here argues that opposition as a form of neighbourhood response is a collective rather than individual action exercised by communities, not individuals, seeking to spatially exclude the mentally ill.

Examination of the processes of sociospatial structuration, specifically residential differentiation, suggests the existence of homogeneous residential neighbourhoods which represent an individual's "daily-life environment" (Peet, 1975). Individuals view activities such as the potential introduction of a mental health facility in the context of their particular neighbourhood, and the effect they perceive it having upon their daily-life environment. Opposition as a form of neighbourhood response thus represents a desire to protect the individuals' daily-life environment, as represented by the perceived degree of threat a facility poses to the neighbourhood, or daily-life, context. It is for this reason that this study seeks to understand the neighbourhood-based aggregate, rather than individual, pattern of response to community mental health facilities.

The primary research goal of this thesis is to understand the nature and extent of spatial externalities generated by community mental health facilities, and their impact upon neighbourhood response to such facilities. Such a study is required for two reasons. First, if we are to plan efficiently and equitably for the delivery of mental health care in community-based settings, it is necessary to understand the

process of neighbourhood response to community mental health facilities, especially the nature and extent of opposition. Second, such a study is called for in order to extend our theoretical knowledge of the nature and significance of spatial externalities, specifically those associated with community mental health facilities, in influencing the structure of urban areas.

To accomplish this goal, five operational objectives have been defined: (1) to define an appropriate conceptual framework for the analysis of neighbourhood response to community mental health facilities; (2) to translate this conceptual framework into a research design and operational model for analysis of this problem; (3) to specify empirically testable hypotheses concerning the perception-response process associated with community mental health facilities and the factors influencing this process; (4) to test these hypotheses and to determine the empirical dimensions of the perception-response process and the factors affecting it; and (5) to evaluate the validity of the operational model chosen and to suggest directions for future research in this area.

A conceptual framework for the examination of this problem is presented in Chapter 2; specific attention is devoted to the processes of urban sociospatial structuration, the effect of spatial externalities, and the origins, development of, and contemporary issues in, the provision of community-based mental health care. Chapter 3 concentrates on the development of an operational model for the analysis of neighbourhood response to community mental health facilities, after reviewing the effect of perceived externality impacts in the specific context of

community mental health facilities. In Chapter 4, the research hypotheses are outlined, the survey design is presented, and a discussion of the variables employed in the analysis is provided. Chapter 5 presents the results of the analysis and, in Chapter 6, the operational model is evaluated in light of the empirical findings, and directions for future research are suggested.

CHAPTER 2

THEORETICAL FOUNDATIONS FOR THE STUDY OF NEIGHBOURHOOD RESPONSE TO COMMUNITY MENTAL HEALTH FACILITIES

This chapter presents the theoretical foundations for the analysis of neighbourhood response to community mental health facilities. It is suggested that opposition represents a form of public response to the perceived externality impacts of urban public facilities, and that response is function of factors both endogenous and exogenous to the individual. Neighbourhood response is recorded as an adjustment to the existing pattern of urban sociospatial structure by serving to modify or to reinforce the processes of structuration. The initial focus of this chapter is upon urban sociospatial structure and the factors influencing the processes of structuration and reproduction. The theory of spatial externalities and their effect upon urban form are then examined. These two sections are then drawn together to consider the question of community response to urban public facilities. Finally, the origins and development of the community mental health movement are discussed, preparing the way, in the following chapter, for specific consideration of public response to community mental health facilities.

2.1 Urban Sociospatial Structure

2.1.1 The Processes of Structuration

In attempting to understand urban social and spatial structure, it is necessary to recognize the mutual interaction of these two structures; they are not separate entities, nor is one merely derivative of the other. As Gregory (1978, p. 121) suggests, we need to "recognize (a) that spatial structures cannot be theorized without social structures, and vice versa, and (b) that social structures cannot be practiced without spatial structures, and vice versa." When we consider class relations and social structure, we must be congnizant of the fact that "spatial structure is not, therefore, merely the arena within which class conflicts express themselves but also the domain within which - and, in part, through which - class relations are constituted" (Gregory, 1978, p. 120).

For the purposes of this discussion, examination is focussed upon one aspect of urban spatial structure, that of residential differentiation, the process by which the composition and structure of urban residential neighbourhoods are determined. Simply, there is a need to account for those factors responsible for the creation and maintenance of distinct homogeneous residential neighbourhoods within the urban environment. Traditional literature in a number of disciplines suggests that residential differentiation results from an aggregate pattern of individual consumer preferences. In this analysis, however, these consumer behaviour models are rejected and

residential differentiation is considered as an inevitable product of advanced capitalist society and a process inextricably linked to the question of urban social structure.

Urban social structure may be regarded as the urban manifestation of the larger process of class structuration. In capitalist societies, the basis for social structuration is the existence of a dichotomous class structure where class may be conceived as status vis-a-vis the means of production. The capitalist mode of production is predicated upon a mutually dependent, although clearly exploitative, relationship between capital and labour within which labour functions solely as a commodity (a factor of production) to be bought and sold by capital (through the wage system), allowing for the appropriation of surplus-value by capital. As Giddens (1973, p. 102) observes, "the market is thus a system of economic relationships founded upon relative bargaining strengths of different groupings of individuals.. those who are propertyless are almost completely powerless in the bargaining encounter as compared to those who own property in the means of production." Understanding the process of class structuration in advanced capitalist society involves not only an acknowledgement of the 'power relation' between capital and labour (Harvey, 1975) but also consideration of the role of market capacity," all forms of relevant attributes which individuals may bring to the bargaining encounter" (Giddens, 1973, p. 103). Dear

(1978, p. 4) has noted that "the existence of differential market capacities (based on ownership in the means of production, on educational or technical skills or on manual labour power) is the source of class structuration and class conflict."

2.1.2 The Concept of Reproduction

To understand the mutually interactive character of the relationship between urban spatial and social structure, it is necessary to examine the concept of reproduction. Endemic to the perpetuation of capitalism itself is the necessity of reproduction-not only of the factors of production (for example, capital and labour) but also, and more importantly, of the social relations which give rise to, and characterize, capitalist development. Foremost among these social relations is class structuration, the reproduction of which is critical to the perpetuation of capitalism. It has been demonstrated (Peet, 1975) that inequality, transmitted through a differential wage structure, is both an essential and self-perpetuating feature of capitalism. Because of marked inter-class and intra-class variations in income, the amount of money available to each household for reproduction (the raising of a future generation) varies significantly both between and within classes. A certain proportion of this variable capital is spent on housing, which brings with it certain dimensions of real income. Real income includes not only an individual's earned income (for instance, salary) but, more importantly, his or her command over a range of public goods and

services available at his or her particular location within the urban environment. An individual's real income tends to increase with accessibility to desirable goods and services, such as parks, schools, and hospitals; the less accessible these services are, the lower will be his or her level of real income. Thus, two individuals or households with the same monetary income may experience quite different levels of real income based upon their accessibility to a number of urban public facilities providing a range of urban public goods and services. The dimensions of real income take on particular importance when considered in the context of an individual's "daily-life environment" (Peet, 1975).

The daily-life environment is a concept based upon Hagerstrand's time-space model (Hagerstrand, 1970; Pred, 1973), and consists of "a person's place of residence, the limits of which are determined by the physical frictions of distance and the sociospatial frictions of class" (Peet, 1975, p. 568). Daily-life environment is a spatial term referring to a geographically finite area, the extent, density and quality of resources (real income) within which are a function of income, and hence, class. The overall quality of an individual's daily life environment, based upon the level of real income contained in the environment, is strongly related to social class; in this manner, it can be seen that residential differentiation (urban spatial structure) is clearly influenced and determined by social structure. In turn, however, residential differentiation has a profound influence

upon social structure and the reproduction of the social relations of production. It is within an individual's daily-life environment that he or she acquires the skills, knowledge, and values that comprise his or her market capacity and, ultimately, social class. Because levels of real income vary markedly between these resource environments (for instance, access to educational opportunities), the market capacities of individuals tend to vary as well, strongly conditioning mobility chances. The net result is a tendency towards intergenerational homogenization of life experiences within resource environments. The effect is cumulative and self-reinforcing: income (social structure) is the initial determinant of an individual's daily-life environment (residential differentiation); this in turn conditions the mobility chances of the following generation producing homogenization of life experiences, reproducing the set of social relations of production and spatial structure.

2.2 Spatial Externalities

2.2.1 External Effects

Changes in production modes, improvements in transportation and communications technology, and rapid acceleration in the rate of urbanization in Canada have all served to produce urban areas that are becoming increasingly more complex in their internal composition (Nader, 1975). At the present time, systemic changes within urban areas have far-reaching consequences for, and effects upon, other sectors of the urban system. As McLaughlin (1969, p. 37)

notes, "optimising action taken by an individual or a group at a particular time has repercussions which alter the context for decisions to act by other individuals or groups at subsequent times." It is these spill-over, or externality, effects that serve as the basis of discussion for the remainder of this discussion.

Externalities or external effects are conventionally defined as "the unpriced effects of a certain activity upon groups or individuals who are not directly involved in that activity" (Dear, 1976, p. 153), and occur when "the production or consumption of certain activities gives rise to benefits or costs to persons other than those who acquire the goods" (Due and Friedlaender, 1977, p. 56). Externalities are often divided into two types: positive externalities, or external economies of scale (benefits); and negative externalities, or external diseconomies of scale (costs). They may be further classified as consumption externalities, where the welfare of one individual is affected by another's consumption patterns or production externalities, where a given producer is unable to reap all the benefits or is not forced to incur all the costs that accrue to others in society as a result of his activities.

Externalities are inextricably linked to the question of market failure; traditional Pigouvian economic thought has long advocated the imposition of corrective taxes and subsidies in efforts to internalize externalities (Pigou, 1932). The introduction of such policies has recently become increasingly rare, primarily because of the identification of many of the inherent weaknesses in

the Pigouvian method (Coase, 1960; Buchanan, 1962). Most recently, certain derivations of the Pigouvian method have met with limited success; methods such as the "standards and prices" approach of Baumol and Oates (1972) do not achieve conditions of Pareto optimality but do possess the advantage of superior operationalization. Current efforts to control externalities through non-market mechanisms, such as administrative and legal regulations (Davis and Kamien, 1970) are now receiving a greater emphasis in the literature and in practice.

2.2.2 Spatial Externalities

Although much of the current economics literature considers the question of external effects within an implicitly aspatial context, it is apparent that the explicit spatial dimensions of externalities have important implications, particularly for the structure of modern urban areas. It is within the context of their effect upon levels of real income that externalities and their spatial dimensions need to be considered. If one accepts the premise that externalities possess a significant spatial component, it is apparent that differential proximity to various urban public facilities will serve to increase or decrease levels of real income. Individuals, who by virtue of their location, are subject to negative externalities of production or consumption, will experience a decrease in their level of real income, while individuals to whom the benefits of positive externalities accrue will

experience increases in real income. It is in this manner that the externalities generated by urban public facilities serve to augment or diminish levels of real income within the urban system.

An integral feature of the spatial externality issue is the concept of externality fields (Harvey, 1973, pp. 57-60). Externalities are limited to a finite geographical area, the extent of which is determined by several factors, particularly the source of the externality and the physical and social composition of the impacted area. The form of an external effect tends to conform to a 'distance-decay' function whereby the intensity of a phenomenon (the externality) is strongest at the source (the facility) and declines systematically with distance from the source. The benefits or costs imposed by an urban public facility do not accrue equally to all residents within the externality field, but rather according to location within the field relative to the source. The greatest effects will be experienced by residents adjacent to the source while residents at the periphery of the externality field are likely to be affected only marginally (see, for example, Rothenberg (1967); Hammer, Horn and Coughlin (1971); or Hall, Breston, and Taylor (1979)).

2.3 Spatial Externalities, Sociospatial Structure, and Neighbourhood Response

2.3.1 Spatial Externalities and Sociospatial Structure

Hitherto, urban spatial structure has been considered in the specific context of residential differentiation. In a broader

perspective, Papageorgiou (1978) has characterized urban form as a product of two unfolding surfaces: a population surface and an externality surface. The consequent urban form results from the interplay of these two surfaces, with the nature of the interplay defined by the structure of the externality surface specifically the form of the externality field.

The interaction of a given population surface and the externality surface generated by an urban public facility may be seen through analysis of locational conflict, "overt public debate over some actual or proposed land development" (Dear and Long, 1978, p. 114). Simply, locational conflict may be regarded as a struggle between two or more parties concering a particular land use (in this case, an urban public facility location) which is perceived as having an effect upon the real income of at least one party. Thus, in this context, a prerequisite for conflict is opposition to a facility location. In these instances, opposition may be seen as a form of public response to the externalities associated with the facility in question, and reflects a desire for protection of the individual's daily-life environment.

As a neighbourhood response to facility-generated externalities, opposition may take a variety of forms, or, as Dear and Long (1978, pp. 117-121) suggest, strategic options to be invoked in the conflict process. These may include: exit (choosing to leave the neighbourhood for another community); voice (actual participation in the conflict

process); resignation; illegal action; and formal participation (periodic participation in the decision-making process through government co-operation). The ability to employ these options, either individually or collectively, may result in opposition to a facility location in certain situations; exercising options such as exit and resignation, however, are not likely to produce successful conflict outcomes. The resolution of any conflict situation is likely to be conditioned strongly by various other factors such as the importance and profile of the conflict issue, the degree of unity shown by either side, and the resources (human, temporal, and monetary) available to either side. Traditionally, smaller and more cohesive middle and upper class neighbourhoods have met with greater success than larger, loosely-knit lower class neighbourhoods (Olson, 1965).

Not only does opposition to proposed facility locations have an effect upon the service delivery network of which the facility is a part, but it also affects urban sociospatial structure. Conflict outcomes serve either to modify or reinforce the existing population surface, the representation of urban sociospatial structure. Successful opposition to a proposed facility location in a neigbourhood void of undesirable facilities, or facilities which are 'noxious' in nature (a facility whose value is recognized by a community but whose actual location is not desired at any specific point) serves to reinforce this pattern of facility absence while unsuccessful opposition will alter the social and spatial structure of the neighbourhood. In

neighbourhoods saturated with facilities, successful opposition modifies the sociospatial structure and unsuccessful opposition serves to reinforce the existing structure.

It is suggested that, in situations of locational conflict, opposition to a facility location is generated as a response to the externalities associated with the facility. At this point, it is necessary to consider the role of environmental perception in externality analysis. Neighbourhood response is taken in light of the perceived externality impacts of the facility and the impact the facility is perceived as having upon an individual's daily-life environment. If a facility is perceived as having a detrimental impact upon an individual's daily-life environment, opposition may occur as individuals seek to protect their environment. In some instances (for example, nuclear power plants or landfill sites), the effects of public facilities are quite apparent; in most cases, however, the effects are less readily documented. The problem of indeterminate externality impacts is further compounded because opposition and conflict frequently develop in response to proposed rather than existing facility locations. It appears, therefore, that opposition to facility locations is generated by the perceived externality irrespective of the actual impact (if any). In some instances, such perceptions (for example, fear of property value decline or fear of large-scale neighbourhood exodus) may become self-realizing.

2.3.2 Determinants of Neighbourhood Response to Urban Public Facilities

It has been suggested that neighbourhood response to the perceived external effects of urban public facilities produces adjustments to existing patterns of urban sociospatial structuration by modifying or reinforcing prior processes of residential differentiation. Consider now the role of spatial externalities in generating opposition to urban public facilities. Specifically, response to the perceived externalities may be regarded as being the product of two distinct sets of factors: those endogenous to the individual, and those exogenous to the individual. Exogenous factors are regarded as all influences external to the individual which affect his or her perception of an external impact; endogenous factors, on the other hand, represent a set of internal characteristics which influence the manner in which the exogenous factors are perceived.

Exogenous factors may be disaggregated into two groups:
(a) those characteristics related to the population surface; and
(b) the characteristics of the externality surface. Specifically, the unfolding of these two surfaces may be considered a question of fit (Alexander, 1963) between the 'form' of the externality surface and the 'context' of the population suface. The greater the degree of incongruence, the greater is the propensity for opposition and locational conflict.

Hitherto, the significance of the population surface in determining response to urban public facilities has been obscured by an emphasis upon the role of individual attitudes and personal characteristics. It is suggested here that neighbourhood response represents a form of group territorial action taken in the context of a particular population surface rather than being solely a function of the psychology of the individual. Through the process of residential differentiation, recognition is given to the existence of homogeneous residential neighbourhoods. Individuals within these neighbourhoods tend to view activities such as the potential introduction of a public facility in the context of their particular neighbourhood and the effect they perceive it having upon their daily-life environment. Variables such as social class assume greater relevance when considered in a neighbourhood context (eg. neighbourhood social class) than when considered only at an individual level. It is likely that two individuals with similar personal characteristics and attitudes but living within different population surfaces will perceive a proposed facility introduction in quite different fashions, and will respond according to the context of their particular neighbourhood.

The population surface is characterized most productively in terms of the physical and social characteristics of the neighbourhood. Physical neighbourhood characteristics include such variables as its age, its land use composition, and the physical quality of

the neighbourhood. *Ceteris paribus,* it is expected that less opppsition to facilities will be encountered in areas of mixed land use containing high levels of commercial, industrial, and rental land use, and in relatively run-down condition (Dear and Taylor, 1979, p. 2.11). This may be accounted for by two factors. First, such areas of mixed land use tend to render the presence of many facilities invisible, and their impact is thus much less apparent that it would be in a single family residential neighbourhood where their presence would be far more pronounced. Second, deteriorating neighbourhoods give residents, particularly those in rental accommodation, little incentive to protect their daily-life environment. In single family residential neighbourhoods, the 'stake', or interest, in the environment is greater, and facility introductions are often seen as a threat to existing environmental quality. Although much of the work in this area remains largely theoretical, some limited empirical evidence (Dear, 1977; Armstrong, 1976) tends to lend support to these patterns of behaviour.

Neighbourhood social structure includes factors such as socioeconomic status (Taylor and Hall, 1977) and a range of factors subsumed under the general heading of social cohesion (Trute and Segal, 1976). These include variables such as the proportion of the population represented by married couples, single parents, and singles; the age profile of the neighbourhood; income levels; and the degree of transiency. Generally, less opposition to facilities may be anticipated in areas of low social cohesion, thereby allowing for

greater ease of facility integration (Trute and Segal, 1976). These findings are not surprising given the high degree of correlation between the physical and social structure of most neighbourhoods. Single family residential neighbourhoods tend to be middle and upper class areas with high levels of social cohesion. The higher income and education levels found in these neighbourhoods often guarantees greater knowledge of available community strategies and the means by which to exercise them successfully (Olson, 1965).

The externality surface can best be described by two sets of factors: (a) the nature of the externality impact; and (b) the form of the externality field. In examining the nature of a facility's impact, one wishes to know the manner in which a facility's location is likely to affect a given neighbourhood or community, or, in other words, the dimensions along which externality impacts are perceived. Impacts may be distinguished initially between those of a tangible and intangible nature (Dear, Fincher, and Currie, 1977, p. 139). Tangible impact dimensions are clearly distinguishable and measurable, and may be further disaggregated into two groups. Monetary impacts represent those tangible impact dimensions whose effect can be assessed in dollar values; they customarily include impacts in the areas of property values and property taxes. Previous research in this area has documented the actual property value impacts of a variety of urban public facility types, including urban parks (Hammer, Horn, and Coughlin, 1971), urban highways (Hall, Breston, and Taylor, 1979), landfill sites (Coughlin, Newburger, and Seigner, 1973), and community

mental health facilities (Boeckh, Dear and Taylor, 1980; Wolpert, 1978; Breslow, 1976). The second group of tangible impacts, refer to all non-monetary tangible effects which can, in some manner, be quantified. Impacts frequently affect areas such as noise levels and traffic volumes (Hall, Breston, and Taylor, 1979). Despite the quantifiable properties of tangible dimensions, it should be noted again that it is frequently the perceived impact that serves as the basis for opposition, rather than the actual impact.

While the quantifiable nature of tangible impact dimensions allows for some inter-facility impact comparisons, the intangible dimensions of facility impacts pose far more complex conceptual and methodological problems. Intangible impacts customarily refer to the wide range of perceived impacts which cannot be quantified but may nonetheless serve as potent forces in generating opposition to urban public facility locations. Common intangible variables often include personal safety, neighbourhood character, and visual appearance. Although they are not quantifiable, these intangible impact dimensions cannot be underestimated in their importance. Dear, Fincher, and Currie (1977, p. 139) have noted the role of certain intangible variables (visual appearance and client loitering) in generating community opposition to drug treatment centres and health facilities in Philadelphia. Thouez (1975) has suggested that perceptions of public facilities are based upon the dimensions of

evaluation, activity, strength, and familiarity. In a study of the perceived external effects of urban public facilities in Hamilton, Gingell et al. (1975) discovered that facility impacts were usually assessed in terms of their degree of noxiousness.

The second feature of the externality surface, the form of the externality field, may be represented along three major dimensions: (a) the intensity of the external effect; (b) the extent of the externality field; and (c) the form of the field's distance-decay function. The intensity of an external effect, or the magnitude of its impact, is conditioned by the form of the externality source (the facility). In this instance, form may be thought of as comprising four factors: facility type, facility scale, the number of facilities in a given area, and the degree of noxiousness associated with the facility (Dear, 1976). Facilities are usually classified into three types (Teitz, 1968): service (where clients travel to the facility itself); despatch (where goods are taken to the client for consumption); and networks (this includes the characteristics associated with most public utility systems). Because each facility type possesses distinctive operating characteristics, it is likely that each serves to produce different external effects. *Ceteris paribus*, it is expected that large scale facilities will generate more intense external effects than small scale facilities. Related to this is the number of facilities in a

given neighbourhood. The greater the number of facilities present in a neighbourhood, the greater is the effective scale of the facilities, and, therefore, the greater the external effect (Boeckh, Dear, and Taylor, 1980; White, 1979). The relationship between the number of facilities in an area and impact intensity may be either linear or non-linear, depending upon facility type. The final dimension, the degree of noxiousness, is critical because it allows for the inclusion of a perceptual element of facility form. Public facilities are regarded as noxious when they are perceived to be needed in a given neighbourhood but not desired by residents at any particular location (Austin, Smith, and Wolpert, 1970). The greater a facility's degree of noxiousness, the greater is the intensity of the externality effect.

While intensity refers to the magnitude of the externality impact, extent may be regarded as the spatial range of the externality field. Although an externality's extent naturally is conditioned by the form of the externality source, it is also influenced by the physical and social characteristics of the neighbourhood. In the same manner that variables such as land use mix and social cohesion serve to emphasize or reduce a facility's visibility, they also serve to determine the extent of the externality field.

