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# RESPONSE TO COMMUNITY MENTAL HEALTH FACILITIES

# EFFECTS OF INDIVIDUAL CHARACTERISTICS ON RESPONSE TO COMMUNITY MENTAL HEALTH FACILITIES

by

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A 4C6 Research Paper
Sumbitted to the Department of Geography
in Partial Fulfillment of the Requirements
for the Degree
Bachelor of Arts

McMaster University

April 1980

BACHELOR OF ARTS (1980)
(Geography)

McMASTER UNIVERSITY
Hamilton, Ontario.

TITLE: Effects of Individual Characteristics on Response to Community Mental Health Facilities.

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NUMBER OF PAGES: ix, 96

## ABSTRACT

This study aims to examine the relationship between individual characteristics and response to community mental health facilities. Four sets of factors are considered: demographic characteristics, socio-economic characteristics, locational characteristics and individuals' sets of beliefs. Only the last factor, beliefs, which includes attitudes toward mental illness and religious beliefs, exhibits strong and consistent relationships to attitudes toward community mental health facilities. Weaker relationships are observed with the demographic and socio-economic variables.

The results of the study provide implications for both the development of theory and planning policy. Theoretically, the link between community characteristics and reactions to facilities is established. From the empirical evidence, tangible policy considerations to aid the effective location of facilities are suggested. These concern zoning legislation as well as methods of identifying potential "acceptor" and "rejector" neighbourhoods. Finally, directions for further research are suggested.

ACKNOWLEDGEMENTS

I would first like to thank my supervisor, Dr. S. Martin Taylor, for his guidance throughout the completion of this thesis. I am indebted to his patience and willingness to help at all times.

I also thank Dr. Michael J. Dear for assistance and comments, and to both Dr. Dear and Dr. Taylor for the use of their data.

A special note of thanks to the residents of Room 303 (M.M., N.M., J.P., J.V. and others) for their tolerance and for providing such an interesting working environment!

Lastly, thank you to Rosanna Wan, for so efficiently typing this thesis under such hurried conditions.

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# CHAPTER ONE

## INTRODUCTION

Attitudes toward mental health have changed radically among health care professionals and the general public alike. Research since World War II has prompted several reforms in the mental health field. The introduction of antipsychotic drugs and new techniques in psychiatry, along with a gradual changes in attitudes toward mental illness, have been especially important (Bassuk and Gerson, 1978; Dear and Taylor 1979; Segal and Aviram, 1978). General social trends including increasing negative sentiments toward incarceration, and incentives to save money by shifting the monetary costs of caring for the mentally ill are also responsible (Dear, 1978). A major consequence of these developments has been the deinstitutionalization of the mentally ill and an increasing focus on community-based facilities. Although the trend toward desinstitutionalized treatment settings is generally regarded as a positive advance in this field, it is accompanied by problems, many of which are rooted in the community itself. Since the host community provides the "context" for deinstitutionalized care, the residents' acceptance of community mental health facilities is intrinsic to their effectiveness. Whether negative reactions are triggered by such factors as fear of the mentally ill living nearby, based on stereotypical or actual threats, or more tangible effects such as a decline in property

values, they present a hindrance to the effective functioning of the facilities. Such opposition to community mental health facilities may be manifested as exclusion of the mentally ill by either formal or informal mechanisms (Segal and Aviram, 1978).

Central to the concept of planning for community mental health facilities, then, is the question of where to locate them in order to facilitate the effective resocialization of the mentally ill. Ideally, it would be desirable to identify suitable host neighbourhoods, and locate these facilities accordingly. However, the current distribution of decentralized mental health facilities suggests that this criterion has not played a major role in location decisions to date. Dear and Taylor (1979) observe a high spatial concentration of mental health facilities and of their clients, usually in inner-city neighbourhoods characterized by a high degree of transiency.

Formal as well as informal processes which reinforce the spatial clustering of facilities have been suggested. First, a propensity for uninstitutionalized or discharged mental patients to reside in these inner city areas, where low cost rental housing is readily available has been observed (Dear, 1978). The theme of biased planning strategies, has been more widely discussed. Dear and Taylor (1979) point out that "least risk" zoning regulations are instrumental in restricting mental health facilities from some neighbourhoods, while consequently saturating others. Similarly, Mumphrey et al., (1971) outline a "Political Placation Model" for locating controversial facilities, which suggests that such decisions are directly reflective of power in the community, thus differentiating between those who may be ignored and those who

must be placated. This model may be quite successfully utilized in explaining the under-allocation of mental health facilities in areas where greater opposition may be anticipated.

A third, related, mechanism suggested by Dear (1979) is neighbourhood opposition to community mental health facilities. Although various factors affecting the rejection or acceptance of facilities by the community have been studied, little is still known about the link between community characteristics and reactions toward community mental health facilities situated nearby. Such knowledge would contribute to the large body of research already completed in this field and have implications for the development of public policy regarding the location of community mental health facilities.