The third characteristic of the externality field is the form of the distance-decay curve specifying the relationship between the intensity and the extent of the externality field. Specifically, this curve describes the spatial variation in externality impact

intensity over the surface of the externality field, and is represented as a function of distance from the externality source. The form of the curve may be described by several functions (linear, exponential, or polynomial); this range of function is described by Dear (1976, pp. 155-156) in the context of perceptions of the property value impact of an urban park. Although certain physical characteristics such as housing density play an important role in determining the form of the distance-decay curve, perceptual dimensions related to facility type, degree of noxiousness, and the nature of the perceived impact would all appear to be significant as well. The nature of a facility's impact tends to be perceived differentially by various individuals, and, therefore, it is likely that the distance-decay curve will vary with their perceptions. Different types of facilities produce externality fields that vary in intensity and extent, and thus the form of the curve will vary also. Currie (1976, pp. 51-52) has suggested possible forms of the distance-decay function for a variety of facility types; evidence for this variability may be found by comparing documented distance-decay effects for different facility types (see, for instance, urban renewal projects (Rothenberg, 1967), urban parks (Hammer, Horn, and Coughlin, 1971), and urban highways (Hall, Breston and Taylor, 1979)).

The endogenous factors influencing the perceived externality impacts of public facilities can be divided into two groups:

(a) attitudes towards the facility and the goods or services it delivers; and (b) the "threat" potentially posed by the externality field. Perceptions of the externality impact produced by the interaction of various exogenous factors tend to be conditioned by these two endogenous factors, producing an overall perception of the desirability of the facility in question. In certain instances, attitudes towards the facility and the perceived threat of the facility may be of a similar nature. For example, negative attitudes towards the use of nuclear energy and the high degree of perceived threat posed by a nuclear power plant location tend to produce very undesirable facility perceptions. On the other hand, the perceived desirability of a facility such as a public library may be of a positive nature, due to favourable attitudinal predispositions concerning the social merit of libraries and the minimal degree of threat they pose to individuals. In other instances, however, these factors tend to work in opposite directions, as is frequently the case with noxious facilities such as drug treatment centres where attitudinal predispositions may be favourable but the associated external effects pose a threat to the neighbourhood environment. In such cases, the resulting desirability perception will be a function of the relative strengths of these two factors.

The relationship between attitudinal predispositons and neighbourhood response is a subject that has received relatively little attention in the literature in the specific context of urban public

facilities. It is likely, however, that attitudes towards public facilities are conditioned by several factors, including education and familiarity with the facility use. Attitudes tend to be facility specific and appear to be based, in large part, upon some perceptual measure of the intrinsic social merit and utility of the facility use and the type of public good or service it delivers.

The second endogenous factor, the perceived "threat" posed by the externality field of a particular facility, appears to be conditioned by three related factors: (a) an individual's "stake" in the environment; (b) the type of the perceived impact; and (c) the perceived magnitude of the impact. An individual's stake in the environment is discussed in the context of urban protest movements by Olives (1976), who stresses the notion that individuals, through a heterogeneous class structure, have different stakes in their daily-life environment, and, in the desire for its protection. The greater an individual's stake in his or her daily-life environment, the greater is his or her propensity to protect that environment from the introduction of facilities whose externality fields are perceived as having a detrimental impact upon his or her level of real income. In this sense, it is clear that individuals consider facility introductions in the context of their specific neighbourhood and that facility perceptions are formed in this context. As Peet (1975), observes, middle-class, resource-rich neighbourhoods are likely to be defended more vigorously against facility encroachment than lower-class, resource-deficient, neighbourhoods with transient populations.

In addition to one's stake in the environment, threat is conditioned by the perceived type and magnitude of the externality impact. The nature of facility impacts has previously been discussed; it is suggested that individuals perceive facilities as having different types of impacts (for instance, monetary, quantitative, or intangible). It follows, therefore, that impact types will be perceived differentially in terms of their environmental threat. The perceived magnitude of impact is a function not only of the intensity and extent of the impact but also of the likelihood of impact. In this regard, the major influence is the location of the individual within the externality field, or simply, distance from the externality source. Individuals in close proximity to the externality source are more likely to be impacted, and thus perceive the facility as posing a major threat to the environment. The greater the threat, the greater is the desire to protect one's daily-life environment through opposition. The more distant one is from the source, the lower is the degree of perceived threat, and the perceived need for protection of the daily-life through opposition.

2.4 Community Mental Health Care

2.4.1 Historical Overview of Mental Health Care

Care of the mentally ill historically has been characterized not so much as a process of treatment and rehabilitation as it has been a process of social isolation and exclusion (Dear and Taylor, 1978,

chapter 3). Despite the use of numerous treatment methods and the best of intentions, mental illness has often been regarded not only as a medical problem but also as a social problem to be controlled most effectively by the exclusion and isolation of the parties in question. The purpose of such practices has always been to protect society from the individual despite certain pretences of treatment. Although the existence of mental illness has long been recognized, a persistent problem has concerned the definition of what constitutes mental illness. Criteria for the definition of mental illness has traditionally included the individual's manifest behaviour, the frequency and duration of his or her deviant behaviour, and the degree of danger posed to other members of society; a more important consideration involves the set of societal standards or values which define "normal" behaviour from which the actions of the mentally ill deviate. Dear and Taylor (1979, pp. 3.1 - 3.2) point out that this "involves the extent to which a society will tolerate eccentric behaviour, and is reflected in the existence or absence of social institutions designed to 'treat' the deviant individual. Whether or not a person is considered mad depends upon the degree of behavioural disturbance and the attitudes of society toward deviant behaviour." Thus, changes in the definition of mental illness and preferred methods for its treatment have reflected not only advances in medical knowledge and treatment techniques but also, and perhaps more significantly, changes in social and attitudinal beliefs and prejudices.

The origins of institutionalized mental health care can be traced to Europe where, by the end of the sixteenth century, the mentally ill, who had formerly been cared for only in the home, were beginning to be formally excluded by society (Foucault, 1973, chapter I). It was during the seventeenth and eighteenth centures that the development of the asylum allowed traditional policies of exclusion to be supplanted by the practice of isolation and confinement. This assumption of the mentally ill as a community responsibility developed, in large part, as a result of changing societal attitudes concomitant with the growing recognition of the social liability posed by the increasing numbers of criminals, indigent, and mentally ill in medieval towns. To deal with this growing deviant population, large "houses of confinement" (Foucault, 1973, chapter II) were constructed to exercise social control, particularly isolation of the deviant, maintenance of law and order, provision of cheap labour, and guidance through moral indoctrination.

Serious overcrowding and the interaction of different types of inmates produced a rapid deterioration in living conditions within these asylums, leading, in the latter half of the eighteenth century, to the birth of the true insane asylum (Foucault, 1973, chapters VII and VIII). Although this development retained confinement as the primary mode of treatment, it did attempt to remove the institutionally produced

causes of deviance by incarcerating, in separate institutions, criminals and the mentally ill. As Dear and Taylor (1979, p. 3.8) observe:

> "The philosophical basis of a separate asylum for the insane has its origins in what we would now call the principles of 'social psychiatry'. Broadly speaking, these principles assert the link between social environment and mental illness... Hence, if mental illness was induced by conditions of society, then mental health could be encouraged by removal of the sufferer from the source of irritation."

In North America, institutionalization of the mentally ill began in the latter part of the seventeenth century when it was used to provide a medically and morally conducive atmosphere for rehabilitation within its continuing broader context as an apparatus of social control. Rothman (1971, p. xv) has noted that:

> "Psychiatrists were more American than they were scientific, and the nature of their response to insanity cannot be comprehended unless one recognizes that they defined mental illness as a social problem, not just a medical one... Prisons, poorhouses and orphan asylums grew up at the same time, and this coincidence suggests that the society was reacting to more than psychiatric doctrines. By moving on all

fronts at one, it had other and broader considerations in mind."

The nineteenth century was characterized as a period of growth in both the number and size of institutions. This development was predicated upon the belief that mental illness could be cured by the provision of proper medical treatment in a morally conducive environment divorced from the community. Growth represented an effective compromise between the genuine desire for reform and the need to reduce the cost of care. During the early part of the century, private funding provided the impetus for expansion, but by mid-century, a publicly supported asylum system had developed, funded and administered by centralized state bodies. Despite the growth of new hospitals in the second half of the century, "the gap between the ideal model of a mental hospital and the social reality steadily widened" (Dear and Taylor, 1979, p. 3.12). The desire to treat the mentally ill could not be met as asylums received increased pressure for incarceration of the mentally ill, particularly those chronic patients who did not respond to treatment. These demands by society, coupled with rapidly escalating operations costs (due, in large part, to the post-1850 inflationary period), served to render proper treatment of the mentally ill as increasingly less of a reality; in short, the asylum had become a mere vehicle of custody. Throughout this period, the impetus for, and success of, institutional reform was tempered by economic realities, as treatment and rehabilitation were sacrificed for social control through isolation and social exclusion.

Rothman's description, "the promise of reform had built up the asylums; the functionalism of custody perpetuated them" (Rothman, 1971, p. 240) is particularly apt.

In Canada, the first provincial institition for the mentally ill was founded in 1835 in Saint John, New Brunswick; it was soon followed in Ontario by the construction of an asylum in the former York jail in 1841 (Hurd, 1973 reprint of the 1916-17 edition, Vol. 4, pp. 120-130). Institutional overcrowding in Ontario asylums soon led to the development of a 'branch' asylum system, the capacity of which was expanded by about 7,000 beds between 1840 and 1916 with the addition of ten new asylums, including Kingston (1854), Hamilton (1876), Brockville (1894) and Penetang (1904) (Hurd, 1973, Vol. 1, pp. 163-168; vol. 4, p. 461). Expansion of this institutionalized mental health care system in Ontario corresponded to general population increases, particularly during periods of peak growth and immigration such as the railway boom in the third quarter of the nineteenth century, the decade of heavy immigration following World War I, and immediately following World War II. During this period, admission and discharge rates increased dramatically, with discharges failing to match admissions. Overcrowding became an increasing problem in Ontario's asylums, a situation which peaked in 1960 when over 19,500 inmates were on the books of Ontario asylums (Dear and Taylor, 1979, p. 3.23).

2.4.2 The Community Mental Health Movement

In Canada and the United States, serious overcrowding continued to be the major factor in the deterioration in the quality of care provided by government institutions. In the post-World War II period, however, the large volume of men turned down for active service during the war, and the return of war veterans suffering from psychiatric disorders brought about a growing recognition of the problems posed by mental illness. The provision of many social services had been neglected during the war; consequently, the post-war period saw the introduction of substantial federal grants for increased provision of health care in Canada. Despite this, mental health care remained persistently custodial in nature (Williams and Luterbach, 1976, p. 16).

During the 1950's, the foundation for the community mental health movement was laid with two major developments in the treatment of mental illness. Although the significance of their relative contributions is unclear because of their nearly simultaneous occurence, both developments served, along with changing social attitudes towards the mentally ill, to provide much of the impetus for deinstitutionalization (Klerman, 1977). The first development, the use of chemotherapy, proved to be a significant factor in reducing the length of hospital stays. In addition to being an effective treatment

for mental illness, the use of tranquilizing agents brought (at least temporarily) previously unmanageable psychotic patients under control. The second development, originating in Britain, involved the introduction of new treatment methodologies, primarily in the area of "social psychiatry", which emphasized the importance of group contact and therapeutic communities.

Agitation for reform in the United States during this period was met partially by the establishment of a Joint Congressional Commission on Mental Illness and Health (1955); its report, in 1961, advocated deinstitutionalization of the large state mental hospitals. It was felt that such institutions served to isolate the patient from society, to retard living skills and to induce a level of disability and dependence over and above that arising from the patient's condition" (Dear and Taylor, 1979, p. 3.16). It was argued that, for many patients, particularly the less chronically dependent, care could best be provided within the community (cf. Karasu et al., 1972) with members of the community providing an open, accepting environment of care to facilitate the recovery of the mentally ill. These feelings were predicated upon the concept of normalization, which Wolfensberger (1972, p. 12) defines as:

> "The utilisation of means which are as culturally normative as possible, in order to establish and/or maintain personal behaviours and characteristics which are as culturally normative as possible."

The belief that socially acceptable behaviour would result from treatment in a normal setting was reflected in the Kennedy administration's passage of the Community Mental Health Centers Act (1963), returning the control and development of mental health care to local communities with the provision of large-scale federal funding. Since then, the community mental health movement has accelerated at a rapid pace, often without full consideration of its impact. The delivery of mental health care has changed enormously since the inception of the community movement and care is provided now through a range of community-based facilities which include: outpatient clinics staffed by qualified personnel; group homes, a form of supervised residential care facility; social-therapeutic centres providing therapy programs for coping in the community; and vocational centres providing job training for ex-patients (Isaak, 1979, pp. 9-11).

The community mental health movement has had a drastic effect upon the pattern of mental health care delivery in the United States and, following the introduction of federal-provincial cost-sharing programs, in Canada. Between 1955 and 1975, the number of patients

resident in mental hospitals in the United States decreased 65% from 559,000 to 193,000 (Bassuk and Gerson, 1978, p. 49). Over the period 1955 to 1973, the percentage of total patient episodes accounted for by state mental hospitals dropped from 40% to 12% while the share represented by outpatient clinics rose from 42% to 65% (Bassuk and Gerson, 1978, p. 48; Dear and Taylor, 1979, p. 3.17). At the same time, the total volume of care provided has increased markedly; in state hospitals, admissions rose from a level of 178,000 in 1955 to 390,000 in 1972 (Bassuk and Gerson, 1978, p. 49). In 1945, the total number of inpatient and outpatient episodes in all types of mental health facilities was 1.7 million; this figure grew to 5.2 million in 1973 of which some 23% were accounted for by community-based facilities (Dear and Taylor, 1979, p. 3.17). The general profile of mental health care delivery in the Unites States following deinstitituionalization legislation can be characterized by an increased volume of service utilization, shorter hospital stays, and a major shift in treatment settings towards community-based care away from large state mental hospitals.

In Canada, between 1960 and 1976, admission rates to Ontario's provincial asylums increased by 80% while discharge rates climbed by 129% (Dear and Taylor, 1979, p. 3.23) (see Table 2.1). The net result has been a drastic (74%) reduction in the "on books" (in hospital at year end) population of asylums from 19,507 in 1960 to 5,030 in 1976. This period has also witnessed a dramatic increase in

TABLE 2.1 ADMISSIONS, DISCHARGES AND ON BOOKS POPULATION OF ONTARIO PROVINCIAL ASYLUMS FOR SELECTED YEARS 1880-1976.

YEARS	PROVINCIAL[a] POPULATION	ADMISSIONS	DISCHARGES	ON BOOKS[b]
1880	1,923,228	574	204	2,899
1890	2,114,321	697	262	3,955
1900	2,182,947	793	335	5,877
1910	2,527,292	1,140	555	6,670
1920	2,933,662	2,879	858	7,689
1930	3,431,683	2,469	1,265	10,390
1940	3,787,655	3,224	2,257	15,283
1950	4,597,542	4,334	2,686	18,923
1960	6,236,092	7,820	6,184	19,507
1971	7,703,106	15,712	15,868	8,838
1976	8,264,465	14,112	14,163	5,030

a Census of Canada (various years)

b Before 1909, the 'on books' total is taken as the annual number of patients under treatment

SOURCE: Dear and Taylor (1979, p. 3.23).

the utilization of non-asylum provincial facilities (see Table 2.2). Admissions and discharges to psychiatric units of general hosptials increased by 278% and 281% respectively between 1965 and 1976, with a consequent increase in the "on books" population of 190%. Perhaps even more indicative of the trend towards community-based care has been the increase in utilization of community mental health facilities: between 1965 and 1974, admissions and discharges rose 185% and 190% respectively, while the "on books" population increased 434% from 10,042 in 1965 to 53,637 in 1974.

2.4.3 Major Issues in the Provision of Community-Based Care

The relatively rapid move towards community-based mental health care in Ontario has not been without problems. Many of the setbacks experienced in the implementation of successful community-based delivery systems have resulted from the hasty introduction of programs without adequate prior consideration of their full impact. Consequently, mental health care planners have not anticipated adequately the degree of community opposition to facility locations in residential neighbourhoods. The community in general, and residential homeowners in particular, have been unprepared for this massive revolution in mental health care delivery, as have municipal legislators, who have been slow to respond to the challenge of defining the wide variety of residential care facilities present in urban areas and specifying appropriate zoning standards for their location. Only very recently have some

TABLE 2.2 PATIENT CENSUS AT PSYCHIATRIC UNITS OF GENERAL HOSPITALS AND COMMUNITY MENTAL HEALTH FACILITIES, PROVINCE OF ONTARIO, 1965-1976.

YEAR	PSYCHIATRIC UNITS			COMMUNITY MENTAL HEALTH		
	ADMISSIONS	DISCHARGES	ON BOOKS	ADMISSIONS	DISCHARGES	ON BOOKS
1965	8,815	8,458	617	17,319	16,421	10,042
1970	18,914	18,820	1,118	37,537	33,729	28,156
1974	26,794	26,702	1,340	49,417	47,660	53,637
1976	33.299	32,212	1,789	(data unavailable)		

SOURCE: Dear and Taylor (1979, p. 3.24)

municipalities begun to define the problem of residential care facilities, and to enact zoning legislation with respect to the location, size, and concentration of facilities.

The success of community-based programs and individual facilities is contingent to a large extent upon the degree of community integration accorded to facility users. *Ceteris paribus*, the most successful facilities will be those located in communities which are openly supportive of the objectives of community-based care. Conversely, the least successful facilities will be those located in non-supportive communities, particularly those which actively seek to block the introduction in their neighbourhoods.

Neighbourhood opposition to the location of community mental health care facilities has important implications not only for the adequate provision of mental health care but also for the urban system as a whole. Paramount among these concerns are questions of efficiency and equity. Initially, of course, opposition reflects a hostile neighbourhood environment and, as such, tends to negate any of the potential benefits of the normalization process. In addition, opposition to proposed facility locations tends to increase program costs substantially by necessitating costly processes of searching for alternative, and frequently more expensive, sites. Consequently, alternative sites are often chosen in neighbourhoods where less opposition may be anticipated. In many instances, the net result is the

development of an inefficient and inequitable delivery system, characterized by facility concentrations in some areas and the complete absence of facilities in other areas. The resultant system is severely imbalanced with areas receiving differential levels of care. Many of the benefits thought to result from the normalization process are lost due to the existence of the non-socializing environments found in many facility-saturated neighbourhoods, often containing high proportions of commercial and industrial land use. A delivery system of this nature is also highly inequitable in that certain neighbourhoods are forced to bear the burden of supporting a disproportionate number of facilities, while other neighbourhoods are not required to share this burden, reinforcing disparities in real income levels among neighbourhoods.

2.5 Summary

In the last two decades, care of the mentally ill has been provided increasingly within the context of the community through a range of small-scale treatment facilities. This deinstitutionalization process has emphasized the provision of care through community-based facilities, and has actively sought to reintegrate the mentally ill in society by allowing them to function within normalized community environments. Opposition to facility locations has not only impaired the effectiveness of community-based programs but has also affected the sociospatial structure of urban areas, altering the physical and social structure of many neighbourhoods.

This chapter has examined the theoretical bases for the study of neighbourhood response to community mental health facilities. Community opposition to facility locations represents a form of *aggregate* response to the perceived externality impacts of urban public facilities in general, and, in particular, community mental health facilities. The basis for this aggregate structural view of the response process lies in the process of urban spatial and social structuration, specifically residential differentiation. Both processes of structuration are highly interrelated in a circular and cumulative manner in which urban spatial structure is not only determined by social structure through the process of residential differentiation, but also influences the reproduction of urban social structure by conditioning the mobility chances of future generations. Critical to an understanding of the response process is the existence of homogeneous *daily-life environments*. Individuals invest resources in their daily-life environment, and, consequently, respond accordingly to protect their investments.

Spatial externalities represent the unpriced spillover effects of modern urban activities. These efforts are confined to a spatially limited area, the externality field; within this field, external effects are felt in varying degrees according to some function of distance from the externality source. Externalities affect, or, more importantly, are perceived to affect, the levels of real income found in residential neighbourhoods. It is in response to this perceived effect that individuals act to protect their daily-life environment. The method of response is frequently community opposition, an aggregate action taken

by neighbourhoods to protect their environment by territorially excluding the source of the external impact, in this case, the community mental health facilities.

CHAPTER 3

NEIGHBOURHOOD RESPONSE TO COMMUNITY MENTAL HEALTH FACILITIES

In this chapter, the theoretical foundations for the study of neighbourhood response to community mental health facilities are developed into a conceptual framework for the analysis of this problem. In the first part of this chapter the general factors influencing neighbourhood response to urban public facilities are extended and placed within the specific context of community mental health facilities. It is suggested that opposition to community mental health facilities may be viewed as a response to the perceived externality impacts of these facilities, and, further, that this response is a function of factors both exogenous and endogenous to the individual. Response is recorded as an adjustment to the existing pattern of sociospatial structuration by either modifying or reinforcing this structure. In the second half of the chapter, the factors discussed in the initial sections are developed into two models of the process of neighbourhood response to community mental health facilities. Initially, a comprehensive general model is developed to indicate the influence of a wide variety of factors thought to influence the response process. This model is then translated into an operational model containing the variables chosen for this particular empirical analysis.

3.1 Factors Influencing Neighbourhood Response to Community Mental Health Facilities

3.1.1 Exogenous Factors Affecting Response

The set of exogenous factors which influence neighbourhood response to community mental health facilities consists of all influences external to the individual affecting his or her perception of these facilities, and is represented by the interaction of a facility's externality surface and the population surface of a particular neighbourhood.

The population surface basically comprises the physical and social characteristics of the neighbourhood. As far as physical structure is concerned, there appears to be little variation between its effect upon community mental health facilities and urban public facilities in general (see Section 2.3.2). Empirical evidence (Dear, 1977, Barahal, 1971; Aviram and Segal, 1973; Armstrong, 1976) suggests that less opposition may be anticipated in areas of mixed land use, areas in poor condition, and areas with a high percentage of industrial, commercial, and rental land use. Work by Wolpert (1975) and Segal and Aviram (1978) supports these hypotheses, illustrating the spatial concentration of facilities in areas where less opposition may be anticipated. Recent work in Metropolitan Toronto (Dear and Taylor, 1979) has revealed that facilities tend to be concentrated in older inner-city neighbourhoods of mixed land use; the predominantly residential suburban areas ringing Toronto appear to have

disproportionately fewer facilities, suggesting that locational strategies are strongly conditioned by the anticipated level of opposition which appears to vary with neighbourhood physical structure.

The social characteristics of a neighbourhood also affect response to community mental health facilities. In their work on the social integration of mental health facilities in residential neighbourhoods, Trute and Segal (1976) observed that the highest levels of integration were found in communities with low levels of social cohesion. The lowest integration levels were observed in highly cohesive neighbourhoods, predominantly suburban communities with high proportions of traditional nuclear families, and homogeneous with respect to class, education and race. The importance of social class in determining response to community mental health facilities is illustrated by the work of Dear and Taylor (1979). They found that although upper class neighbourhoods exhibited more tolerant attitudes towards the mentally ill, they contained disproportionately fewer facilities than facility-saturated lower class neighbourhoods. Although this pattern is partially attributable to the greater availability of less expensive convertible housing in lower class neighbourhoods, it is also indicative of the greater degree of political "clout" found in upper class neighbourhoods, and their greater ability to deflect locational decisions.

The externality surface generated by community mental health facilities can be characterized by the type of externality impact and the form of the externality field. Although the externality fields of mental health facilities represent a largely uncharted area in the empirical literature, Dear and Taylor (1979) have suggested several interesting features of the mental health facility externality surface. When asked to assess the potential impact of a facility, almost one-third of their sample anticipated little or no impact, while over one-quarter viewed a facility as having a positive impact. Significantly, less than one-quarter of all respondents perceived a facility as having a potentially negative impact. When asked to assess specific types of impacts, the predominant response was again of a neutral nature although negative impacts were clearly perceived in three areas: property values, traffic volumes, and resident satisfaction with the neighbourhood. These areas represent monetary, quantitative, and intangible impact dimensions respectively; there was little evidence to suggest the pre-eminence of any of these impact dimensions in determining response to mental health facilities.

Regarding the form of the perceived externality field, it has been suggested that neighbourhood response is infuenced by the intensity of the externality field, its spatial extent, and the form of its distance-decay function. The findings of Dear and Taylor (1979) suggest that the perceived externality fields of mental health facilities

are limited in their intensity and spatial extent. When respondents were asked to rate the desirability of having facilities located at varying distances from their homes, facilities were generally perceived as being desirable, suggesting that at this aggregate level of measurement, externality fields possess a relatively low level of intensity. The highest ratings of undesirability were observed in the "within one block" distance zone and dropped quite sharply in the "2 to 6 block" range. A very small percentage of respondents rated facilities as being undesirable beyond this range, suggesting that the spatial extent of the mental health externality field may be quite limited, perhaps to a six block radius. The existence of a distinct distance-decay function is suggested by the decline in undesirability ratings with increased distance between respondent and facility. These findings also suggest that facility type plays some role in determining facility desirability as social-therapeutic centres were perceived as being more desirable than either outpatient clinics or group homes, although the small sample size failed to produce statistically significant variations.

3.1.2 Endogenous Factors Affecting Response

The endogenous factors influencing neighbourhood response to community mental health facilities consist of two factors: attitudes

towards the mentally ill, and the perceived degree of threat posed by a facility introduction. Because of an absence of empirical evidence to support the theoretical significance of the latter factor, it is suggested that the greater the perceived degree of threat, the greater is the propensity for opposition. Perceived threat in this instance is a function of the individual's stake in the environment and the perceived magnitude of the impact. Because of the existence of an observable distance-decay effect in the perceived externality fields of community mental health facilities, it is suggested that the perceived magnitude of the externality impact is affected most significantly by the distance between an individual and the externality source, the facility.

The role of attitudes in determining response to community mental health facilities is strongly conditioned by individual variations in attitudes towards the particular facility user group, the mentally ill. Since the 1940's, attitudes towards the mentally ill have been the subject of considerable research, particularly in the post-war period in the United States, when strong efforts were made to educate the public about mental illness in order to remove much of its associated stigma. These efforts were based upon the medical model of mental illness which "explains psychiatric symptoms as abnormal functioning of the central nervous system brought about partly by psychosocial stress and partly by physiological factors" (Dear and Taylor, 1979, p. 4.2). It was felt that much of its stigma

could be eliminated if mental illness was regarded in the same context as any other form of illness. The general conclusion of the Joint Commission of Mental Illness and Health (1961) was that this campaign had been largely unsuccessful in developing accepting attitudes towards the mentally ill, and following strong criticism of the medical models of mental illness (Sarbin and Mancuso, 1967; Scheff, 1966; Szasz, 1961), an alternative model was developed. The "labelling theory" approach emphasizes the influence of social groups as "the creators of deviance by their establishment and application of rules of appropriate conduct" (Dear and Taylor, 1979, p. 4.7). Public deviant behaviour is so labelled by society, causing the labelled individual to adapt to this societal reaction, producing, in some instances, chronic mental illness.

Empirical research in the last two decades has fallen into two groups: those supporting the medical model of mental illness; and those rejecting this model in favour of the labelling theory approach. Reviews of the differences in the empirical literature have been provided by D'Arcy and Brockman (unpublished paper) and Rabkin (1974), who note that the variation in reported results may be partially attributable to methodological incomparability. Although these reviews exhibit little consensus on the appropriateness of either model, Dear and Taylor (1979) note that, in addition to a general increase in the level of knowledge about mental illness, there appears to be widespread recognition of the medical model of mental illness, despite only

limited acceptance of the notion that the mentally ill are not unlike other medically ill individuals (Rabkin, 1974). In summarizing the general developments in this field, Dear and Taylor (1979, p. 4.17) observe that, "there has been a trend towards greater acceptance of the ex-mental patient but a large social distance is still kept by the public from the ex-mental patient when close interpersonal relationships are involved."

Dear and Taylor (1978, Section 4.4), in reviewing the literature on factors influencing attitudes towards the mentally ill, have noted the effect of personal characteristics on attitude formation. Freeman (1961) and MacLean (1969) found that younger age groups as well as more highly educated groups tend to exhibit more scientific and enlightened attitudes towards the mentally ill while older and less educated groups tend to be more rejecting and unsympathetic in their attitudes. A number of studies, notably Lemkau and Crocetti (1962), and Dohrenwend and Ching-Shong (1967), concluded that a greater recognition of mental illness and a greater degree of tolerance in terms of recommended treatment methods is found in higher social status groups. Dear and Taylor (1979) observed that a range of demographic characteristics, including age, sex, number of school-aged children, education, tenure, church attendance, and familiarity with mental health care, accounted for significant, although low, percentages of variation in attitudes towards the mentally ill as measured along four attitude scales. These scales recorded attitudes towards the mentally ill along four dimensions:

community mental health ideology; benevolence; social restrictiveness; and authoritarianism. Variations in attitudes as measured by these scales proved to be useful predictors of attitudinal and behavioural response to community mental health facilities, with acceptance related to pro-C.M.H.I. and pro-benevolent attitudes, and rejection associated with pro-social restrictiveness and pro-authoritarianism. The rejection groups were disposed to oppose facility locations while the acceptance groups reflected a propensity to take no action.

3.2 Modelling Neighbourhood Response to Community Mental Health Facilities

The remainder of this chapter focusses on modelling the process of neighbourhood response to community mental health facilities. In the preceding section and in chapter 2, the theoretical bases for the development of such a model were examined; in the remainder of this chapter, the major components of such a model are identified and their interaction is specified. Initially, a comprehensive general model is posited; it attempts to simplify the complex neighbourhood response process into an easily understood model, but a model which nonetheless seeks to describe a 'real world' situation as closely as possible. As with any modelling attempt, the success of the model depends upon the explanatory power gained at the expense of detail lost. Having established such a model, it will then be translated, in the final section, into an operational response model. This model will specify

an empirically testable process and include the variables to be tested in the empirical analysis.

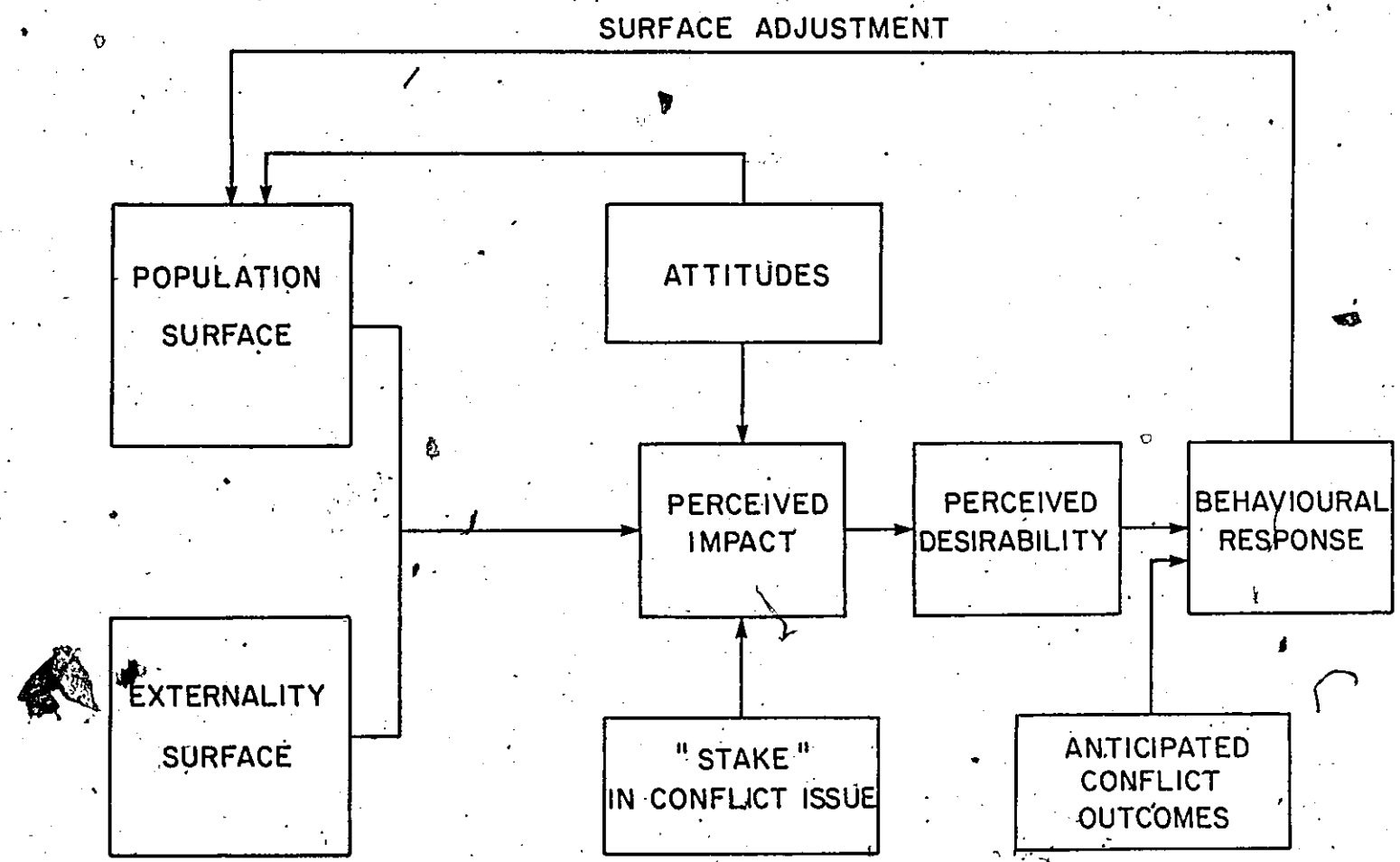
3.2.1 A General Model of Response to Community Mental Health Facilities

The comprehensive general model of neighbourhood response to community mental health facilities developed for the purposes of this discussion is presented in Figure 3.1. Specifically, this model suggests that the two exogenous factors, the population surface and the externality surface, interact to produce an externality impact. This impact will be perceived differentially by individuals as a result of certain endogenous factors such as attitudes (which also influence the form of the population surface) and an individual's 'stake' in the conflict issue. The perceived facility impact will determine the perceived desirability of a facility, which in turn, together with anticipated conflict outcomes, will influence the degree and form of neighbourhood response. Response will create adjustments to the existing population surface, creating a dynamic response-adjustment process.

The population surface has previously been defined as comprising the physical and social characteristics of the host neighbourhood while the externality surface is best described by the nature of the externality impact and the form of the externality field. The unfolding and interaction of these two surfaces produces an externality impact which is perceived differentially by individuals. Variations in

FIGURE 3·1

GENERAL MODEL OF RESPONSE TO COMMUNITY MENTAL HEALTH FACILITIES



perceptions of this impact are a function of the fit between the form of the externality surface and the context of the population surface,or neighbourhood. Attitudes towards mental illness and the mentally ill may also influence an individual's perception of facility impact. An individual's 'stake' in the conflict issue (what one sees one's self potentially gaining or losing by a facility introduction in one's neighbourhood) is also a strong determinant of one's perceptions and tends to move perceptions of facility impact from a purely abstract and speculative perspective to a more personal and subjective level. Because neighbourhood response is an aggregate process taken in the context of specific environments, it should be noted that an individual's stake in the locational conflict issue is related to, but quite separable from, his or her stake in the environment. An individual's stake in the environment is a function of one's investment in home and neighbourhood, the utility derived from this investment, and the desire to protect one's daily-life environment. An individual's stake in a conflict issue is determined partially by his or her stake in the environment but also by the perceived degree of threat posed by the conflict situation. Thus, while two individuals may have similar stakes in the environment, their stake in any given conflict issue will hinge upon the likelihood of being impacted by an unfavourable conflict resolution. In this regard, distance from the facility in question is likely to affect strongly an individual's stake in the conflict issue.

The combined interaction of the population and externality surfaces, attitudes, and stake in the conflict issue all serve to produce a unique perception of facility impact. This perceived impact may be thought of in terms of the type and extent (magnitude) of impact. Based upon his or her perception of the facility's impact, an individual derives a perception of the facility's desirability in his or her neighbourhood. This perceived facility desirability, together with anticipated conflict outcomes, conditions the form of neighbourhood response. Although its effect has largely been ignored in the literature, it is suggested that the influence of anticipation concerning conflict outcomes is pervasive in many instances. Dear and Long (1978), citing their own research as well as that of Hirschman (1970), observed that, in situations of locational conflict, expectations of the success of various strategic options determine the ultimate course of action taken. They noted that the less optimistic individuals are concerning plan outcomes, the more likely they are to voice their opposition, and, further, that individuals may postpone moving from a neighbourhood if they anticipate that their use of voice may be successful.

The form of response chosen in any conflict situation does not represent the end of the response process; because of the inherently dynamic nature of modern urban systems, neighbourhood response and the outcome serve as inputs to an ongoing process of adjustment to a dynamic urban sociospatial structure. Successful opposition to facilities in a neighbourhood void of facilities

serves to reinforce prior patterns of structuration while unsuccessful opposition will result in a modification of the sociospatial structure. In facility-saturated neighbourhoods, the reverse will hold true; successful opposition will modify the sociospatial structure while unsuccessful opposition will reinforce the existing patterns of structuration.

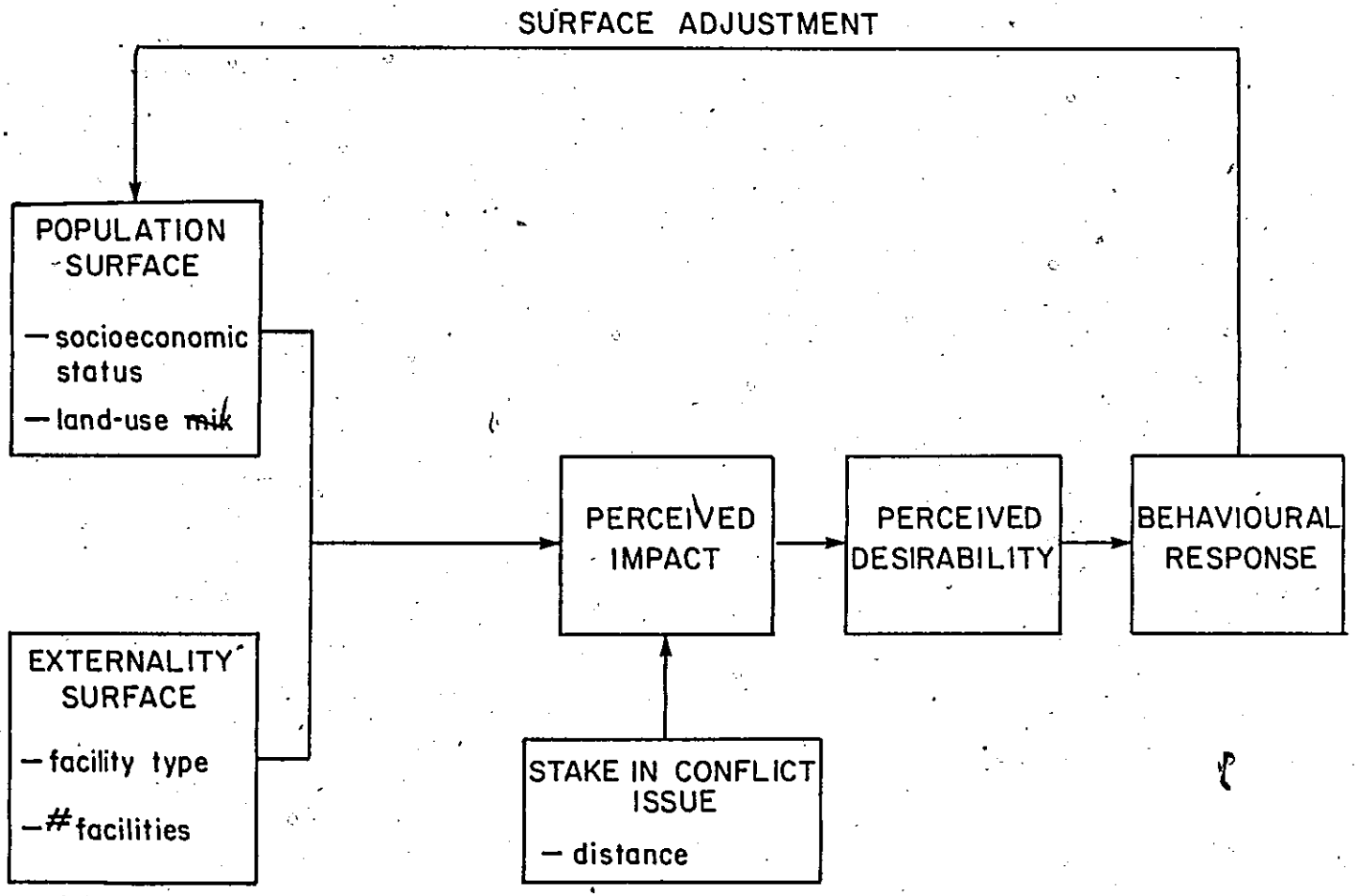
3.2.2 An Operational Model of Response to Community Mental Facilities

Although this comprehensive general model of neighbourhood response attempts to include all factors influencing response to community mental health facilities, it is inappropriate for actual empirical research because of the difficulties involved in operationalizing certain of its components. It is therefore necessary to specify an operational model with empirically testable variables. In developing such a model one must necessarily sacrifice some degree of theoretical explanation for the sake of being able to examine those factors felt to be most important in terms of explanatory power. In this way, one may determine the validity of research hypotheses concerning the variables chosen and assess the utility both of these variables and the model in general. The operational model chosen is depicted in Figure 3.2.

The model suggests that the differential interaction of a population and externality surface, together with stake in the conflict issue, serves to produce a perceived facility impact.

FIGURE 3·2

OPERATIONAL MODEL OF RESPONSE TO COMMUNITY MENTAL HEALTH FACILITIES



Perception of facility impact is translated into perceived facility desirability and, ultimately, neighbourhood response. Response results in adjustments to the population surface, potentially re-initiating the response process. Comparison of the general and operational models reveals the absence of two factors: attitudes and anticipated conflict outcomes. Attitudes towards the mentally ill were omitted for two reasons. First, although the effect of this variable in the formation of individual behavioural response is conceded (see Section 3.1.2), the concern of this thesis is with neighbourhood response, which is felt to be a form of group-based territorial exclusion based upon desire for protection of the daily-life environment. Second, attitudes represent an area which has been relatively extensively examined in both the theoretical and empirical literature, and this research seeks to examine some of the less well documented variables whose influence is perhaps equally pervasive. The role of anticipated conflict outcomes was omitted for two reasons as well: it is not as critical a factor as the areas chosen for examination, and it remains difficult to operationalize, particularly in an instance (such as this) where more than one situation of locational conflict is being examined.

In specifying a neighbourhood response process based upon perceptions of facility impact and desirability, three key factors have been identified: (1) a population surface; (2) an externality

surface; and (3) an individual's stake in the conflict issue. Further, five variables representing the most critical dimensions of these factors have been specified. It is suggested that the population surface is best characterized by neighbourhood socio-economic status and the land use mix of the neighbourhood. These variables together represent both the social and physical attributes of the host neighbourhood, and it is expected that much of the perceptual and response variability attributable to the population surface can be explained by these variables. From previous empirical work, it is likely that less favourable perceptions will be held and more active opposition encountered in higher socioeconomic status neighbourhoods as well as in those neighbourhoods with predominantly single family residential land use.

As far as the externality surface is concerned, it is suggested that variations in perceptions and response are attributable to the type of facility found in a neighbourhood as well as the number of these facilities. Despite the lack of empirical evidence, it is suggested that greater opposition will be found in neighbourhoods with residential care facilities because of the actual residence of patients in the neighbourhood compared to the short term visits of patients utilizing outpatient clinics and social-therapeutic centres. The visibility of the latter facility type is further reduced by the fact that such facilities tend to operate during normal working hours and, for this reason, many neighbourhood

residents who work outside their neighbourhoods may not be aware of a facility's operations. *Ceteris paribus*, it is expected that the propensity for opposition to facilities will increase with the number of facilities found in any given neighbourhood.

The last factor, stake in the conflict issue, is represented by a distance variable. Because one's stake in any conflict issue is related to the likelihood of being impacted by an unfavourable conflict outcome, it is suggested that stake can best be represented by the distance separating an individual from the facility in question. Individuals in close proximity to a facility are more likely to be impacted by the facility (and hence have a greater stake in the conflict issue), while those individuals further away are likely to have a smaller stake in the issue according to the form of the distance-decay function associated with the facility's externality field. Thus, it may be expected that less favourable perceptions will be held and greater opposition encountered amongst individuals closest to the facility in question.

3.3 Summary

Neighbourhood response to community mental health facilities is the product of the differential interaction of factors exogenous and endogenous to the individual. The exogenous factors relate to the fit

between the context of the host neighbourhood's population surface and the form of the facility's externality surface. The propensity for surface adjustment to the prior patterns of structuration is greatest when the fit between facility form and neighbourhood context is weakest. The primary endogenous factor influencing response is the individual's stake in the conflict issue, a function of his stake in the environment and the degree of potential threat posed by a facility location. The degree of threat is strongly conditioned by the distance between the facility location and the individual.

In this chapter the theoretical and empirical literature have been developed into a comprehensive general model of neighbourhood response to community mental health facilities. It is felt that this model accurately simulates the process of response and incorporates all major process components. From this model, an operational model was derived, including the five major variables thought to account for much of the variation in facility perception and neighbourhood response to community mental health facilities. It is these variables that will be incorporated into the research hypotheses (Chapter 4) to be empirically tested in the subsequent analysis (Chapter 5).

CHAPTER 4

RESEARCH DESIGN

Chapters 4 and 5 concentrate upon the perceived externality impacts of community mental health facilities and their influence upon the process of neighbourhood response to facilities. This chapter begins with the specification of the research objectives and research hypotheses guiding the empirical analysis, the results of which are presented in Chapter 5. The remainder of this chapter is devoted to a discussion of the survey design employed and certain analytical considerations pertaining to this study.