It is the purpose of this study to examine the relationship between community characteristics and reactions to community mental health facilities. Three research objectives have been identified:

(1) To establish a conceptual framework linking community characteristics and reactions to facilities of this study;

(2) To identify sets of neighbourhood characteristics, both individually and in combination, which would differentiate between "acceptor" and "rejector" communities, and

(3) To infer from the empirical evidence tangible policy considerations to aid the effective location of community mental health facilities.

The remainder of this report will deal with the theoretical and empirical aspects of this study. The following chapter will outline the conceptual framework for this study, while Chapter Three will outline the empirical literature relevant to this analysis. A discussion of the research design and statistical procedures used will be given in Chapter Four, and the results are presented in Chapter Five. The final Chapter provides a summary of the results and the major conclusions.

# CHAPTER TWO

# CONCEPTUAL FRAMEWORK

## 2.1 Theoretical Considerations

For various reasons, the location of a community mental health facility in residential areas is often met by opposition from neighbourhood residents. Hence, the facility may be termed as negative externality source, that is, it produces unanticipated and unwanted effects on the surrounding non-user community. These externality effects may include tangible or intangible impacts, such as increased traffic or fear, respectively. Papageorgiou (1978) proposes that the effect of such an externality is determined by the interaction between a population surface and an externality surface. In the context of community mental health centres, the population surface will vary with respect to the characteristics of the residents, as well as their predispositions toward mental illness (Dear, et al., 1980).

Segal and Aviram (1978) isolated community characteristics, as the most important factor influencing the external integration of a facility client. Because of an underemphasis of community characteristics in the past, a more thorough consideration of this factor is stressed. The characteristics of the clients and of the facility itself are also seen as major determinants of the success or failure of integration.

Dear and Taylor (1979) regard the problem of locating community mental health facilities as an exercise of manipulating the "form" (the facility) and "context" (the neighbourhood setting), to achieve a good "fit" between the two. "Facility form" is defined on four dimensions: type, scale, number and degree of noxiousness, while "neighbourhood context" encompasses two dimensions: physical structure and social structure. The important factors describing physical structure may include land use mix, structure characteristics and density. Social structure, on the other hand is described by socio-economic, demographic and beliefs variables.

Theoretically, community characteristics play a fundamental role in determining the extent to which the introduction of a mental health facility into a community is successful. The following discussion will outline a conceptual framework as the basis for testing of the relationship between community characteristics and responses to facilities.

## 2.2 Conceptual Framework

This study aims to extend the findings of a major project examining community attitudes toward mental health facilities recently completed by Dear and Taylor (1979). The conceptual framework proposed by Dear and Taylor is the basis for this analysis. Various "links" within the conceputal model are examined.

Five basic components are crucial to the conceptual model: attitudes toward the mentally ill, neighbourhood characteristics, facility/client characteristics, attitudes toward the mental health facility,

behavioural response and outcomes (Fig. 2.1). *Attitudes toward the mentally ill* are linked directly to reactions toward community mental health facilities. These attitudes are themselves a product of the personal characteristics of an individual, namely, demographic and socio-economic factors as well as a set of beliefs, therefore these three sets of personal characteristics are regarded as being only indirectly linked to reactions toward the facility itself.

In addition to attitudes toward the mentally ill, neighbourhood, and facility/client characteristics are seen to influence reactions toward the faiclities. *Neighbourhood characteristics* refer to both physical and social descriptors of the neighbourhood. Dear and Taylor regard land-use mix and physical quality of the area as especially important physical factors, since they could affect the physical integration of a mental health facility into a neighbourhood. On the other hand, factors which enhance or hinder social integration of mental patients, such as social cohesion of a neighbourhood, are suggested with respect to the social dimension. Secondly, tangible and intangible *facility characteristics* refer not only to factors such as effects on property values and fear of the mentally ill respectively, but also to design characteristics of the building itself. However, four specific components of this set of characteristics have been isolated as the major factors. These include type of facility, scale of facilities, number of facilities and degree of noxiousness.

The combined effects of these three main factors briefly outlined above, attitudes toward the mentally ill, neighbourhood characteristics and facility characteristics, are seen to determine *attitudes*