4.1 Research Objectives and Hypotheses

Two objectives guide the analysis to be undertaken in the following chapter. The first is to establish the empirical dimensions of the process of neighbourhood response to community mental health facilities; the second is to examine the effects of the variables thought to influence this process. To meet the first ojective, three specific research objectives have been identified:

1) to identify the nature of the perceived externality impacts associated with community mental health faciliites;
2) to define the spatial extent of the externality field; and
3) to identify the degree of anticipated neighbourhood response resulting from the externality field.

To meet the second objective relating to the influence of the variables chosen upon the process of neighbourhood response, five specific research hypotheses have been identified:

1) variations in the process of neighbourhood response to community mental health facilities are related to neighbourhood social class;
2) variations in the process of neighbourhood response to community mental health facilities are related to neighbourhood land-use mix;
3) variations in the process of neighbourhood response to community mental health facilities are related to facility type;
4) variations in the process of neighbourhood response to community mental health facilities are related to the number of facilities in a neighbourhood; and
5) variations in the process of neighbourhood response to community mental health facilities are related to the distance between facility and respondent.

4.2 Survey Design

The majority of data used in the subsequent analysis was collected as part of a larger survey of attitudes towards community mental health facilities in Toronto, Ontario (Dear and Taylor, 1979). These data, collected during the summer and fall of 1978 by the Survey Research Centre at York University in Toronto, included information pertaining to the characteristics of the neighbourhoods, facilities, and respondents included in the survey.

The survey sample consisted of two sub-samples: neighbourhoods containing community mental health facilities, and neighbourhoods without facilities. Both sub-samples were stratified by two variables: three levels of social class (high, medium, and low), and two geographic zones (city and suburb) (for a fuller discussion of the stratification criteria see Dear and Taylor (1979, section 5.2.1)). For the neighbourhoods without facilities, a multi-stage cluster sampling procedure was followed, involving the random selection of households from randomly drawn census Enumeration Areas (E.A.'s); for the neighbourhoods with facilities, a similar procedure was followed, the only deviation being the purposive rather than random selection of E.A.'s due to small sample size and the necessity of including a representative range of facility types. Following three pretests, 1610 households were selected and 1090 interviews completed, yielding a response rate of approximately 68%. The distribution of completed interviews by facility, social class and geographic location is presented in Table 4.1.

A questionnaire was used to collect data pertaining to perceptions of, and response to, community mental health facilities, as well as personal characteristics of the respondents. This questionnaire (see Appendix A) was introduced as a general survey of community services in Toronto, and initial questions dealt with general impressions about such services. Succeeding questions ascertained awareness of community mental health facilities in Toronto and attitudes towards the mentally ill. The next group of questions related to facility and neighbourhood perceptions, the perceived externality impacts of facilities, perceived

TABLE 4.1 NUMBER OF COMPLETED INTERVIEWS BY STRATA

WITHOUT FACILITIES SUBSAMPLE

GEOGRAPHICAL ZONE	SOCIAL CLASS			TOTAL
	Lower	Middle	Upper	
City	74	146	93	313
Suburb	95	180	114	389
TOTAL	169	326	207	702

WITH FACILITIES SUBSAMPLE

GEOGRAPHICAL ZONE	SOCIAL CLASS			TOTAL
	Lower	Middle	Upper	
City	61	55	77	193
Suburb	67	78	50	195
TOTAL	128	133	127	388

SAMPLE TOTAL 1080

facility desirability and intended response. Finally, the personal characteristics of respondents were noted. The only data not drawn from the questionnaire were distance data calculated from field surveys and topographic maps, and land use data.

4.3 Analytical Considerations

In this section, a brief discussion is presented of several considerations related to the analysis performed in this study. These considerations relate to the selection of an appropriate analytical level, the data employed in the analysis, and the types of statistical tests selected. The first consideration involves the selection of a level of analysis yielding the most meaningful results consistent with the context of the conceptual framework developed in the earlier stages of this work. In previous research (for instance, Dear and Taylor (1979)), analysis has customarily been performed at a very low level of disaggregation (eg. social class, location, facility type, etc.). In this analysis, it is felt that the most appropriate level of analysis is the localized neighbourhood in the facility's vicinity. This choice can be attributed to three factors, one practical and two of a more theoretical nature. Analyses performed at a highly aggregate level tend to obscure the effect of individual variables under consideration. By choosing the localized neighbourhood level and carefully selecting the neighbourhoods for analysis, it is possible to hold a variety of factors constant while gauging the specific effect of the variable under consideration. It is felt that the local neighbourhood represents the

level at which, and the area in which, spatial externalities are most strongly felt. The emphasis of this research is upon neighbourhood, not individual, response to community mental health facilities; should neighbourhood response be undertaken, the local neighbourhood represents the level at which any action is likely to be manifest.

The second consideration to be discussed relates to the actual data employed in the analysis. These data pertain to facility awareness, perceived facility impact, perceived facility desirability, and neighbourhood response (see Appendix A). To assess awareness of community mental health facilities (question 5a), respondents were asked if they were aware of any facilities in their neighbourhood. On the basis of this question, two awareness groups were established: (1) those aware of a facility in their neighbourhood, and (2) those unaware or unsure of a facility in their neighbourhood. (A report released subsequent to this analysis has indicated that of this aware group, only a small percentage could accurately name the facility in their neighbourhood (Pulcins, 1980). Although this finding is potentially significant in the context of individual behavioural response, it is felt that the results contained in Chapter 5 are still valid in their intended context of the aggregate process of neighbourhood response to community mental health facilities).

The perceived facility impact (Question 10a) was assessed in terms of twelve specfied impacts shown to be significant in related previous research (Gingell et al., 1975). These included a range of monetary

impacts (e.g. effects upon property values and property taxes), quantifiable impacts (e.g. changes in noise levels and traffic volumes), and intangible impacts (e.g. effects upon neighbourhood image and residential character). Respondents were asked to assess each of the twelve impacts along seven-point bi-polar semantic differential scales with only the two poles labelled. For the aware group, the perceived impact was based upon their neighbourhood facility; for the unaware group, a potential impact was assessed.

To determine perceived facility desirability (Question 11), respondents were asked to rate the desirability of a facility location within three distances from their residence: within 1 block; within 2-6 blocks; and within 7-12 blocks. The use of the three distance zones was designed to assess the perceived extent of the externality field associated with community mental health facilities, gauging reactions to facility locations immediately proximate to the individual, at an intermediate range, and relatively distant from the respondent. To rate facility desirability, a nine-point labelled category scale, similar to that used by Gingell et al. (1975) was used, ranging from "extremely undesirable" to "extremely desirable" with a neutral mid-point.

To assess neighbourhood response to community mental health facilities (Question 12), all respondents who rated a facility as undesirable at any distance in Question 11 were asked what action they would take in opposition to a facility for each distance at which they related a facility as undesirable. A list of nine possible options

was shown to each of these respondents; these responses were later aggregated into four response categories (see Section 5.4.1).

The last analytical consideration involves the selection of the most appropriate form of statistical analysis. Research efforts previously cited have tended to treat the scales and options contained in the questionnaire as possessing interval properties, and have employed regular parametric tests based upon this assumption. It is contended here that the variables contained in this analysis possess only ordinal properties and, therefore, the use of non-parametric statistical tests, such as the Kruskal-Wallis one-way analysis of variance and the Kolmogorov-Smirnov test for differences in distributions, are called for.

CHAPTER 5

EMPIRICAL DIMENSIONS OF NEIGHBOURHOOD RESPONSE TO COMMUNITY-MENTAL HEALTH FACILITY LOCATIONS

In this chapter, discussion is provided of the results of the empirical analysis. The initial section presents an explanation of the subsample selection process for each analysis. The second, third, and fourth sections present, respectively, the empirical dimensions of the perceived externality impacts of community mental health facilities, the externality fields associated with facilities, and neighbourhood response to these fields. The final section summarizes the results in the context of the three specific research objectives and five research hypotheses presented in Chapter 4.

5.1 Subsample Selection

In Chapter 4, five research hypotheses were established; they were designed to assess the effect of the five variables specified in the operational model advanced in Chapter 3. Specifically, these hypotheses were structured to examine the effect on the response process of social class, land use mix, facility type, number of

facilities in a neighbourhood, and distance between the respondent and facility. This section discusses the selection of subsamples for testing these hypotheses. Individual subsamples were selected for each analysis in order to hold constant, as much as possible, the effect of extraneous variables.

To examine neighbourhood social class, two subsamples were chosen in order to control for geographic location, and facility type and number. The first subsample was chosen from city locations and consisted of three group homes selected by neighbourhood social class strata (lower, middle, and upper class). The second subsample, chosen from suburban locations, consisted of three social/therapeutic facilities drawn from lower, middle, and upper class neighbourhoods. Both subsamples are profiled in Table 5.1.

For assessing the influence of neighbourhood land use mix, a three-neighbourhood subsample was selected. All neighbourhoods were drawn from middle class city locations containing either social/therapeutic or outpatient facilities. Each neighbourhood reflected one predominant land use type, either: (1) single family residential; (2) multiple family residential; or (3) commercial and industrial land use. This subsample is presented in Table 5.2

To test the influence of facility type, twelve facility neighbourhoods were selected from city locations (seven group homes, two social-therapeutic centres, and three outpatient clinics). The social-therapeutic and outpatient neighbourhoods were aggregated into

TABLE 5.1 SOCIAL CLASS ANALYSIS: SUBSAMPLE STRUCTURE

GROUP HOME SUBSAMPLE

Neighbourhood characteristics:		Sample size (n):	
Facility type:	group homes	Lower class:	17
Number of facilities:	2 (each in the same block)	Middle class:	12
Location:	city	Upper class:	19
Dominant land use:	multiple family residential	Subsample:	48

SOCIAL-THERAPEUTIC SUBSAMPLE

Neighbourhood characteristics:		Sample size (n):	
Facility type:	social-therapeutic	Lower class:	24
Number of facilities:	1	Middle class:	20
Location:	suburbs	Upper class:	49
Dominant land use:	single family residential	Subsample:	99

TABLE 5.2 NEIGHBOURHOOD LAND USE MIX ANALYSIS: SUBSAMPLE STRUCTURE
LAND USE TYPE SUBSAMPLE

Neighbourhood characteristics		Sample size (n):	
Social class:	middle	Single family residential:	22
Location:	city	Multiple familiy residential:	9
Number of facilities:	1	Commercial/Industrial:	9
Facility type:	mixed	Subsample:	40

one group, thus establishing a dichotomous subsample containing residential care facilities (group homes), and non-residential care treatment facilities (social/therapeutic centres and outpatient clinics). To gauge the effect of this variable properly, it was felt that the most appropriate subsample would include only those respondents who indicated, in Question 5a, that they were aware of a facility in their neighbourhood. (Results of a recent study (Pulcins, 1980) have subsequently indicated that less than 15% of the respondents aware of a facility in their neighbourhood (or approximately 3% of the entire sample) could correctly name the particular facility.) While these findings raise certain questions concerning the validity of this analysis (as well as the neighbourhood saturation and distance analyses), at the time of analysis, this measure of awareness provided the most accurate and appropriate control device. Further attempts to incorporate only those respondents who could name the facility in their neighbourhood into the analysis failed because of inadequate sample size. Therefore, although the use of the larger aware group does reflect imperfections in sample design, it was retained in order to provide a better indicator of the effects of facility type, and number. This subsample is presented in Table 5.3.

The fourth subsample was selected from a number of city locations in order that the effect of facility saturation (the number of facilities in a neighbourhood) might be properly determined. This

TABLE 5.3 FACILITY TYPE ANALYSIS: SUBSAMPLE STRUCTURE
FACILITY TYPE SUBSAMPLE*

Neighbourhood characteristics:		Sample size (n):	
Location:	city	Group homes:	33
Number of facilities:	1 or 2	Social-therapeutic/ outpatient	16
Social class:	mixed		
Dominant land use:	single or multiple family residential	Subsample	49

*Includes only those respondents aware of a facility in their neighbourhood.

subsample consisted of a saturated neighbourhood group (from facilities located with one quarter mile (400 metres) of each other), and a single facility group composed of single facility neighbourhoods. Both groups were then reduced to include only those individuals who had indicated awareness of a neighbourhood facility (see discussion of the awareness issue in the previous paragraph). This subsample is profiled in Table 5.4.

To test the effect of distance upon the response process, a subsample including all residents of facility neighbourhoods was selected. For each respondent, two measures of distance were calculated from the use of large-scale enumeration area maps and site inspections. The two selected distance measures were: (1) straight line distance, the actual distance between respondent and facility; and (2) street distance, the shortest distance between respondent and facility using residential streets. The initial research design involved several regression analyses using actual straight line and street distance values. The results of these analyses were highly insignificant due to the small number of possible values for the dependent variables and the pattern of actual responses. Consequently, the distance data were aggregated to form five distance groups for each distance measure: (1) up to 100 metres from the facility; (2) 101-200 metres; (3) 201-300 metres; (4) 301-400 metres; and (5) further than 400 metres (one quarter mile) from the facility. The structure of both distance groups is given in Table 5.5.

TABLE 5.4 FACILITY SATURATION ANALYSIS: SUBSAMPLE STRUCTURE
NEIGHBOURHOOD SATURATION SUBSAMPLE*

Neighbourhood characteristics:		Sample size (n):	
Location	city	Single facility:	15
Social class:	mixed	Saturated:	22
Facility type:	mixed	Subsample:	37
Dominant land use:	single or multiple family residential		

*Includes only those respondents aware of a facility in their neighbourhood.

TABLE 5.5 DISTANCE ANALYSIS: SUBSAMPLE STRUCTURE

STREET DISTANCE MEASURE

Distance zone:	Actual distance:	Sample Size:
1	≤ 100 metres	66
2	101-200 metres	85
3	201-300 metres	64
4	301-400 metres	64
5	> 400 metres	100
subsample		379

STRAIGHT LINE DISTANCE MEASURE

Distance zone:	Actual distance:	Sample Size:
1	≤ 100 metres	94
2	101-200 metres	96
3	201-300 metres	93
4	301-400 metres	48
5	> 400 metres	48
subsample		379

5.2 Perceived Externality Impacts

The first research objective was to identify the perceived externality impacts of community mental health facilities. In this section, these impacts are identified and variations in the perceptions of these impacts by the five selected variables are discussed. Two analyses were performed on the perceived impacts for each subsample. Initially, the polarity and ratings of certain impacts were reversed so that, for all impacts, a value of *1.0* represented the most positive rating and *7.0* the most negative rating. In the first analysis, responses were aggregated into three groups: (1) *positive*, with ratings from 1.0 to 3.0; (2) *neutral* (4.0); and (3) *negative* (5.0 to 7.0). For each impact, the percentage of responses falling into each group was calculated by neighbourhood and for the subsample, as well as mean percentages and ranges for each group. In the second analysis, median impact ratings for each impact were calculated by neighbourhood and for the subsample. To test for variations among different neighbourhoods Kruskal-Wallis chi-square statistics (corrected for ties) were calculated for each impact for the social class, land use mix, and distance subsamples, and Kolmogorov-Smirnov z statistics for the facility type and saturation level subsamples. The Kruskal-Wallis non-parametric one-way analysis of variance gauges differences in the median values of each neighbourhood while the Kolmogorov-Smirnov test assesses the goodness of fit of the distribution of responses. For both tests, associated significance levels are also presented.

5.2.1 Perceived Externality Impacts and Social Class

Tables 5.6 and 5.7 present, for the group home and social/therapeutic subsamples respectively, the percentage distribution of perceived impact ratings. From these tables it is clear that community mental health facilities are perceived as having a predominantly neutral impact upon residential neighbourhoods. For the group home subsample, the mean percentage of neutral ratings is 54%, with mean neighbourhood percentages ranging between 49% and 59%; for the social/therapeutic subsample, mean neighbourhood values ranged from 42% to 57%, with an overall mean of 50%. The percentage of negative responses exceeds positive responses in most instances although certain exceptions do exist. In both subsamples, the percentage of positive responses equals or exceeds negative responses for two impact types in the lower class neighbourhoods; the same is true for the group home subsample in the middle class neighbourhood. In the upper class neighbourhoods, however, positive responses exceed negative responses for five and four impacts for the group home and social/therapeutic subsamples respectively, suggesting that facilities are perceived more positively by residents of upper class neighbourhoods than by residents of lower and middle class neighbourhoods.

As far as the individual impact types are concerned, certain trends are apparent. An examination of both tables reveals some relationship between impact type and the percentage of positive impact

TABLE 5.6. PERCENTAGE DISTRIBUTION OF PERCEIVED IMPACTS BY SOCIAL CLASS GROUP HOME SUBSAMPLE

IMPACT VARIABLE	SOCIAL CLASS LOWER			MIDDLE			UPPER			SUBSAMPLE		
	+	N	-	+	N	-	+	N	-	+	N	-
TRAFFIC	18	53	29	0	58	42	11	63	26	10	58	31
VALUES	12	41	47	17	33	50	21	53	26	17	44	40
SAFETY	12	71	18	8	75	17	16	68	16	13	71	17
NOISE	24	47	29	8	50	42	5	68	26	13	56	31
TAXES	18	71	12	25	58	17	17	72	11	19	68	13
PEOPLE	29	35	35	17	67	17	5	68	26	17	56	27
APPEARANCE	24	47	29	17	58	25	21	63	16	21	56	23
SATISFACTION	29	35	35	8	42	59	16	58	26	19	46	35
MOVE	24	53	24	0	58	42	5	53	42	10	54	35
IMAGE	24	35	41	17	58	25	26	47	26	23	46	31
CHARACTER	24	47	29	25	33	42	21	53	26	23	46	31
QUALITY	18	53	29	17	50	33	32	42	26	23	48	29
$\bar{x}$%	21	49	30	13	53	33	16	59	25	17	54	28
lowest %	12	35	12	0	33	17	5	42	11	10	44	13
highest %	29	71	47	25	75	50	32	72	42	23	71	40
n	17			12			19			48		

TABLE 5.7 PERCENTAGE DISTRIBUTION OF PERCEIVED IMPACTS BY SOCIAL CLASS
SOCIAL/THERAPEUTIC SUBSAMPLE

IMPACT VARIABLE	SOCIAL CLASS									SUBSAMPLE		
	LOWER			MIDDLE			UPPER					
	+	N	-	+	N	-	+	N	-	+	N	-
TRAFFIC	0	73	27	20	30	50	2	44	54	6	48	47
VALUES	10	43	48	10	35	55	6	46	48	8	43	49
SAFETY	5	64	32	10	45	45	30	45	25	19	49	31
NOISE	9	64	27	10	55	35	15	53	32	12	56	31
TAXES	14	43	43	25	45	30	11	59	30	15	52	33
PEOPLE	5	68	27	5	50	45	20	57	24	13	58	29
APPEARANCE	14	71	14	10	55	35	16	69	16	14	66	20
SATISFACTION	18	41	41	21	37	42	23	33	44	21	36	43
MOVE	9	59	32	15	30	55	19	38	43	16	42	43
IMAGE	23	50	27	15	45	40	28	38	34	24	43	34
CHARACTER	23	55	23	25	45	30	27	52	21	26	51	23
QUALITY	19	52	29	20	35	45	23	56	21	21	51	28
$\bar{x}$%	12	57	31	16	42	42	18	49	33	16	50	34
lowest %	0	41	14	5	30	30	2	33	16	6	36	20
highest %	23	73	48	25	55	55	30	69	54	26	66	49
n		22			20			48			90	

ratings. In both subsamples, the most positively perceived impacts are intangible (*neighbourhood image, neighbourhood residential character, environmental quality,* and *visual appearance*); the least positively perceived are quantifiable (*traffic levels, residents moving, personal safety,* and *noise levels*). No apparent patterns are observed for the distribution of neutral and negative responses. In instances where the percentage of positive responses exceeds negative responses, the most important impact dimensions appear to be *property taxes, personal safety,* and *visual appearance;* the most negatively perceived impacts are *property values, traffic levels,* and *neighbourhood satisfaction.*

Median impact ratings by neighbourhood and Kruskal-Wallis statistics are presented for the group home and social/therapeutic subsamples in Tables 5.8 and 5.9 respectively. Examination of these tables confirms the absence of strongly perceived positive or negative impacts. All the median impact ratings approximate the neutral rating of 4.0, with individual values ranging between 3.93 and 4.75; in only three instances (of a possible seventy-two) do median ratings deviate by more than $\pm$ 0.50 from the neutral impact rating of 4.0 (*property values* and *residents moving* for the middle class neighbourhood (group home subsample) and *traffic levels* for the upper class neighbourhood (group home subsample)). Given the perceived neutrality of facility impacts, it is not surprising that impact perceptions do not vary with social class, as may be seen by the absence of any significant Kruskal-Wallis statistics.

TABLE 5.8 MEDIAN IMPACT RATINGS BY SOCIAL CLASS: GROUP HOME SUBSAMPLE

IMPACT VARIABLE	SOCIAL CLASS LOWER	MIDDLE	UPPER	SUBSAMPLE	KRUSKAL-WALLIS H
TRAFFIC	4.188	4.500	4.667	4.430	4.410
VALUES	4.444	4.750	4.455	4.487	0.320
SAFETY	4.214	4.389	3.952	4.125	5.053
NOISE	4.143	4.227	4.160	4.170	0.616
TAXES	4.333	4.056	4.167	4.178	0.986
PEOPLE	4.167	4.400	4.038	4.147	4.517
APPEARANCE	4.000	4.227	4.000	4.044	2.924
SATISFACTION	4.278	4.286	4.313	4.297	0.035
MOVING	4.192	4.700	4.306	4.324	1.613
IMAGE	4.045	4.278	4.083	4.118	1.107
CHARACTER	4.000	4.056	3.940	3.978	0.511
QUALITY	4.091	4.357	3.981	4.067	1.942
n	22	20	48	90	

* denotes significance at the .05 level

** denotes significance at the .01 level

TABLE 5.9 MEDIAN IMPACT RATINGS BY SOCIAL CLASS: SOCIAL/THERAPEUTIC SUBSAMPLE

IMPACT VARIABLE	SOCIAL CLASS LOWER	MIDDLE	UPPER	SUBSAMPLE	KRUSKAL-WALLIS H
TRAFFIC	4.111	4.357	4.125	4.179	2.331
VALUES	4.429	4.500	4.050	4.262	1.182
SAFETY	4.042	4.056	4.000	4.029	0.249
NOISE	4.063	4.333	4.154	4.167	1,089
TAXES	3.958	3.929	3.962	3.953	0.019
PEOPLE	4.083	4.000	4.154	4.093	0.706
APPEARANCE	4.063	4.071	3.958	4.019	0.442
SATISFACTION	4.083	4.500	4.091	4.182	1.432
MOVING	4.000	4.357	4.350	4.231	4.127
IMAGE	4.250	4.071	4.000	4.091	0.510
CHARACTER	4.063	4.250	4.050	4.091	0.439
QUALITY	4.111	4.167	3.938	4.065	1.127
n	17	12	19	48	

* denotes significance at the .05 level

** denotes significance at the .01 level

Despite the lack of statistical significance in either table, there is a suggestion that facility impacts are more negatively perceived in middle class neighbourhoods than in either lower or upper class neighbourhoods. In both subsamples, the most negative impact ratings are given by the middle class neighbourhood in nine of twelve instances. No significant trends are apparent as far as individual impact types are concerned. The most negatively perceived impact is *property values*, suggesting that monetary impacts are more readily perceived than either quantifiable or intangible impacts; this suggestion is supported by the fact that the most neutral ratings are ascribed to intangible impacts such as *neighbourhood appearance*, *residential character*, *neighbourhood image*, and *environmental quality*.

5.2.2 Perceived Externality Impacts and Neighbourhood Land Use Mix

The percentage distribution of perceived impact ratings by land use type is presented in Table 5.10. Respondents appear to be almost equally divided in their perceptions of facility impact; for the subsample, 45% of responses are neutral (with individual neighbourhood percentages ranging from 40% to 53%) while negative ratings are given by 42% of respondents (with neighbourhood percentages ranging from 29% to 47%). A very small percentage of respondents perceived facilities as having a positive effect upon their neighbourhood (between 9% and 18% in the individual neighbourhoods with a subsample mean of 13%).

TABLE 5.10 PERCENTAGE DISTRIBUTION OF PERCEIVED IMPACTS BY LAND USE TYPE

IMPACT VARIABLE	LAND USE TYPE: SINGLE FAMILY RESIDENTIAL			MULTIPLE FAMILY RESIDENTIAL			COMMERCIAL/ INDUSTRIAL			SUBSAMPLE		
	+	N	-	+	N	-	+	N	-	+	N	-
TRAFFIC	0	65	35	0	33	67	0	56	44	0	55	45
VALUES	5	32	63	0	22	78	11	56	33	5	35	59
SAFETY	5	53	42	0	56	44	11	56	33	5	54	40
NOISE	5	65	30	0	56	44	11	67	22	5	63	32
TAXES	10	75	15	22	67	11	22	56	22	16	68	16
PEOPLE	16	42	42	11	56	33	11	56	33	14	49	38
APPEARANCE	11	47	42	11	44	44	33	44	22	16	46	38
SATISFACTION	17	17	67	33	33	33	33	44	22	25	28	47
MOVING	25	25	50	11	33	56	11	44	44	18	32	50
IMAGE	5	37	58	33	22	44	25	50	25	17	36	47
CHARACTER	5	32	63	33	33	33	22	44	33	16	35	40
QUALITY	5	35	60	33	22	44	22	67	11	16	40	45
$\bar{x}$ %	9	44	47	16	40	44	18	53	29	13	45	42
lowest %	0	17	15	0	22	11	0	44	11	0	28	16
highest %	25	75	67	33	67	78	33	67	44	25	68	59
n		19			9			9			37	

This table also suggests a variation in perceived impact related to land use type; it appears that facility impacts are less negatively perceived by residents of commercial and industrial neighbourhoods. The highest percentage of positive ratings (18%) is found in the commercial/industrial neighbourhood and the lowest percentage (9%) in the single family residential neighbourhood. The reverse holds true for the negative responses: the lowest percentage (29%) is observed in the commercial/industrial neighbourhood and the highest percentage (47%) in the single family residential neighbourhood.

Median impact ratings by land use type are given in Table 5.11, along with Kruskal-Wallis statistics and associated significance levels. While the previous analysis suggests a fairly even split between neutral and negative responses, Table 5.11 indicates that facilities are perceived as having a slight negative, but predominantly neutral, impact upon the neighbourhoods examined. The majority of impact ratings are close to the neutral rating of 4.0 with individual values ranging between 3.88 and 5.88 (the median value of 4.0 is exceeded by $\pm$ .0.50 in only eight instances of thirty-six). Perceptions of facility impact do not vary significantly with neighbourhood land use mix, as evidenced by the absence of any significant Kruskal-Wallis statistics.

Despite the absence of significant variations in perceived impact, the pattern observed in Table 5.10 appears to be supported: facility impacts are least negatively perceived by residents of the commercial/

TABLE 5.11 MEDIAN IMPACT RATINGS BY LAND USE TYPE

IMPACT VARIABLE	LAND USE TYPE: SINGLE-FAMILY RESIDENTIAL	MULTIPLE-FAMILY RESIDENTIAL	COMMERCIAL/ INDUSTRIAL	SUBSAMPLE	KRUSKAL-WALLIS H
TRAFFIC	4.269	4.800	4.400	4.405	1.249
VALUES	5.875	5.000	4.200	5.000	3.361
SAFETY	4.350	4.400	4.200	4.325	0.621
NOISE	4.192	4.400	4.083	4.208	0.975
TAXES	4.033	3.917	4.000	4.000	0.449
PEOPLE	4.313	4.200	4.200	4.250	0.167
APPEARANCE	4.333	4.375	3.875	4.235	2.389
SATISFACTION	5.500	4.000	3.875	4.400	3.735
MOVING	4.500	4.667	4.375	4.500	0.338
IMAGE	4.875	4.250	4.000	4.423	3.512
CHARACTER	5.125	4.000	4.125	4.462	2.885
QUALITY	4.786	4.250	3.917	4.367	5.091
n	19	9	9	37	

* denotes significance at the .05 level

** denotes significance at the .01 level

industrial land use neighbourhood, and most negatively perceived by residents of the single family residential neighbourhood. In nine of twelve instances, the least negative ratings are made by respondents from this neighbourhood, while the single family residential neighbourhood produces the most negative ratings in seven of twelve instances. From this pattern, it is suggested that facilities are perceived as having the greatest impact upon single family residential neighbourhoods and the least impact upon neighbourhoods with high proportions of commercial and industrial land use. This pattern is likely attributable to the reduced visibility of facilities in areas of mixed land use and the greater desire for protection of the daily-life environment in single family residential neighbourhoods. The relatively greater stake in the environment of residents of single family neighbourhoods appears to be supported by the variation in median impact ratings for the *property value* impact, with residents of this type of neighbourhood perceiving a noticeably more negative impact. The only other impact types to reveal relatively large, although statistically insignificant, variations are *neighbourhood satisfaction* and *neighbourhood image;* in both instances, the most negative ratings are made by residents of the single family residential neighbourhood and the most positive by residents of the commercial/industrial neighbourhood.

5.2.3 Perceived Externality Impacts and Facility Type

The percentage distribution of perceived facility impacts by facility type is presented in Table 5.12. From this table it can be seen that the majority of respondents (56% for the subsample and 54% and 57% for the two facility types) perceive facilities as having no impact upon their neighbourhood. Of the remainder of the subsample, approximately twice as many respondents anticipate negative impacts (29% compared with 15%). This pattern is similar for both facility types, suggesting that facility type does not have an effect upon perceptions of facility impact. A slight relationship between positively perceived facility impacts and impact type can be observed. The most positively perceived impacts are intangible ones (*neighbhourhood image, residential character,* and *environmental quality*) while the least positively perceived are monetary and quantifiable (*property values* and *traffic levels*).

In Table 5.13, median impact ratings are presented by facility type, along with Kolmogorov-Smirnov statistics and significance levels. This table supports the impression obtained from Table 5.12 of predominantly neutral perceived facility impacts. All impact ratings approximate the neutral median rating of 4.0 with values ranging between 3.86 and 4.44. The absence of any significant Kolmogorov-Smirnov statistics indicates the perceptions of facility impact do not vary significantly with

TABLE 5.12 PERCENTAGE DISTRIBUTION OF PERCEIVED IMPACTS BY FACILITY TYPE.

IMPACT VARIABLE	FACILITY TYPE: GROUP HOMES			SOCIAL THERAPEUTIC/ OUTPATIENT			SUBSAMPLE		
	+	N	-	+	N	-	+	N	-
TRAFFIC	7	81	13	7	80	13	7	80	13
VALUES	3	50	47	0	53	47	2	51	47
SAFETY	16	56	28	13	67	20	15	60	25
NOISE	13	55	32	13	73	13	13	61	26
TAXES	16	81	3	20	67	13	17	76	6
PEOPLE	9	59	31	13	53	33	11	57	32
APPEARANCE	10	58	32	13	67	20	11	61	28
SATISFACTION	6	50	44	27	33	40	13	45	43
MOVING	16	59	25	33	47	20	21	55	23
IMAGE	19	39	42	33	33	33	24	37	39
CHARACTER	23	45	32	33	40	27	26	44	30
QUALITY	23	52	26	27	33	40	24	46	30
$\bar{x}$%	13	57	30	19	54	27	15	56	29
lowest %	3	39	3	0	33	13	2	37	6
highest %	23	81	47	33	80	47	26	80	47
n		31			15			46	

TABLE 5.13 MEDIAN IMPACT RATINGS BY FACILITY TYPE

IMPACT VARIABLE	FACILITY TYPE: GROUP HOMES	SOCIAL-THERAPEUTIC/ OUTPATIENT	SUBSAMPLE	KOLMOGOROV-SMIRNOV Z
TRAFFIC	4.040	4.042	4.041	0.321
VALUES	4.438	4.438	4.438	0.373
SAFETY	4.111	4.050	4.089	0.300
NOISE	4.176	4.000	4.107	0.602
TAXES	3.920	3.950	3.929	0.321
PEOPLE	4.184	4.188	4.185	0.439
APPEARANCE	4.194	4.050	4.143	0.390
SATISFACTION	4.375	4.200	4.333	0.652
MOVING	4.079	3.857	4.019	0.566
IMAGE	4.292	4.000	4.206	0.444
CHARACTER	4.107	3.917	4.050	0.533
QUALITY	4.031	4.200	4.071	0.533
n	31	15	46	

* denotes significance at the .05 level

** denotes significance at the .01 level

facility type. No pattern is observable as far as individual impact types are concerned: the impacts most negatively perceived are *property values* and *neighbourhood satisfaction* while the least negatively perceived are *property taxes* and *residents moving*.

5.2.4 Perceived Externality Impacts and Neighbourhood Saturation

In Table 5.14, the percentage distribution of perceived facility impacts is presented by saturation level. It is clear that the majority of respondents (55% for the subsample and 49% for the two saturation levels) perceive facilities as having no impact upon their neighbourhood. Of the remainder of the subsample, approximately twice as many anticipate negative facility impacts (29% compared with 16%). Although the percentage of negative ratings is similar for each saturation level (28% and 30%), the distribution of positive ratings (23% in the single facility neighbourhoods compared with 12% in the saturated neighbourhood) indicates that less positive perceptions of facility impact are held by residents of facility-saturated neighbourhoods, suggesting that perceived impact may be directly related to the number of facilities in a neighbourhood. A slight relationship can be observed between positively perceived facility impacts and impact type, with the most positively perceived impacts being intangible (*neighbourhood image, residential character,* and *environmental quality)* and the least positively perceived being either quantifiable (*traffic levels* and *noise levels*) or monetary (*property values*) in nature.

TABLE 5.14 PERCENTAGE DISTRIBUTION OF PERCEIVED IMPACTS BY NEIGHBOURHOOD SATURATION LEVEL

IMPACT VARIABLE	NEIGHBOURHOOD SATURATION LEVEL								
	SINGLE FACILITY			SATURATED			SUBSAMPLE		
	+	N	-	+	N	-	+	N	-
TRAFFIC	8	69	23	0	86	14	3	79	18
VALUES	0	46	54	5	59	36	3	54	43
SAFETY	23	62	15	9	59	32	14	60	26
NOISE	15	62	23	5	62	33	9	62	29
TAXES	15	69	15	14	81	5	15	77	9
PEOPLE	23	46	31	5	64	32	11	57	31
APPEARANCE	23	46	31	5	76	19	12	65	23
SATISFACTION	31	39	31	5	46	50	14	43	43
MOVING	39	39	23	18	50	32	26	46	29
IMAGE	39	31	31	24	33	43	29	32	38
CHARACTER	31	39	31	29	43	29	29	41	29
QUALITY	31	39	31	24	43	33	27	41	32
$\bar{x}$ %	23	49	28	12	59	30	16	55	29
lowest %	0	31	15	0	33	5	3	32	9
highest %	39	69	54	29	86	50	29	79	43
n		13			21			34	

TABLE 5.15 MEDIAN IMPACT RATINGS BY NEIGHBOURHOOD SATURATION LEVEL

IMPACT VARIABLE	NEIGHBOURHOOD SATURATION LEVEL			KOLMOGOROV-SMIRNOV Z
	SINGLE FACILITY	SATURATED	SUBSAMPLE	
TRAFFIC	4.111	4.083	4.093	0.654
VALUES	4.600	4.269	4.368	0.500
SAFETY	3.938	4.192	4.095	0.470
NOISE	4.063	4.231	4.167	0.436
TAXES	4.000	3.941	3.962	0.301
PEOPLE	4.083	4.214	4.175	0.530
APPEARANCE	4.083	4.094	4.091	0.654
SATISFACTION	4.000	4.500	4.333	0.750
MOVING	3.800	4.136	4.031	0.580
IMAGE	3.875	4.286	4.136	0.519
CHARACTER	4.000	4.000	4.000	0.301
QUALITY	4.000	4.111	4.011	0.301
n	13	21	34	

* denotes significance at the .05 level

** denotes significance at the .01 level

Median perceived impact ratings are presented by saturation level in Table 5.15. This table supports the observation that community mental health facilities are perceived as having little positive or negative impact. All ratings are close to the neutral impact rating of 4.0, with individual ratings ranging between 3.80 and 4.60 (in only one instance (*property values* for the single facility neighbourhood) of twenty-four do the median impact ratings vary by more than $\pm$ 0.50 from the neutral rating of 4.0). The absence of significant Kolmogorov-Smirnov statistics indicates that perceptions of facility impact do not vary significantly with the number of facilities in a neighbourhood. Although the magnitude of variation is relatively small, there is a slight suggestion that impacts are more negatively perceived by residents of facility-saturated neighbourhoods: more negative perceptions of facility impact are held by residents of the saturated neighbourhood in eight of twelve instances. No clear relationship can be determined between perceived impact and impact type. Monetary and intangible impacts are observed at both the positively perceived extreme (*property taxes* and *residential character*) and the negatively perceived extreme (*property values* and *neighbourhood satisfaction*).

5.2.5 Perceived Externality Impacts and Distance

The percentage distribution of perceived impact ratings is presented for the street and straight line distance measures respectively in Table 5.16 and 5.17. It can be seen from inspection

TABLE 5.16 PERCENTAGE DISTRIBUTION PERCEIVED IMPACTS BY DISTANCE ZONE: STREET DISTANCE SUBSAMPLE

IMPACT VARIABLE	DISTANCE ZONE 1 (<100 metres)			2 (101-200 metres)			3 (201-300 metres)			4 (301-400 metres)			5 (>400 metres)			SUBSAMPLE		
	+	N	-	+	N	-	+	N	-	+	N	-	+	N	-	+	N	-
TRAFFIC	6	65	29	1	69	30	10	57	33	5	57	38	10	45	45	6	58	36
VALUES	12	46	43	7	42	51	5	56	39	7	51	42	13	46	41	9	48	44
SAFETY	13	52	35	11	64	25	16	66	18	5	60	35	23	57	20	15	60	26
NOISE	18	63	19	8	64	29	15	57	28	10	58	32	17	56	27	13	60	27
TAXES	21	69	10	14	68	19	18	60	22	9	68	24	15	60	25	15	64	20
PEOPLE	10	62	28	6	62	32	20	61	20	3	57	40	18	55	27	12	59	29
APPEARANCE	15	58	27	5	70	25	28	61	11	19	61	20	16	61	23	16	62	22
SATISFACTION	21	36	43	21	37	42	30	41	29	18	45	37	26	36	38	23	39	38
MOVING	23	37	40	9	56	36	13	53	34	12	55	33	19	45	36	15	49	36
IMAGE	20	42	37	22	44	34	30	42	28	17	50	33	30	45	25	24	45	31
CHARACTER	21	40	40	28	41	32	34	41	25	28	47	25	30	50	20	28	44	28
QUALITY	23	38	38	20	49	30	28	51	21	15	55	30	30	51	19	24	49	27
$\bar{x}$%	17	51	32	13	56	32	21	54	26	12	55	32	21	51	29	17	53	30
lowest %		36	10	1	37	19	5	41	11	5	45	20	10	36	19	6	39	20
highest %		69	43	28	70	51	34	66	39	28	68	42	30	61	45	28	64	44
n		63			82			61			60			95			361	

TABLE 5.17 PERCENTAGE DISTRIBUTION OF PERCEIVED IMPACTS BY DISTANCE ZONE: STRAIGHT LINE DISTANCE SUBSAMPLE

IMPACT VARIABLE	DISTANCE ZONE 1 (≤ 100 metres)			2 (101-200 metres)			3 (201-300 metres)			4 (301-400 metres)			5 (> 400 metres)			SUBSAMPLE		
	+	N	-	+	N	-	+	N	-	+	N	-	+	N	-	+	N	-
TRAFFIC	6	67	27	3	64	32	9	54	37	6	45	49	9	50	41	6	58	36
VALUES	10	49	40	6	40	55	6	54	40	19	49	32	9	46	46	9	48	44
SAFETY	14	57	29	8	60	32	14	64	22	26	60	15	17	57	26	15	60	26
NOISE	13	62	24	10	65	25	12	54	35	15	55	30	22	59	20	13	60	27
TAXES	18	69	13	14	67	19	13	61	26	17	57	25	13	64	22	15	64	20
PEOPLE	8	65	27	10	54	36	11	63	27	22	50	28	15	59	26	12	59	29
APPEARANCE	13	63	24	13	63	25	24	61	15	20	59	22	11	66	23	16	62	22
SATISFACTION	22	40	38	20	30	50	27	46	27	23	40	36	24	39	37	23	39	38
MOVING	20	46	34	9	50	41	14	51	35	17	52	30	17	46	37	15	49	36
IMAGE	23	45	32	20	40	41	26	47	27	30	49	21	26	46	28	24	45	31
CHARACTER	26	43	31	24	41	35	35	41	24	30	50	20	28	52	20	28	44	28
QUALITY	24	46	31	18	46	36	24	52	23	30	52	17	26	54	20	24	49	27
$\bar{x}$%	16	54	29	13	52	36	18	54	28	21	52	27	18	53	29	17	53	30
lowest %	6	40	13	3	30	19	6	41	15	6	40	15	9	39	20	6	39	20
highest %	26	69	40	24	67	55	35	64	40	30	60	49	28	66	46	28	64	44
n		90			90			86			48			17			361	

of the tables that community mental health facilities are perceived as having a predominantly neutral impact. The mean percentage of neutral responses for the subsamples is 53%, with individual values ranging between 51% and 56% for the street distance subsample and between 52% and 54% for the straight line distance subsample. In most instances the percentage of negative ratings exceeds the positive percentage. Deviations from this pattern are four, (in the third through fifth distance zones), suggesting the existence of a weak distance-decay effect in the perceptions of facility impact. Some relationship can be observed between positively perceived impacts and impact type. The most positively perceived impacts are intangible (*residential character, neighbourhood image, enviornmental quality,* and *neighbourhood satisfaction*) while the least positively perceived are quantifiable (*traffic levels*) and monetary (*property values*).

In Tables 5.18 and 5.19, median impact ratings are presented by distance zone for the street and straight line distance subsamples respectively. These tables indicate that facilities are perceived as having little positive or negative impact upon residential neighoburhoods. All ratings approximate the neutral impact rating of 4.0, with individual median values ranging between 3.87 and 4.56 in the street distance subsample and between 3.87 and 4.74 in the straight line distance subsample. The neutral rating of 4.0 is exceeded by more than $\pm$0.50 in only one instance of sixty in each subsample (*property values* in the second distance zone). In the street distance subsample, three

TABLE 5.18 MEDIAN IMPACT RATINGS BY DISTANCE ZONE: STREET DISTANCE SUBSAMPLE

IMPACT VARIABLE	DISTANCE ZONE 1 (≤ 100 metres)	2 (101-200 metres)	3 (201-300 metres)	4 (301-400 metres)	5 (> 400 metres)	SUBSAMPLE	KRUSKAL-WALLIS H
TRAFFIC	4.171	4.205	4.200	4.294	4.395	4.251	3.453
VALUES	4.339	4.567	4.309	4.350	4.307	4.365	3.928
SAFETY	4.219	4.106	4.012	4.250	3.972	4.096	13.796**
NOISE	4.013	4.167	4.114	4.186	4.094	4.115	4.498
TAXES	3.925	4.037	4.028	4.113	4.089	4.042	6.800
PEOPLE	4.145	4.210	4.000	4.324	4.077	4.147	14.220**
APPEARANCE	4.103	4.145	3.865	4.014	4.054	4.046	12.329*
SATISFACTION	4.310	4.283	4.000	4.204	4.176	4.193	4.813
MOVING	4.239	4.244	4.203	4.197	4.190	4.214	0.936
IMAGE	4.200	4.132	3.980	4.167	3.953	4.076	4.817
CHARACTER	4.239	4.047	3.880	3.964	3.904	3.990	6.944
QUALITY	4.196	4.103	3.935	4.136	3.896	4.034	8.212
n	63	82	61	60	95	361	

* denotes significance at the .05 level

** denotes significance at the .01 level

TABLE 5.19 MEDIAN IMPACT RATINGS BY DISTANCE ZONE: STRAIGHT LINE DISTANCE SUBSAMPLE

IMPACT VARIABLE	DISTANCE ZONE 1 (≤ 100 metres)	2 (101-200 metres)	3 (201-300 metres)	4 (301-400 metres)	5 (> 400 metres)	SUBSAMPLE	KRUSKAL-WALLIS H
TRAFFIC	4.164	4.224	4.261	4.476	4.326	4.251	5.065
VALUES	4.307	4.737	4.315	4.130	4.405	4.365	11.960*
SAFETY	4.127	4.204	4.064	3.911	4.077	4.096	11.599*
NOISE	4.089	4.112	4.217	4.135	3.981	4.115	5.373
TAXES	3.966	4.033	4.108	4.074	4.069	4.042	4.677
PEOPLE	4.147	4.235	4.130	4.065	4.093	4.147	2.895
APPEARANCE	4.091	4.100	3.933	4.019	4.086	4.046	6.081
SATISFACTION	4.206	4.500	4.000	4.158	4.167	4.193	7.221
MOVING	4.159	4.322	4.205	4.125	4.214	4.214	3.999
IMAGE	4.103	4.265	4.012	3.913	4.024	4.076	5.312
CHARACTER	4.063	4.139	3.871	3.891	3.917	3.990	6.677
QUALITY	4.075	4.200	3.989	3.875	3.940	4.034	8.108
n	90	90	86	48	47	361	

* denotes significance at the .05 level

** denotes significance at the .01 level

significant Kruskal-Wallis statistics can be observed: *undesirable people* (.01 level); *personal safety* (.01 level); and *visual appearance* (.05 level). These variations in perceived facility impact do not, however, reveal any consistent pattern or direction related to street distance between respondent and facility. In the straight line subsample, two significant variations in perceived impact may be detected, both at the .05 significance level: *property values;* and *personal safety*. Again, no consistent direction can be determined in these variations. There is however, from inspection of both tables, a suggestion of the existence of a slight distance-decay effect with the most negative perceptions of facility impact being held by those residents closest to the facility. In the street distance subsample, five of the twelve most negative median impact ratings are found in the first distance zone and five of the twelve most positive ratings in the fifth distance zone; in the straight line distance subsample, nine of the twelve most negative median impact ratings are found in the first two distance zones and seven of the most positive in the last two distance zones.

5.2.6 Summary of Perceived Externality Impacts

This section reveals that community mental health facilities are generally perceived as having neither a strong positive or negative impact upon residential neighbourhoods. Apart from five impacts in the distance subsamples, analysis has revealed no significant variations in impact perception related to social class, neighbourhood land use mix,

facility type, facility saturation, and distance. Discernible patterns can be observed, however, insofar as social class, land use mix, facility saturation, and distance are concerned. These patterns suggest that less negative impact perceptions are held respectively by residents of (1) upper class neighbourhoods; (2) neighbourhoods of mixed commercial and industrial land use; (3) single facility neighbourhoods; and (4) neighbourhood areas furthest away from facilities. With the exception of the social class effect, the direction of the relationships is as expected. The variation related to social class is likely attributable to the higher education levels and more tolerant attitudes to be found in upper class neighbourhoods. The most negatively perceived impact is consistently in the area of *property values* while a range of intangible impacts (*neighbourhood image*, *residential character*, and *environmental quality*) are consistently perceived as having the least negative effect. This suggests that if opposition is to occur, it will likely be in response to negatively perceived monetary impacts. *Property values* represent perhaps the most critical dimension of an individual's investment in his or her daily-life environment, and it is likely that any perceived threat to this dimension will result in opposition as individuals seek to protect their environment.

5.3 The Extent of the Externality Field

The second specified research objective was to define the spatial extent of the externality field generated by community mental

health facilities. In this section, the spatial extent, intensity, and rate of distance decay of the externality field are defined in terms of perceived facility desirability. To assess these dimensions, respondent ratings of perceived facility desirability were aggregated to form three respondent groups: (1) those perceiving a facility location as desirable (ratings of 1.0 to 4.0); (2) those who were neutral in their perceptions (5.0); and (3) those perceiving a facility location as desirable (6.0 to 9.0). The percentage of responses falling into each group was then calculated at each of the three specified distance ranges. The significance of variations in the disaggregated pattern of responses was determined through the use of Kruskal-Wallis statistics for the social class, land use mix, and distance subsamples, and Kolmogorov-Smirnov statistics for the facility type and saturation level subsamples.

5.3.1 The Externality Field and Social Class

The percentage distribution of desirability ratings by social class is presented for the group home and social/therapeutic subsamples in Tables 5.20 and 5.21 respectively. It can be seen that perceived facility desirability decreases with proximity to the facility, indicating the existence of an externality field conforming to some conventional distance-decay function. Although 60.4% and 60.9% of the group home and social/therapeutic subsamples respectively perceive

TABLE 5.20 PERCENTAGE DISTRIBUTION OF PERCEIVED DESIRABILITY RATINGS BY SOCIAL CLASS: GROUP HOME SUBSAMPLE

RESPONSE CATEGORY	SOCIAL CLASS				KRUSKAL-WALLIS H
	LOWER	MIDDLE	UPPER	SUBSAMPLE	
WITHIN 1 BLOCK					
% DESIRABLE	41.2	41.7	42.1	41.7	
% NEUTRAL	23.5	16.7	21.1	20.8	0.171
% UNDESIRABLE	35.5	41.7	36.9	37.5	
MEDIAN	4.875	5.000	4.875	4.900	
WITHIN 2-6 BLOCKS					
% DESIRABLE	58.8	50.0	57.9	56.3	
% NEUTRAL	17.6	25.0	36.8	27.1	0.135
% UNDESIRABLE	23.5	25.0	5.3	16.7	
MEDIAN	3.750	4.500	4.000	4.000	
WITHIN 7-12 BLOCKS					
% DESIRABLE	64.7	58.3	57.9	60.4	
% NEUTRAL	11.8	33.3	42.1	29.2	0.100
% UNDESIRABLE	23.5	8.3	0.0	10.4	
MEDIAN	3.333	3.500	4.000	3.667	
n	17	12	19	48	

* denotes significance at the .05 level

** denotes significance at the .01 level

TABLE 5.21 PERCENTAGE DISTRIBUTION OF PERCEIVED DESIRABILITY RATINGS BY SOCIAL CLASS: SOCIAL/THERAPEUTIC SUBSAMPLE

RESPONSE CATEGORY	SOCIAL CLASS LOWER	MIDDLE	UPPER	SUBSAMPLE	KRUSKAL-WALLIS H
WITHIN 1 BLOCK					
% DESIRABLE	20.8	31.6	38.8	32.6	
% NEUTRAL	41.7	15.8	16.3	22.8	0.384
% UNDESIRABLE	37.6	52.7	45.0	45.5	
MEDIAN	5.200	5.625	5.188	5.262	
WITHIN 6-12 BLOCKS					
% DESIRABLE	33.3	57.9	57.1	51.1	
% NEUTRAL	45.8	15.8	16.3	23.9	0.756
% UNDESIRABLE	20.8	26.4	26.5	25.0	
MEDIAN	4.864	4.000	3.917	4.400	
WITHIN 7-12 BLOCKS					
% DESIRABLE	50.0	57.9	67.3	60.9	
% NEUTRAL	37.5	31.6	22.4	28.3	0.984
% UNDESIRABLE	12.5	10.5	10.1	10.8	
MEDIAN	4.500	4.000	3.208	3.447	
n	24	19	49	92	

* denotes significance at the .05 level

** denotes significance at the .01 level

facility locations as being desirable to some extent at a distance of 7 to 12 blocks from their home, these percentages drop to 41.7% and 32.6% within the 1 block range. Examination of the median impact ratings also confirms this pattern.

Despite the existence of an observable distance-decay effect over the three distance zones, the externality field is quite limited in its intensity and extent. In the group home subsample, the percentage of desirable responses is never exceeded by the percentage of undesirable responses; in the social/therapeutic subsample, the percentage of desirable responses is exceeded by undesirable responses in only within the 1 block range. The distribution of responses indicates that community mental health facilities are not perceived as being strongly undesirable, even within 1 block of the respondent. This limited externality intensity is also reflected in the confined extent of the externality field, which would appear to be quite weak beyond a distance of 1 block from the facility.

Social class does not have a significant effect upon perceived desirability ratings, as may be seen by the absence of any significant Kruskal-Wallis statistics for either subsample. In the individual neighbourhoods, desirable ratings decline consistently with proximity to the facility. Although minor variations are apparent in each subsample, there are no consistent patterns that can be attributed to social class.

5.3.2 The Externality Field and Neighbourhood Land Use Mix

In Table 5.22, the percentage distribution of desirability ratings is presented by land use type. The existence of an externality field with a conventional distance-decay function is indicated by the pattern of decreased perceived facility desirability with increased proximity to the facility. Facilities are perceived as desirable at a distance of 7 to 12 blocks by 47.5% of respondents but by only 30.0% of respondents within a distance of 1 block. The median desirability ratings reveal a similar pattern. Certain deviations from this general pattern can be detected: the constant percentage of desirable responses (33.3%) across all three distance ranges for the multiple family residential neighbourhood, and the very high percentage of desirable responses (66.7%) in the 2 to 6 block distance range for the commercial/industrial neighbourhood. There appears to be little explanation for these patterns, and because of the small size of these neighbourhoods (n=9), it is doubtful if these trends apply to the larger population.

While there is adequate evidence to indicate the existence of an externality field, it also appears that this field is limited in its intensity and confined in its extent. The percentage of respondents rating facilities as undesirable exceeds the positive percentage in only two instances (within the 1 block distance range for the single

TABLE 5.22 PERCEPTAGE DISTRIBUTION OF PERCEIVED DESIRABILITY RATINGS BY LAND USE TYPE

RESPONSE CATEGORY	LAND USE TYPE: SINGLE FAMILY RESIDENTIAL	MULTIPLE FAMILY RESIDENTIAL	COMMERCIAL INDUSTRIAL	SUBSAMPLE	KRUSKAL-WALLIS H
WITHIN 1 BLOCK:					
% DESIRABLE	22.7	33.3	44.4	30.0	
% NETURAL	36.4	33.3	22.2	32.5	1.105
% UNDESIRABLE	40.9	33.3	33.3	37.5	
MEDIAN	5.250	5.000	4.750	5.115	
WITHIN 2-6 BLOCKS:					
% DESIRABLE	40.9	33.3	66.7	45.0	
% NEUTRAL	27.3	22.2	11.1	22.5	1.740
% UNDESIRABLE	31.8	44.4	22.2	32.5	
MEDIAN	4.833	5.250	3.250	4.722	
WITHIN 7-12 BLOCKS:					
% DESIRABLE	45.5	33.3	44.4	47.5	
% NEUTRAL	31.8	44.4	22.2	32.5	1.237
% UNDESIRABLE	22.7	22.2	33.3	20.0	
MEDIAN	4.643	4.875	3.750	4.577	
n	22	9	9	40	

* denotes significance at the .05 level

** denotes significance at the .01 level

family residential neighbourhood and in the 2 to 6 block distance range for the multiple family residential neighbourhood), suggesting that the externality field is limited in its intensity and confined to an effective distance of 1 block. Land use type appears to have a variable effect upon perceptions of facility desirability as may be seen by the uneven pattern of responses in the multiple family residential and commercial/industrial neighbourhoods. The only land use type exhibiting a clearly defined pattern of response is the single family residential neighbourhood, in which perceived desirability diminishes consistently with proximity to the facility. This pattern is as expected, suggesting that individuals in these neighbourhoods possess a greater desire for protection of their investment in their daily-life environment than do individuals in other neighbourhoods.

5.3.3 The Externality Field and Facility Type

The percentage distribution of perceived desirability ratings is given by facility type in Table 5.23. With the exception of the 2 to 6 block distance range, perceived facility desirability decreases with proximity to the facility, indicating the existence of an externality field with a probable polynomial distance-decay relationship. Facility locations are perceived as desirable at a distance of 7 to 12 blocks by 49.0% of the subsample, but are considered desirable by only 42.9% within a distance of 1 block; the pattern of the median desirability ratings also supports this relationship. The pattern for the subsample

TABLE 5.23 PERCENTAGE DISTRIBUTION OF PERCEIVED DESIRABILITY RATINGS BY FACILITY TYPE

RESPONSE CATEGORY	FACILITY TYPE: GROUP HOMES	FACILITY TYPE: SOCIAL THERAPEUTIC/ OUTPATIENT	SUBSAMPLE	KOLMOGOROV-SMIRNOV Z
WITHIN 1 BLOCK:				
% DESIRABLE	42.4	43.8	42.9	
% NEUTRAL	33.3	12.5	26.5	0.640
% UNDESIRABLE	24.2	43.8	30.6	
MEDIAN	4.727	5.000	4.769	
WITHIN 2-6 BLOCKS:				
% DESIRABLE	48.5	56.0	51.0	
% NEUTRAL	42.4	12.5	32.7	0.727
% UNDESIRABLE	9.0	31.7	16.3	
MEDIAN	4.536	3.500	4.400	
WITHIN 7-12 BLOCKS:				
% DESIRABLE	45.5	56.3	49.0	
% NEUTRAL	51.5	12.5	38.8	0.926
% UNDESIRABLE	3.0	31.0	12.2	
MEDIAN	4.588	3.250	4.526	
n	33	16	49	

* denotes significance at the .05 level
** denotes significance at the .01 level

is determined largely by the pattern of the group home neighbourhoods, which comprise roughly two-thirds of the subsample. Although an externality field clearly exists, it is definitely limited in its intensity and extremely constrained in its extent. The percentage of respondents perceiving facility locations as desirable equals or exceeds the percentage of undesirable responses in every instance. This suggests that facility locations are not undesirably perceived, even within a distance of 1 block from a respondent's home.

Although the Kolmogorov-Smirnov statistics are not significant, it appears that there is some relationship between perceived facility desirability and facility type. Although the non-residential care facility (social/therapeutic and outpatient facilities) neighbourhoods reflect higher percentages of desirable responses at each distance, examination of the pattern of undesirable responses indicates that facilities are generally perceived as more undesirable by residents of this type of neighbourhood than by residents of neighbourhoods containing residential care (group home) facilities. At a distance of 7 to 12 blocks, facility locations are perceived as undesirable by 31.0% of residents in social/therapeutic and outpatient facility neighbourhoods, compared with only 3.0% of residents in group home facility neighbourhoods; at a distance of only 1 block, the corresponding figures are 43.8% and 24.2%. Residents of the social/therapeutic and outpatient facility neighbourhoods are also more firmly committed to a perception of facility desirability with only 12.5% of respondents rating facility locations

neutral at each distance range; the percentage of neutral responses in the group home facility neighbourhoods ranges from 33.3% within 1 block to 51.5% at a distance of 7 to 12 blocks.

5.3.4 The Externality Field and Neighbourhood Saturation

In Table 5.24, the percentage distribution of perceived desirability ratings is presented by neighbourhood saturation level. With the exception of the middle distance range, perceived facility desirability decreases with proximity to the facility, indicating the existence of an externality field with a distance-decay relationship defined by some form of polynomial function. At a distance of 7 to 12 blocks, facility locations are perceived as desirable by 51.4% of respondents; this percentage drops to 43.2% within 1 block of the home. This relationship is also supported by the pattern of median desirability ratings. For the individual neighbourhoods, this pattern is distorted, as the single facility neighbourhood desirable percentages are equal in the 2 to 6 block and 7 to 12 block distance ranges; in the facility saturated neighbourhood, the percentages of desirable responses are equal in the 1 block and 7 to 12 block ranges, and highest in the 2 to 6 block range. The absence of any significant Kolmogorov-Smirnov statistics indicates that perceptions of facility desirability are not related to the number of facilities in a neighbourhood.

TABLE 5.24 PERCENTAGE DISTRIBUTION OF PERCEIVED DESIRABILITY RATINGS BY NEIGHBOURHOOD SATURATION LEVEL

RESPONSE CATEGORY	NEIGHBOURHOOD SATURATION LEVEL: SINGLE FACILITY	SATURATED	SUBSAMPLE	KOLMOGOROV-SMIRNOV Z
WITHIN 1 BLOCK:				
% DESIRABLE	40.0	45.5	43.2	
% NEUTRAL	13.3	22.7	18.9	0.443
% UNDESIRABLE	46.7	31.8	37.8	
MEDIAN	5.250	4.700	4.857	
WITHIN 2-6 BLOCKS:				
% DESIRABLE	60.0	50.0	54.1	
% NEUTRAL	13.3	36.4	27.0	0.462
% UNDESIRABLE	26.7	13.5	18.9	
MEDIAN	3.750	4.500	4.200	
WITHIN 7-12 BLOCKS:				
% DESIRABLE	60.0	45.5	51.4	
% NEUTRAL	13.3	50.0	35.4	0.706
% UNDESIRABLE	26.7	45.5	13.5	
MEDIAN	3.125	4.591	4.250	
n	15	22	37	

* denotes significance at the .05 level
** denotes significance at the .01 level

Despite the existence of an externality field, it appears that such a field is limited in its intensity and extent. In only one instance (in the single facility neighbourhoods at a distance of 1 block) is the percentage of desirable responses exceeded by the percentage of undesirable responses, suggesting that the spatial extent of the externality field is probably limited to a distance of one block from the facility, after which the intensity of the field declines rapidly.

5.3.5 The Externality Field and Distance

The percentage distribution of perceived desirability ratings is presented by distance zone for the street distance and straight line distance subsamples respectively in Tables 5.25 and 5.26. It is apparent that perceived facility desirability declines with increased specified proximity to the facility, indicating the existence of an externality field conforming to a conventional distance-decay relationship. For both distance subsamples, 51.2% of respondents perceived facility locations as desirable at a distance of 7 to 12 blocks; within 1 block, desirable perceptions are held by only 34.5% of respondents. Examination of the median desirability ratings further supports this pattern. With the exception of the first distance zone in each subsample, this pattern is consistent across the various distance zones.

TABLE 5.25 PERCENTAGE DISTRIBUTION OF PERCEIVED DESIRABILITY RATINGS BY DISTANCE ZONE: STREET DISTANCE SUBSAMPLE

RESPONSE CATEGORY	DISTANCE ZONE 1 (≤ 100 metres)	2 (101-200 metres)	3 (201-300 metres)	4 (301-400 metres)	5 (> 400 metres)	SUBSAMPLE	KRUSKAL-WALLIS H
WITHIN 1 BLOCK:							
% DESIRABLE	33.3	36.5	31.3	31.7	37.4	34.5	
% NEUTRAL	28.8	32.9	32.8	25.4	25.3	28.9	1.510
% UNDESIRABLE	37.9	30.6	35.9	42.9	37.4	36.6	
MEDIAN	5.079	4.911	5.071	5.219	5.000	5.037	
WITHIN 2-6 BLOCKS:							
% DESIRABLE	48.5	44.7	42.2	39.1	56.0	47.0	
% NEUTRAL	25.8	36.5	32.8	32.8	22.0	29.6	2.610
% UNDESIRABLE	25.8	18.8	25.0	28.1	22.0	23.5	
MEDIAN	4.559	4.645	4.738	4.833	3.900	4.603	
WITHIN 7-12 BLOCKS:							
% DESIRABLE	47.0	48.2	51.6	45.3	60.0	51.2	
% NEUTRAL	36.4	43.5	37.5	40.6	29.0	36.9	3.129
% UNDESIRABLE	16.7	8.2	10.9	14.1	11.0	11.9	
MEDIAN	4.583	4.541	4.357	4.615	3.500	4.359	
n	66	85	64	64	100	379	

* denotes significance at the .05 level
** denotes significance at the .01 level

TABLE 5.25 PERCENTAGE DISTRIBUTION OF PERCEIVED DESIRABILITY RATINGS BY DISTANCE ZONE: STREET DISTANCE SUBSAMPLE

RESPONSE CATEGORY	DISTANCE ZONE 1 (≤ 100 metres)	2 (101-200 metres)	3 (201-300 metres)	4 (301-400 metres)	5 (> 400 metres)	SUBSAMPLE	KRUSKAL-WALLIS H
WITHIN 1 BLOCK:							
% DESIRABLE	36.2	32.3	29.3	34.0	45.8	34.5	
% NEUTRAL	33.0	30.2	27.2	36.2	14.6	28.9	2.090
% UNDESIRABLE	30.9	37.5	43.5	29.8	39.6	36.6	
MEDIAN	4.919	5.086	5.260	4.941	4.786	5.037	
WITHIN 2-6 BLOCKS:							
% DESIRABLE	50.0	41.7	38.7	60.4	54.2	47.0	
% NEUTRAL	30.9	32.3	34.4	22.9	18.8	29.6	3.465
% UNDESIRABLE	19.1	26.0	26.9	16.7	27.1	23.5	
MEDIAN	4.500	4.758	4.828	3.500	4.100	4.603	
WITHIN 7-12 BLOCKS:							
% DESIRABLE	50.0	46.9	46.2	66.7	56.3	51.2	
% NEUTRAL	38.3	40.6	40.9	29.2	27.1	36.9	2.977
% UNDESIRABLE	11.7	12.5	12.9	4.2	16.7	11.9	
MEDIAN	4.500	4.577	4.592	3.500	3.500	4.359	
n	94	96	93	48	48	379	

* denotes significance at the .05 level
** denotes significance at the .01 level

Despite the existence of an observable distance-decay effect over the three specified distance zones, the intensity and extent of the externality field would appear to be quite limited. For both subsamples, the percentage of desirable responses is almost equal to the percentage of undesirable responses within a distance of 1 block (34.5% compared with 36.6%); beyond this distance range, the desirable percentage is twice as great as the undesirable percentage at a distance of 2 to 6 blocks (47.0% compared with 23.5%), and over four times as great at a distance of 7 to 12 blocks (51.2% and 11.9%).

The actual distance, either street or straight line, between respondent and facility does not have any effect upon perceived desirability ratings, as may be seen by the absence of significant Kruskal-Wallis statistics. Although the variations are not significant, it should be noted that, for each of the three specified distance ranges, the percentage of desirable responses in each subsample is higher in the fifth distance zone (further than 400 metres) than in the first distance zone (less than 100 metres). This suggests, that despite fluctuations in perceived desirability in the second, third, and fourth distance zones, some form of actual externality field does exist, with desirability decreasing with proximity to the facility.

5.3.6 Summary of the Externality Field

This section reveals, through examination of perceived facility desirability, the existence of externality fields generated by community mental health facilities. Facilities are not perceived as being strongly, if at all, undesirable, suggesting an externality field limited in its intensity and highly confined in its extent, in most instances to a distance of only one block. Evidence suggests the perception of community mental health facilities as noxious facilities, facilities whose desirability is recognized by members of the community but whose location is not desired at any specific location.

Variations in perceived facility desirability are not significantly related to social class, neighbourhood land use mix, facility type, facility saturation, or distance between respondent and facility. Relationships, although not statistically significant, can be observed between perceived facility desirability and both facility type and distance. Facility locations are perceived as more undesirable by residents of non-residential care facility neighbourhoods than by residents of residential care facility neighbourhoods; this pattern is contrary to the suggested relationship between desirability and facility type, and no reason for this situation is evident. Perceived facility desirability is also related to actual distance between respondent and facility, with desirability decreasing with proximity to the facility, as expected.

5.4 Neighbourhood Response

The third research objective involved identification of the degree of anticipated neighbourhood response resulting from the externality fields of community mental health facilities. To accomplish this, the potential responses given in Question 12 were aggregated to form four response categories: (1) *do nothing;* (2) take *individual action;* (3) take *group action;* and (4) *consider moving.* The aggregation procedure is shown in Table 5.27. The number of responses (from individuals who had rated facility locations as undesirable in Question 11) falling into each category was calculated, and then expressed as a percentage of the total number of respondents in each subsample. This procedure was carried out for each of the three specified distance ranges. (Note: deviations between the percentage response totals for each distance range and the percentage of undesirable ratings for each distance range contained in Tables 5.20 through 5.26 result from the presence of a variable number of missing values in each subsample). The significance of variations in the disaggregated response patterns was determined by the use of Kruskal-Wallis statistics for the social class, land use type, and distance subsamples, and by Kolmogorov-Smirnov statistics for the facility type and saturation level subsamples.

TABLE 5.27
INTENDED RESPONSE SCALE AGGREGATION PROCEDURE

DO NOTHING	1.	OPPOSE AND DO NOTHING
	2.	OPPOSE AND WRITE TO NEWSPAPER
	3.	OPPOSE AND CONTACT POLITICIAN
INDIVIDUAL ACTION	4.	OPPOSE AND CONTACT OTHER GOVERNMENT OFFICIAL
	5.	OPPOSE AND ATTEND MEETING
	6.	OPPOSE AND ATTEND MEETING
GROUP ACTION	7.	OPPOSE AND JOIN PROTEST GROUP
	8.	OPPOSE AND FORM PROTEST GROUP
CONSIDER MOVING	9.	OPPOSE AND CONSIDER MOVING

QUESTION: For each location of a mental health facility you have rated as undesirable which of these actions would you most likely take?

5.4.1 Neighbourhood Response and Social Class

Given the results of the externality field analysis, it is not surprising that the percentage of respondents anticipating some form of response increases with proximity to the facility. In the group home subsample, the percentage of respondents anticipating response is 10.0% at a distance of 7 to 12 blocks and 37.5% within a distance of 1 block, an increase of 27.5%; in the social/therapeutic subsample, the increase is 32.3%, from 10.8% to 43.1%. Because the options of *doing nothing* and *considering moving* represent elements of resignation and exit respectively, it is felt that a more accurate measure of *effective* community opposition would include only the *individual action* and *group action* options. When this measure of opposition is considered, only 16.7% and 20.5% of total respondents in these two subsamples represent an effective opposition group, indicating that facilities serve to arouse only a limited degree of opposition (Tables 5.28 and 5.29).

There appears to be little relationship between neighbourhood response and social class; in only one of the six Krusakal-Wallis analyses (the within 1 block distance range for the group home subsample) are significant (at the .05 level) variations observed. At this distance it is apparent that a different pattern of response exists in the upper class neighbourhood. This neighbourhood contains a relatively higher percentage of individuals who would *do nothing* and no

TABLE 5.28 PERCENTAGE DISTRIBUTION OF INTENDED RESPONSES BY SOCIAL CLASS: GROUP HOME SUBSAMPLE

RESPONSE CATEGORY	SOCIAL CLASS LOWER	MIDDLE	UPPER	SUBSAMPLE	KRUSKAL-WALLIS H	n
WITHIN 1 BLOCK:						
DO NOTHING	5.9	0.0	15.8	8.3		
INDIVIDUAL ACTION	0.0	8.3	5.3	4.2	6.706*	18
GROUP ACTION	11.8	8.3	15.8	12.5		
CONSIDER MOVING	17.6	25.0	0.0	12.5		
WITHIN 2-6 BLOCKS:						
DO NOTHING	0.0	8.3	5.3	4.2		
INDIVIDUAL ACTION	11.8	8.3	0.0	6.3	2.305	8
GROUP ACTION	11.8	0.0	0.0	4.2		
CONSIDER MOVING	0.0	8.3	0.0	2.1		
WITHIN 7-12 BLOCKS:						
DO NOTHING	11.8	8.3	0.0	6.3		
INDIVIDUAL ACTION	11.8	0.0	0.0	4.2	0.667	5
GROUP ACTION	0.0	0.0	0.0	0.0		
CONSIDER MOVING	0.0	0.0	0.0	0.0		
ANY RESPONSE						
< 1 BLOCK	35.3	41.6	36.9	37.5		
2-6 BLOCKS	23.6	24.9	5.3	16.8		
7-12 BLOCKS	23.6	8.3	0.0	10.5		

* denotes significance at the .05 level
** denotes significance at the .01 level

TABLE 5.29 PERCENTAGE DISTRIBUTION OF INTENDED RESPONSES BY SOCIAL CLASS: GROUP HOME SUBSAMPLE

RESPONSE CATEGORY	SOCIAL CLASS LOWER	MIDDLE	UPPER	SUBSAMPLE	KRUSKAL WALLIS H	n
WITHIN 1 BLOCK:						
DO NOTHING	16.7	10.0	10.2	11.8		
INDIVIDUAL ACTION	4.2	15.0	10.2	9.7	0.360	40
GROUP ACTION	8.3	10.0	12.2	10.8		
CONSIDER MOVING	8.3	10.0	12.2	10.8		
WITHIN 2-6 BLOCKS:						
DO NOTHING	4.2	5.0	10.2	7.5		
INDIVIDUAL ACTION	12.5	15.0	10.2	11.9	0.923	23
GROUP ACTION	4.2	5.0	6.1	5.4		
CONSIDER MOVING	0.0	0.0	0.0	0.0		
WITHIN 7-12 BLOCKS						
DO NOTHING	4.2	5.0	6.1	5.4		
INDIVIDUAL ACTION	4.2	5.0	4.0	4.3	1.379	10
GROUP ACTION	4.2	0.0	0.0	1.1		
CONSIDER MOVING	0.0	0.0	0.0	0.0		
ANY RESPONSE:						
<1 BLOCK	37.5	45.0	48.8	43.1		
2-6 BLOCKS	20.9	25.0	26.5	24.8		
7-12 BLOCKS	12.6	10.0	10.1	10.8		

* denotes significance at the .05 level
** denotes significance at the .01 level

individuals who would *consider moving*. The response anticipated by the most number of residents is to take some form of group action, the most effective option in situations of locational conflict. The choice of this option undoubtedly reflects higher education and income levels in the neighbourhood as well as greater familiarity with the urban planning process and locational conflict (Tables 5.28 and 5.29).

5.4.2 Neighbourhood Response and Neighbourhood Land Use Mix

In Table 5.30, the percentage distribution of intended responses is presented by land use type. The percentage of respondents intending some form of response increases with proximity to the facility. For the subsample, this percentage increases by 17.5% between the 7 to 12 block distance range (20.0%) and the 1 block distance range (37.5%). Of this group, only 20.0% represent effective opposition to a facility location through their choice of either *individual* or *group action* strategies. It appears that, even within a distance of one block, facility locations serve to generate only a relatively limited degree of neighbourhood response and community opposition.

Little relationship can be observed between intended response and land use type, as may be seen by the absence of significant Kruskal-Wallis statistics. There is some indication, albeit slight, that respondents in single family residential neighbourhoods are slightly more disposed to take some form of action, although the percentage of respondents anticipating either *individual action* or *group action* is comparable in all three land use types.

TABLE 5.30 PERCENTAGE DISTRIBUTION OF INTENDED RESPONSES BY LAND USE TYPE

RESPONSE CATEGORY	LAND-USE TYPE: SINGLE FAMILY RESIDENTIAL	MULTIPLE FAMILY RESIDENTIAL	COMMERCIAL/ INDUSTRIAL	SUBSAMPLE	KRUSKAL-WALLIS H	n
WITHIN 1 BLOCK:						
DO NOTHING	13.6	0.0	11.1	10.0		
INDIVIDUAL ACTION	9.1	0.0	22.2	10.0	3.873	15
GROUP ACTION	9.1	22.2	0.0	10.0		
CONSIDER MOVING	9.1	11.1	0.0	7.5		
WITHIN 2-6 BLOCKS:						
DO NOTHING	4.5	0.0	11.1	5.0		
INDIVIDUAL ACTION	13.6	11.1	11.1	12.5	2.318	13
GROUP ACTION	9.1	22.2	0.0	10.0		
CONSIDER MOVING	4.5	11.1	0.0	5.0		
WITHIN 7-12 BLOCKS:						
DO NOTHING	13.6	0.0	0.0	7.5		
INDIVIDUAL ACTION	9.1	0.0	11.1	7.5	5.104	8
GROUP ACTION	0.0	11.1	0.0	2.5		
CONSIDER MOVING	0.0	11.1	0.0	2.5		
ANY RESPONSE:						
<1 BLOCK	40.9	33.3	33.3	37.5		
2-6 BLOCKS	31.7	44.4	22.2	32.5		
7-12 BLOCKS	22.7	22.2	11.1	20.0		

* denotes significance at the .05 level
** denotes significance at the .01 level

5.4.3 Neighbourhood Response and Facility Type

The percentage distribution of intended responses by facility type is reported in Table 5.31. From the table, it can be seen that the percentage of intended actions increases with proximity to the facility; the increase in the percentage tending toward some form of response between the 7 to 12 block and the within 1 block distance ranges is 18.0%, from 12.0% to 30.0%. Of this group, effective opposition in the form of either *individual* or *group action* is chosen by only 14% of all respondents in the subsample, indicating the limited degree of opposition generated by the perceived externality fields of community mental health facilities.

Little relationship can be observed between intended response and facility type, as evidenced by the insignificant Kolmogorov-Smirnov statistics (inadequate sample size prohibited analysis at the 7 to 12 block distance range). Inspection of the individual neighbourhood response patterns reveals, however, that residents of the non-residential care facility neighbourhoods are more likely to take not only some form of action but also to exercise effective opposition. At a distance of 1 block, 41.1% of the social/therapeutic and outpatient facility neighbourhoods would take some form of action and an effective opposition strategy would be chosen by 23.5%; in the group home facility neighbourhoods, the corresponding percentages are only 24.3% and 9.1% respectively.

TABLE 5.31 PERCENTAGE DISTRIBUTION OF INTENDED RESPONSES BY FACILITY TYPE

RESPONSE CATEGORY	FACILITY TYPE: GROUP HOMES	FACILITY TYPE: SOCIAL THERAPEUTIC/ OUTPATIENT	SUBSAMPLE	KOLMOGOROV-SMIRNOV Z	n
WITHIN 1 BLOCK:					
DO NOTHING	6.1	17.6	10.0		
INDIVIDUAL ACTION	6.1	5.9	6.0	0.725	15
GROUP ACTION	3.0	17.6	8.0		
CONSIDER MOVING	9.1	0.0	6.0		
WITHIN 2-6 BLOCKS:					
DO NOTHING	0.0	11.8	4.0		
INDIVIDUAL ACTION	6.1	5.9	6.0	0.548	8
GROUP ACTION	0.0	11.8	4.0		
CONSIDER MOVING	3.0	0.0	2.0		
WITHIN 7-12 BLOCKS:					
DO NOTHING	0.0	11.8	4.0		
INDIVIDUAL ACTION	3.0	11.8	6.0	inadequate sample size	
GROUP ACTION	0.0	5.9	2.0		
CONSIDER MOVING	0.0	0.0	0.0		
ANY RESPONSE:					
<1 BLOCK	24.3	41.1	30.0		
2-6 BLOCKS	9.1	29.4	16.0		
7-12 BLOCKS	3.0	29.4	12.0		

* denotes significance at the .05 level
** denotes significance at the .01 level

5.4.4 Neighbourhood Response and Neighbourhood Saturation

In Table 5.32, the percentage distribution of intended responses is presented by neighbourhood saturation level. The percentage of respondents anticipating some form of behavioural response increases with proximity to the facility, with 37.0% anticipating response within 1 block of the facility compared with only 13.2% at a distance of 7 to 12 blocks, an increase of 23.8%. Of this group, effective opposition in the form of either *individual* or *group action* would be chosen by only 18.5% of respondents, indicating the limited degree of response to the externality fields of community mental health facilities.

The pattern of neighbourhood response appears to be related only minimally to the number of facilities in a neighbourhood, as may be observed by the absence of significant Kolmogorov-Smirnov statistics. Examination of the table, however, reveals not only that residents of the single-facility neighbourhoods are more likely to take some form of action than residents of the saturated neighbourhood, but also that they are inclined to exercise more effective opposition strategies through the selection of either *individual* or *group action*. At a distance of 1 block, 46.7% of respondents from the single facility neighbourhoods anticipated some form of response, with 26.6% selecting an effective opposition strategy; in the facility-saturated neighbourhood, the corresponding percentages are respectively only 30.4% and 13.0%.

TABLE 5.32 PERCENTAGE DISTRIBUTION OF INTENDED RESPONSES BY NEIGHBOURHOOD SATURATION LEVEL

RESPONSE CATEGORY	NEIGHBOURHOOD SATURATION LEVEL: SINGLE FACILITY	SATURATED	SUBSAMPLE	KOLMOGOROV-SMIRNOV Z	n
WITHIN 1 BLOCK:					
DO NOTHING	20.0	8.7	13.2		
INDIVIDUAL ACTION	13.3	4.3	7.9	0.535	14
GROUP ACTION	13.3	8.7	10.6		
CONSIDER MOVING	0.0	8.7	5.3		
WITHIN 2-6 BLOCKS:					
DO NOTHING	13.3	0.0	5.3		
INDIVIDUAL ACTION	6.7	4.3	5.3	0.873	7
GROUP ACTION	6.7	4.3	5.3		
CONSIDER MOVING	0.0	4.3	2.6		
WITHIN 7-12 BLOCKS:					
DO NOTHING	13.3	0.0	5.3		
INDIVIDUAL ACTION	6.7	4.3	5.3	inadequate sample size	
GROUP ACTION	6.7	0.0	2.6		
CONSIDER MOVING	0.0	0.0	0.0		
ANY RESPONSE:					
<1 BLOCK	46.7	30.4	37.0		
2-6 BLOCKS	26.7	12.9	18.5		
7-12 BLOCKS	26.7	4.3	13.2		

* denotes significance at .05 level
** denotes significance at .01 level

5.4.5 Neighbourhood Response and Distance

The percentage distribution of intended responses by distance zone is presented in Table 5.33 and 5.34 for the street and straight line distance subsamples. The pattern of response in both subsamples indicates that the percentage of residents tending towards some form of response increases with specified proximity to the facility. At a distance of 7 to 12 blocks, this percentage is 12.2%; within 1 block of the facility, this value becomes 35.7%, an increase of 23.5%. Effective opposition through the selection of either *individual* or *group action* strategies accounts, however, for only 15.3% of the total number of respondents in the subsample, suggesting that only limited opposition is likely to occur in response to the externality fields of community mental health facilities.

Actual distance between respondent and facility has a slight influence upon the observed patterns of neighbourhood response. Only one (at a distance of 2 to 6 blocks for the straight line distance measure) of the six Kruskal-Wallis analyses proves to be statistically significant (at the .05 level). Although variations in response are apparent, no clearly discernible relationship between neighbourhood response and actual distance between respondent and facility can be identified at this, or either other, distance range in either subsample.

TABLE 5.33 PERCENTAGE DISTRIBUTION OF INTENDED RESPONSES BY DISTANCE ZONE: STREET DISTANCE SUBSAMPLE

RESPONSE CATEGORY	DISTANCE ZONE 1 (≤100 metres)	2 (101-200 metres)	3 (201-300 metres)	4 (301-400 metres)	5 (>400 metres)	SUBSAMPLE	KRUSKAL-WALLIS H	n
WITHIN 1 BLOCK:								
DO NOTHING	13.6	5.9	7.8	21.2	11.0	11.5		
INDIVIDUAL ACTION	9.0	7.1	9.4	7.5	5.0	7.4	5.302	136
GROUP ACTION	3.0	10.6	9.4	6.1	9.0	7.9		
CONSIDER MOVING	12.1	5.9	9.4	6.1	11.0	8.9		
WITHIN 2-6 BLOCKS:								
DO NOTHING	7.6	1.2	9.4	12.1	6.0	6.8		
INDIVIDUAL ACTION	9.0	10.6	9.4	4.5	8.0	8.4	2.904	89
GROUP ACTION	3.0	4.7	6.3	6.1	6.0	5.2		
CONSIDER MOVING	6.1	2.4	0.0	4.5	2.0	2.9		
WITHIN 7-12 BLOCKS:								
DO NOTHING	7.6	3.5	6.3	6.1	6.0	5.8		
INDIVIDUAL ACTION	6.1	3.5	3.2	4.5	4.0	4.2	0.835	46
GROUP ACTION	0.0	1.2	1.6	1.5	1.0	1.1		
CONSIDER MOVING	3.0	0.0	0.0	1.5	1.0	1.1		
ANY RESPONSE:								
<1 BLOCK	37.7	29.5	26.0	40.9	36.0	35.7		
2-6 BLOCKS	25.7	18.9	25.1	27.2	22.0	23.3		
7-12 BLOCKS	16.7	8.2	11.1	13.6	12.0	12.2		

* denotes significance at the .05 level
** denotes significance at the .01 level

TABLE 5.34 PERCENTAGE DISTRIBUTION OF INTENDED RESPONSES BY DISTANCE ZONE: STRAIGHT LINE DISTANCE SUBSAMPLE

RESPONSE CATEGORY	DISTANCE ZONE (≤ 100 metres)	(101-200 metres)	(201-300 metres)	(301-400 metres)	(>400 metres)	SUB-SAMPLE	KRUSKAL-WALLIS H	n
WITHIN 1 BLOCK:								
DO NOTHING	10.6	8.2	18.1	12.5	6.3	11.5		
INDIVIDUAL ACTION	7.4	9.3	7.5	2.1	8.4	7.4	4.190	136
GROUP ACTION	3.3	11.3	7.5	6.3	12.5	7.9		
CONSIDER MOVING	9.6	7.2	9.6	6.3	12.5	8.9		
WITHIN 2-6 BLOCKS:								
DO NOTHING	5.3	3.1	13.8	4.2	6.3	6.8		
INDIVIDUAL ACTION	7.5	10.3	8.6	4.2	10.5	8.4	9.504*	89
GROUP ACTION	2.1	10.3	2.2	6.3	6.3	5.2		
CONSIDER MOVING	4.3	2.1	2.2	2.1	4.2	2.9		
WITHIN 7-12 BLOCKS:								
DO NOTHING	5.3	6.2	6.4	4.2	6.3	5.8		
INDIVIDUAL ACTION	4.3	5.2	3.2	2.1	6.3	4.2	0.941	46
GROUP ACTION	0.0	1.0	2.2	0.0	2.1	1.1		
CONSIDER MOVING	2.1	0.0	1.1	0.0	2.1	1.1		
ANY RESPONSE:								
<1 BLOCK	30.9	36.0	42.7	27.2	39.7	35.7		
2-6 BLOCKS	19.2	25.8	26.8	16.8	27.3	23.3		
7-12 BLOCKS	11.7	12.4	12.9	6.3	16.8	12.2		

* denotes significance at the .05 level
** denotes significance at the .01 level

5.4.6 Summary of Neighbourhood Response

The findings in this section indicate that only a limited percentage of respondents anticipate any form of response to the perceived externality fields of community mental health facilities; this limited degree of response is further reduced if one considers only the options of *individual action* and *group action*, the two strategies representing effective opposition to facility locations. The degree of anticipated response is related to the specified distance between respondent and facility, with the percentage of intended responses increasing with proximity to the facility.

Results indicate that intended response is not significantly related to social class, neighbourhood land use mix, facility type, neighbourhood saturation level, or distance between respondent and facility. Certain patterns of response, although statistically insignificant, can be observed. In the group home subsample in the social class analysis, the upper class neighbourhood seems strongly disposed towards group action, reflecting superior education and knowledge levels, as well as a stronger desire for protection of the daily-life environment. Response and effective opposition are more likely to be taken by residents of non-residential care facility neighbourhoods than by residents of residential care facility neighbourhoods. This pattern is contrary to the suggested theoretical direction of the relationship but consistent with the results of the externality field analysis for this

subsample. These findings suggest that the greater visibility of patients seeking treatment at social/therapeutic and outpatient facilities is perhaps a more potent force in generating opposition that the actual residence of patients in group home facilities. However, it should be noted that a very small percentage of respondents are aware of the actual facility in their neighbourhood, and consequently, this pattern of response may be somewhat misleading. Response and effective opposition are also more likely to be taken by residents of single facility neighbourhoods than by residents of facility saturated neighbourhoods. This pattern is contrary to the suggested direction of relationship and does not appear to be related to variations in externality field perceptions between these two types of neighbourhood.

5.5 Summary

This chapter has established the empirical dimensions of the process of neighbourhood response to community mental health facilities. Facilities are generally perceived as having little positive or negative impact upon residential neighbourhoods; property value effects are widely perceived as having a negative impact, supporting the suggestion that opposition is related to the desire of individuals to protect their stake in the daily-life environment, particularly any financial investment. Facilities also generate externality fields which are limited in their intensity and spatially confined in their extent.

Distance-decay effects are observed in each field, although perceived facility undesirability is relatively weak beyond a distance of one block. Community mental health facilities must be regarded as noxious to some extent, in that they are perceived as desirable at every location in the neighbourhood, except immediately adjacent to respondents' homes. The externality fields produced by community mental health facilities serve to arouse only a limited degree of opposition; the degree of anticipated response to these externality fields is related to specified distance between the respondent and facility, with the propensity for response increasing with advanced proximity to facility.

Variations in the response process (perceived facility impacts, perceived desirability, and neighbourhood response) are not significantly related to the variables employed in the analysis: social class; neighbourhood land use mix, facility type, number of facilities in a neighbourhood, and actual distance between respondent and facility. Although certain patterns and isolated instances of significantly related variations can be observed, there are no consistent patterns of significant variation.

CHAPTER 6

CONCLUSIONS

This thesis has focussed on neighbourhood response to community mental health facilities; in the concluding chapter, this research effort is reviewed and evaluated. In the initial section, the various theoretical, conceptual, and empirical dimensions of the thesis are summarized. In the second section, the thesis research objectives are evaluated, and, in the final section, directions for future research are suggested.

6.1 Summary

Care of the mentally ill has recently undergone a shift in delivery away from large institutional settings towards the provision of treatment through small-scale community based facilities. This deinstitutionalization process has made major efforts to normalize the mentally ill through their social re-integration into the community. Opposition to the location of community mental health facilities has reduced the effectiveness of community-based treatment programs, in many cases producing inner city ghettoization of the mentally ill in "asylums without walls". As well, opposition has often resulted in differential adjustments to the existing sociospatial structure of

urban areas, creating serious inequities in the incidence of the burden of housing the mentally ill across the urban landscape.

Neighbourhood opposition to community mental health facility locations represents a form of aggregate response to the perceived externality impacts of facilities. The aggregate structural approach to understanding the response process recognizes opposition as a form of collective territorial action taken by communities as they seek to spatially exclude the mentally ill. Examination of the interrelated processes of social and spatial structuration, particularly residential differentiation, reveals the existence of homogeneous daily-life environments which play a critical role in the reproduction of sociospatial structure. Urban public facilities, specifically community mental health facilities, generate a range of unpriced external effects which often affect the real income levels found in these environments. Because of investment of resources in their daily-life environments, individuals tend to resist the introduction of facilities they perceive to have a detrimental impact upon their investment. It is in this fashion that individuals regard the potential introduction of community mental health facilities. Facilities are perceived within the aggregate context of the neighbourhood environment, and opposition, should it occur, results as a neighbourhood response reflecting a desire for protection of the daily-life environment through group-based territorial exclusion of the mentally ill.

Neighbourhood response to the perceived externality effects of community mental health facilities is the product of the differential interaction of factors exogenous and endogenous to the individual. The exogenous factors pertain to the fit between the context of the host neighbourhood's population surface and the form of the facility's externality surface. The greatest likelihood of opposition and population surface adjustment occurs when the fit between the neighbourhood context and the facility form is poor. The endogenous factor most likely to influence response is the individual's stake in the conflict issue, a product of the individual's stake in the environment and the degree of threat posed by a facility location.

In an empirical analysis of neighbourhood response to community mental health facilities undertaken using data from a survey conducted in Toronto, Ontario, efforts were made to chart the empirical dimensions of the response process. This analysis was structured to test the validity of conceptual and operational models of response developed in this thesis. These models specified a multi-stage process of response involving perceptions of facility impact and desirability as well as anticipated response resulting from these perceptions. The exogenous and endogenous factors influencing response were represented in the operational model by five variables characterizing the population surface (neighbourhood social class and land use mix), the externality surface (facility type and number of facilities), and

stake in the conflict issue (distance between respondent and facility).

In the analysis structured around three research objectives and five hypotheses relating to the variables contained in the model, the following results were observed:

(1) Community mental health facilities are perceived as having a predominantly neutral impact upon residential neighbourhoods. Respondents tend to fear the negative impact of facilities upon residential property values, reflecting a desire for protection of the daily-life environment;

(2) The facility-generated externality fields are perceived as being limited in their intensity and spatially constrained in their extent. The degree of perceived facility desirability decreases with increased proximity to the facility in a conventional distance-decay relationship, indicating a perception of community mental health facilities as noxious facilities with a moderate impact;

(3) These externality fields serve to arouse very limited community opposition; the degree of anticipated response is related to perceptions of facility desirability, with response rates increasing with proximity to the facility; and

(4) Variations in response and perceptual processes are not significantly related to the variables specified in the operational model: neighbourhood social class; neighbourhood land use mix; facility type; number of facilities in a neighbourhood; and distance between respondent and facility.

6.2 Research Evaluation

In this section, the work undertaken in this thesis is reviewed and evaluated; major limitations of, and constraints upon, the empirical analysis are assessed, and the contribution of the thesis evaluated. Initially, an appropriate conceptual framework for the analysis of neighbourhood response to community mental health facilities was defined and translated into a research design and operational model for analysis. Empirically testable research hypotheses were specified and tested, establishing the empirical dimensions of the perception-response process, and the factors influencing it.

It has been noted that the operational model developed in this thesis failed, in the empirical analysis, to detect significant variations in the perception-response process related to the variables thought to influence this process. Suggestions of the inappropriateness or lack of utility of this model are rejected for two reasons. First, the model is based on theoretical foundations derived from the theoretical and empirical literature in this field. Sound research design and sample construction procedures were specified, and met where sample size permitted. Consistent aggregation procedures were followed and appropriate statistical analyses performed. It is felt that any weaknesses or inconsistencies were likely related to the test data and not the model itself. The major concern here is the issue of

facility awareness. At the time of analysis, the most conclusive measure of awareness was included in the research design. Subsequent research results have indicated that this measure was inaccurate, and that only about 3% of the sample were aware of the correct facilities in their neighbourhood, as opposed to the original 13%. Therefore, only approximately 25% of the 'aware' sample selected for analyses were correctly aware of the facilities in question, and one must naturally question the veracity of results obtained in the analyses utilizing 'aware' subsamples. Similarly, sample size necessitated the use of the entire facility neighbourhoods subsample for the distance analyses; the low awareness level contained in this subsample probably obscured any true effect related to distance. A second weakness of the data was the small sample size. The design of the original Toronto survey did not foresee the possibility of analysis undertaken at the neighbourhood level, and, consequently in this work, small sample size necessitated, in some instances, aggregation procedures which compromised the initially rigorous research design. This may have obscured potentially significant results. Small sample size in instances where aggregation was not employed may have also produced misleading and perhaps insignificant results. The final weakness of the data set relates to the original survey instrument, the questionnaire. It is possible that the wording and structure of the questions involved in this analysis were incapable of detecting real differences in the perception and response processes. Examination of actual surveys revealed a certain ambiguity

in the minds of many respondents as to what actually constituted a 'community mental health facility'. Indistinct facility images undoubtedly influenced perceptions of the external effects of facilities and response patterns. The limited range of possible responses to certain questions also may not have reflected the true perceptions and responses of individuals. Finally, the considerable completion time involved in responding to this questionnaire may have prompted some individuals to complete it as swiftly as possible without proper consideration.

The second reason for the absence of significant variations among the specified variables is simply that variations may not exist. Although the neighbourhood mental health facility issue has received a certain degree of exposure in the media, it is apparent that this is not a topical or burning issue with the majority of the population. The very low levels of facility awareness in neighbourhoods with facilities is particularly indicative of this fact. Given this situation, it is likely that the majority of individuals are not concerned about the problem, and consequently, have difficulty addressing the issue and responding in an informed and consistent manner to questionnaires dealing with community mental health facilities. If the issue is not clearly perceivable, it is quite likely that perceptual differences do not exist or cannot be readily detectable.

Despite these limitations, it is felt that this thesis has been useful in several respects. First, it has proposed the theoretical foundations for the analysis of *neighbourhood* response to community mental health facilities; previous research has strongly emphasized the process of *individual* response. It is felt that while the individual psychology approach has a certain degree of intrinsic merit, it fails to consider the problems of perception and response within the context of individual neighbourhoods. The *aggregate structural* approach demonstrated in this work considers the response process at the neighbourhood level and incorporates aspects of the neighbourhood population surface largely ignored in other research efforts. Second, this thesis has developed an operational model for the analysis of the response process incorporating integral components of the aggregate structural approach previously undocumented (i.e. neighbourhood land use mix, neighbourhood facility saturation level, and distance between respondent and facility). Third, and perhaps most important, this work has tested this operational model in an analysis of response at the *neighbourhood level*. All previous research has been performed on data at a very aggregate level and has not held constant a number of extraneous variables which may have influenced results. This analysis was performed, where possible, using individual neighbourhood subsamples controlling for the influence

of extraneous variables. In addition a number of previously unexamined contextual variables such as land use mix, neighbourhood facility saturation, and distance were empirically tested and their influence documented. In summary, it is believed that these advances have contributed to both the theoretical and empirical literature of externalities in the general context of urban public facilities, and in the specific context of community mental health facilities.

6.3 Suggestions for Future Research

Suggestions for future research in this area relate to two concerns. First, it is felt strongly that future research is required to identify the aggregate structural dimensions of neighbourhood response to community mental health facilities, and to determine the influence of the contextual variables affecting this process. Extensive work has already identified many of the empirical dimensions of individual response and the range of personal characteristics and attitudes which influence this process. Although empirical results indicate the significance of personal characteristics and attitudes in influencing perceptual and response processes, it is still felt that the aggregate structural approach is a valid one for the study of response to community mental health facilities and that there are a range of as yet undocumented contextual variables that influence the response process.

The second suggestion is an extension of the first concern and pertains to the methodology employed in testing these variables. If one

is to adopt an aggregate structural viewpoint, it is necessary that any analysis and, more importantly, the sample design and data collection procedures, produce data sets designed for analysis at the neighbourhood level. The sample design should ensure that adequate sample size is provided for in each neighbourhood and that sufficient surveys are completed. More clarification is needed in the questionnaire design, particularly insofar as meaningful descriptions of community mental health facilities are concerned. As well, appropriate indicators of awareness must be devised and reflected in the sample design and data collection procedures. Should these modifications be made in the pre-analysis stages, a rigorous analytical design can be followed and the exact influence of contextual variables properly assessed, yielding a more realistic picture of the aggregate process of neighbourhood response to community mental health facilities.

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APPENDIX A

SURVEY QUESTIONNAIRE

SURVEY RESEARCH CENTRE
INSTITUTE FOR BEHAVIOURAL RESEARCH
YORK UNIVERSITY

157

LABEL

JUNE 1978

PROJECT # 215

Community Attitudes Toward Neighbourhood Public Facilities

The Survey Research Centre at York University is conducting a study on behalf of a research group at McMaster University in Hamilton. We would like to know your feelings about various community services.

RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	MARITAL STATUS	AGE	ELIGIBLE (18 YRS. & OVER) CODE YES OR NO	PERSON NUMBER	CHECK SELECTED PERSON
(HEAD)						

SELECTION TABLE 12

NUMBER OF PERSONS ELIGIBLE	1	2	3	4	5	6
PERSON TO BE INTERVIEWED	1	2	2	1	3	5

RECORD OF CALLS

	DAY	MONTH	TIME	RESULTS
1				
2				
3				
4				
5				

LENGTH OF INTERVIEW: _____

INTERVIEWER: _____

10 20 21 30 40

SURVEY RESEARCH CENTRE
INSTITUTE FOR BEHAVIOURAL RESEARCH
YORK UNIVERSITY

158

LABEL

PROJECT # 215

1. What is your general opinion about locating community services in residential neighbourhoods? (e.g., community centre, local clinic, police station, fire hall). Are you in favour or opposed?

Favour	1
Indifferent	2
Opposed	3
Don't Know	8

2a. Assuming land was available, are there any particular community services you would favour having located in this neighbourhood?

Yes	1
No	2
Don't Know	8

GO TO Q. 3a

b. If YES, what types?

_____ __

_____ __

_____ __

3a. Are there any particular community services you would oppose having located in this neighbourhood?

Yes	1
No	2
Don't Know	8

GO TO Q. 4a

b. If YES, what types?

_____ __

_____ __

_____ __

4a. I am especially interested in your feelings about community mental health facilities and the next few questions relate to this. Community mental health facilities include out-patient clinics, drop-in centres and group homes which are situated in residential neighbourhoods and serve the local community. Mental health facilities which are part of a major hospital are *not* included.

Are you aware of any community mental health facilities in Toronto?

Yes..... 1
No..... 2
GO TO Q. 5a

b. Can you name any?

5a. Is there a community mental health facility in your neighbourhood?

Yes..... 1
No..... 2
Don't Know..... 8
GO TO Q. 6

b. What is the name of that facility?

c. Where is it located? *(CLOSEST INTERSECTION)*

6. *IF FROM Q. 5 RESPONDENT IS UNAWARE OF A FACILITY IN THE NEIGHBOURHOOD THEN PHRASE Q. 6 IN THE FUTURE CONDITIONAL (E.G. "WOULD HAVE"); IF AWARE, THEN USE THE PAST TENSE (E.G. "HAS HAD").*

What effects do you think the location of a community mental health facility in your neighbourhood would have/has had?

ATTITUDES TOWARD MENTAL ILLNESS

7. The following statements express various opinions about mental illness and the mentally ill. The mentally ill refers to people needing treatment for mental disorders but who are capable of independent living outside a hospital. Please circle the response which most accurately describes your reaction to each statement. It's your first reaction which is important.

HAND QUESTIONNAIRE TO R. TO FILL IN

STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
S.A.	A	N	D	S.D.

a. As soon as a person shows signs of mental disturbance, he should be hospitalized.

S.A. A N D S.D. ___

b. More tax money should be spent on the care and treatment of the mentally ill.

S.A. A N D S.D. ___

c. The mentally ill should be isolated from the rest of the community.

S.A. A N D S.D. ___

d. The best therapy for many mental patients is to be part of a normal community.

S.A. A N D S.D. ___

e. Mental illness is an illness like any other.

S.A. A N D S.D. ___

f. The mentally ill are a burden on society.

S.A. A N D S.D. ___

STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
S.A.	A	N	D	S.D.

g. The mentally ill are far less of a danger than most people suppose.

S.A. A N D S.D. ___

h. Locating mental health facilities in a residental area downgrades the neighbourhood.

S.A. A N D S.D. ___

i There is something about the mentally ill that makes it easy to tell them from normal people.

S.A. A N D S.D. ___

j. The mentally ill have for too long been the subject of ridicule.

S.A. A N D S.D. ___

k. A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered.

S.A. A N D S.D. ___

l. As far as possible mental health services should be provided through community based facilities.

S.A. A N D S.D. ___

m. Less emphasis should be placed on protecting the public from the mentally ill.

S.A. A N D S.D. ___

n. Increased spending on mental health services is a waste of tax dollars.

S.A. A N D S.D. ___

STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
S.A.	A	N	D	S.D.

C.2

o. No-one has the right to exclude the mentally ill from their neighbourhood.

S.A. A N D S.D. ____

p. Having mental patients living within residential neighbourhoods might be good therapy but the risks to residents are too great.

S.A. A N D S.D. ____

q. Mental patients need the same kind of control and discipline as a young child.

S.A. A N D S.D. ____

r. We need to adopt a far more tolerant attitude toward the mentally ill in our society.

S.A. A N D S.D. ____

s. I would not want to live next door to someone who has been mentally ill.

S.A. A N D S.D. ____

t. Residents should accept the location of mental health facilities in their neighbourhood to serve the needs of the local community.

S.A. A N D S.D. ____

u. The mentally ill should not be treated as outcasts of society.

S.A. A N D S.D. ____

v. There are sufficient existing services for the mentally ill.

S.A. A N D S.D. ____

STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
S.A.	A	N	D	S.D.

w. Mental patients should be encouraged to assume the responsibilities of normal life.

S.A. A N D S.D.

x. Local residents have good reason to resist the location of mental health services in their neighbourhood.

S.A. A N D S.D.

y. The best way to handle the mentally ill is to keep them behind locked doors.

S.A. A N D S.D.

z. Our mental hospitals seem more like prisons than like places where the mentally ill can be cared for.

S.A. A N D S.D.

aa. Anyone with a history of mental problems should be excluded from taking public office.

S.A. A N D S.D.

bb. Locating mental health services in residential neighbourhoods does not endanger local residents.

S.A. A N D S.D.

cc. Mental hospitals are an out-dated means of treating the mentally ill.

S.A. A N D S.D.

dd. The mentally ill don't deserve our sympathy.

S.A. A N D S.D.

STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
S.A.	A	N	D	S.D.

ee. The mentally ill should not be denied their individual rights.

S.A. A N D S.D. ___

ff. Mental health facilities should be kept out of residential neighbourhoods.

S.A. A N D S.D. ___

gg. One of the main causes of mental illness is a lack of self-discipline and will power.

S.A. A N D S.D. ___

hh. We have a responsibility to provide the best possible care for the mentally ill.

S.A. A N D S.D. ___

ii. The mentally ill should not be given any responsibility.

S.A. A N D S.D. ___

jj. Residents have nothing to fear from people coming into their neighbourhood to obtain mental health services.

S.A. A N D S.D. ___

kk. Virtually anyone can become mentally ill.

S.A. A N D S.D. ___

ll. It is best to avoid anyone who has mental problems.

S.A. A N D S.D. ___

STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
S.A.	A	N	D	S.D.

mm. Most women who were once patients in a mental hospital can be trusted as baby sitters.

S.A. A N D S.D.

nn. It is frightening to think of people with mental problems living in residential neighbourhoods.

S.A. A N D S.D.

8. *HAND QUESTIONNAIRE TO R. TO FILL IN*

a. Please read through this list of adjectives and put and X beside each one you associate with the term community mental health facility. Community mental health facilities include out-patient clinics, drop-in centres and group homes which are situated in residential neighbourhoods and serve the local community.

_____accessible
_____active
_____appealing
_____attractive
_____bad
_____big
_____busy
_____calm
_____chaotic
_____cheerful
_____clean
_____commercial
_____confusing
_____congested
_____conspicuous
_____contrasting
_____convenient
_____crowded
_____dangerous
_____depressing
_____deserted
_____dirty
_____disturbing
_____familiar
_____fast
_____friendly
_____frightening
_____good
_____harmonious
_____hidden
_____human
_____inconsistent
_____inconspicuous
_____inhuman
_____insecure
_____institutional
_____interesting
_____inviting
_____noisy
_____normal
_____noticeable
_____odd
_____orderly
_____ordinary
_____organized
_____out-of-place
_____peaceful
_____permanent
_____planned
_____predictable
_____private
_____public
_____quiet
_____relaxed
_____repellant
_____residential
_____rundown
_____safe
_____slow
_____small
_____sociable
_____stable
_____strange
_____sympathetic
_____tense
_____threatening
_____ugly
_____uncertain
_____unfamiliar
_____unfriendly
_____unnatural
_____unnoticeable
_____unplanned
_____unpleasant
_____unusual
_____visible
_____welcoming
_____well-maintained

b. Now please circle the six adjectives in the list which for you are most associated with the term community mental health facility.

9. *HAND QUESTIONNAIRE TO R. TO FILL IN*

a. Please repeat the same procedure to indicate the adjectives you associate with your neighbourhood in general.

_____accessible	_____hidden	_____slow
_____active	_____human	_____small
_____appealing	_____inconsistent	_____sociable
_____attractive	_____inconspicuous	_____stable
_____bad	_____inhuman	_____strange
_____big	_____insecure	_____sympathetic
_____busy	_____institutional	_____tense
_____calm	_____interesting	_____threatening
_____chaotic	_____inviting	_____ugly
_____cheerful	_____noisy	_____uncertain
_____clean	_____normal	_____unfamiliar
_____commercial	_____noticeable	_____unfriendly
_____confusing	_____odd	_____unnatural
_____congested	_____orderly	_____unnoticeable
_____conspicuous	_____ordinary	_____unplanned
_____contrasting	_____organized	_____unpleasant
_____convenient	_____out-of-place	_____unusual
_____crowded	_____peaceful	_____visible
_____dangerous	_____permanent	_____welcoming
_____depressing	_____planned	_____well-maintained
_____deserted	_____predictable	
_____dirty	_____private	
_____disturbing	_____public	
_____familiar	_____quiet	
_____fast	_____relaxed	
_____friendly	_____repellant	
_____frightening	_____residential	
_____good	_____rundown	
_____harmonious	_____safe	

b. Now please circle the six adjectives in the list which for you are most associated with your neighbourhood in general.

10. *HAND QUESTIONNAIRE TO R. TO FILL IN*

a. Now please rate on each of the following 1 - 7 scales the effect you think a community mental health facility would have/has had on your neighbourhood.

greatly increase traffic on residential streets	1	2	3	4	5	6	7	greatly decrease traffic on residential street
greatly increase property values	1	2	3	4	5	6	7	greatly decrease property values
greatly increase personal safety	1	2	3	4	5	6	7	greatly decrease personal safety
greatly increase noise levels	1	2	3	4	5	6	7	greatly decrease noise levels
greatly increase property taxes	1	2	3	4	5	6	7	greatly decrease property taxes
greatly attract desirable people	1	2	3	4	5	6	7	greatly attract undesirable people
greatly enhance the visual appearance	1	2	3	4	5	6	7	greatly detract from visual appearance
greatly increase residents' neighbourhood satisfaction	1	2	3	4	5	6	7	greatly reduce residents' neighbourhood satisfaction
greatly encourage residents to move	1	2	3	4	5	6	7	greatly discourage residents from moving
greatly improve neighbourhood image	1	2	3	4	5	6	7	greatly detract from neighbourhood image
greatly complement residential character of neighbourhood	1	2	3	4	5	6	7	greatly diminish residential character of neighbourhood
greatly upgrade neighbourhood quality	1	2	3	4	5	6	7	greatly downgrade neighbourhood quality

b. PLEASE CIRCLE THE <u>THREE</u> EFFECTS YOU REGARD AS THE MOST IMPORTANT.

11. *HAND R. CARD A.*

How do you rate the desirability of having a community mental health facility located within the following distances from your home?

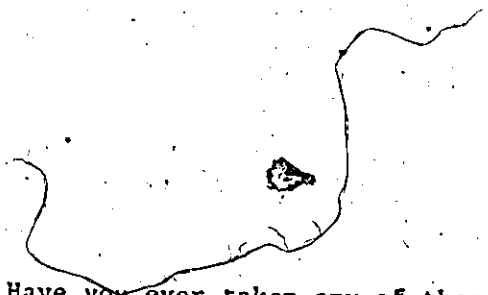
01. extremely desirable	05. Neutral	06. slightly undesirable
02. considerably desirable		07. moderately undesirable
03. moderately desirable		08. considerably undesirable
04. slightly desirable		09. extremely undesirable
		98. Don't Know

a. ...within 7 - 12 blocks.. ___
b. ...within 2 - 6 blocks.. ___
c. ...within 1 block..... ___

12. *HAND R. CARD B.*

For each location of a mental health facility you have rated as undesirable which of these actions would you most likely take?

a. 7 - 12 blocks..... ___
b. 2 - 6 blocks..... ___
c. 1 block..... ___



13. Have you ever taken any of those actions to oppose the location of a mental health facility in your neighbourhood?

Yes..... 1
No..... 2

14. *ASK Q. 14 ONLY IF FROM Q. 5 RESPONDENT IS UNAWARE OF A MENTAL HEALTH FACILITY IN THE NEIGHBOURHOOD. SEE. Q. 5. OTHERS GO TO Q. 15 A.*

Do you think your attitudes or behaviour would change if a mental health facility was opened in this neighbourhood?

Yes	1
No	2

GO TO Q. 19

15. *ASK Q's 15 THROUGH 18 ONLY IF FROM Q. 5 RESPONDENT IS AWARE OF A MENTAL HEALTH FACILITY IN THE NEIGHBOURHOOD. OTHERS GO TO Q. 19*

a. What is your opinion of the mental health facility in your neighourhood? Are you

... in favour	1
... or opposed	2
indifferent	3
Don't Know	8

GO TO Q. 16

b. Why are you in favour of/opposed to the facility?

c. *ASK ONLY IF OPPOSED IN Q. 15 a.*

HAND R. CARD B.

Which, if any of the actions listed on this card have you taken? *(CODE 3 ONLY)*

First mentioned	__ __
Second mentioned	__ __
Third mentioned	__ __

16. Were you living in this neighbourhood before the mental health facility opened?

Yes..... 1

No..... 2

GO TO Q. 19

17a. Are you aware of changes in any of your neighbours' attitudes or behaviour since the mental health facility opened?

Yes..... 1

No..... 2

GO TO Q. 18 a

b. If YES, describe the changes:

18a. Are you aware of changes in your attitudes or behaviour or that of any member of your family since the centre opened?

Yes..... 1

No..... 2

GO TO Q. 19

b. Please describe these changes:

19 *ASK EVERYONE*

In general, do you have any suggestions about how mental health facilities could be best fitted into residential neighbourhoods?

20. Have you or any friends or relatives ever used mental health services of any kind? C.5

Yes	
No	1
Don't Know	2
	8

And now a few questions about your background.

21. What level of education have you completed?

Some public school	1
Public school graduation	2
Some high school	3
High school graduation	4
Technical training beyond secondary school	5
Some university or college	6
University or college graduation	7
Post-graduate work	8

22a. What is your main occupation, that is what sort of work do you do?

_____ ___

_____ ___

b. What sort of business or industry do you work in?

_____

_____

23a. What is the main occupation of the head of the household, that is what sort of work does he/she do?

_____ ___

_____ ___

b. What sort of business or industry does he/she work in?

_____

_____

24. *HAND R. CARD C.*

J

Please indicate which range most closely describes the income before taxes of this household in the past year. Just give me the letter from the card.

A.	Less than $5,000	1
B.	$5,000 to $9,999	2
C.	$10,000 to $14,999	3
D.	$15,000 to $19,999	4
E.	$20,000 to $24,999	5
F.	$25,000 to $30,000	6
G.	More than $30,000	7
	Don't Know	8
	Refused	9

25a. Do you attend religious services at least once a month?

Yes	1
No	2

GO TO Q. 26

b. What is your religious group or denomination?

Anglican	01
Baptist	02
Greek Orthodox	03
Jewish	04
Lutheran	05
Mennonite	06
Pentecostal	07
Presbyterian	08
Roman Catholic	09
Salvation Army	10
Ukrainian Catholic	11
United Church	12
Other *(SPECIFY)* _____	

26. Do you rent or own your residence?

Rent	1
Own	2
Other *(SPECIFY)* _____	3

27. How long have you lived in this house/apartment? YEARS ___

THANK YOU VERY MUCH FOR YOUR CO-OPERATION

INTERVIEWER CODE:

SEX OF RESPONDENT:

Male	1
Female	2

5/27