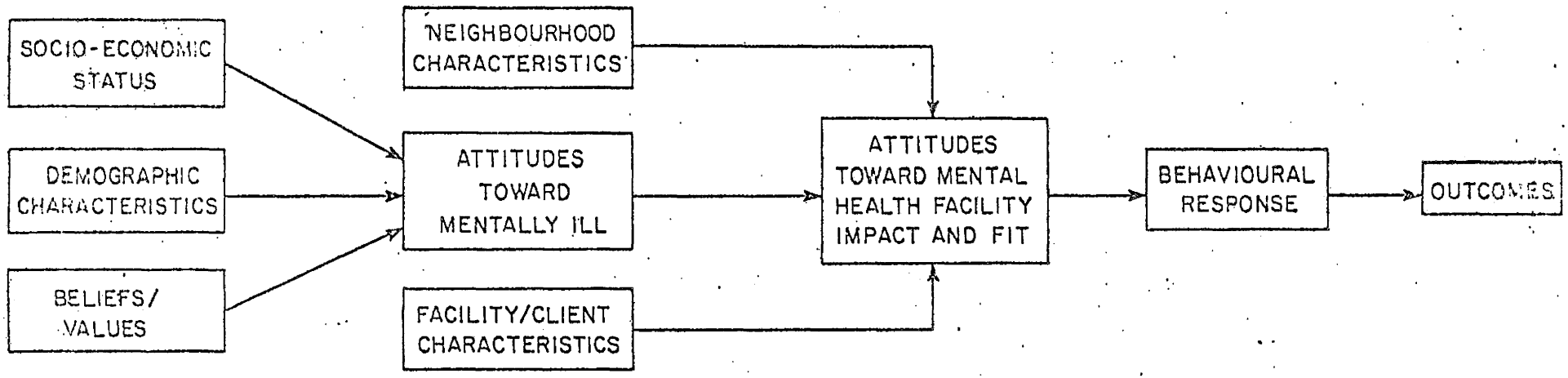


FIGURE 2-1 MODEL OF INDIVIDUAL RESPONSE TO NEIGHBOURHOOD MENTAL HEALTH FACILITIES

Source: Dear and Taylor (1979).

*toward the community mental health facility,* and subsequently, *behaviour.* Thus the degree of support for, or opposition to the facility leads to a behavioural response which itself may be supportive, neutral or oppositional. The last component of the model describes *outcomes.* Several considerations may fall into this category, although in this study, the main concern was focussed on the acceptance or rejection of the community mental health facility.

For the purposes of this study, a limited and modified version of this conceptual framework was utilized. Two changes to the model have been implemented. First, the succession of links has been altered to accommodate the focus of this study. Whereas previously, personal characteristics were regarded as being directly linked to attitudes toward mental illness and thus only indirectly to reactions to a community mental health facility, personal characteristics in the revised framework assume a more direct role with respect to response (Fig. 2.2). Reactions to facilities are directly influenced by four separate factors. These include demographic characteristics, socio-economic characteristics, a set of beliefs and values as well as proximity to the facility. The interaction of these factors, rather than their individual effects, is emphasized. Note, that in this framework attitudes toward mental illness are incorporated within an individual's set of beliefs, which are in turn partially a product of both socio-economic and demographic characteristics.

The focus here on the relative importance of individual characteristics as predictors of reactions to facilities is not to suggest that either the neighbourhood or facility characteristics are of less importance. Rather the restricted focus reflects the need

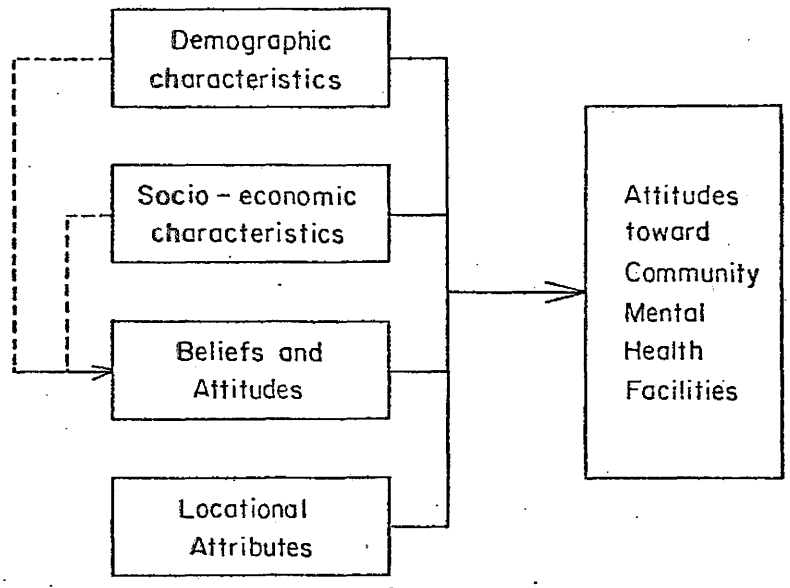


Figure 2.2. Modified Conceptual Framework.

to establish the relative importance of the different subsets of individual characteristics and to limit the scope of the analysis to manageable proportions.

# CHAPTER THREE

# LITERATURE REVIEW

Much attention in recent literature has focused on attitudes toward mental illness, but to a much lesser extent, on reactions to community mental health facilities. It is evident from this literature, that predispositions toward mental illness may be differentiated according to the characteristics of individuals. These include demographic and socio-economic characteristics, as well as an individual's set of beliefs and values. Also, there are indications that the location of the individual relative to the community mental health facility plays a role in determining attitudes toward the facilities. In this chapter, the relevant literature will be reviewed with respect to each of these factors separately. Operational research hypotheses will then be developed in light of the evidence presented.

## 3.1 Demographic and Socio-economic Characteristics

The effects of demographic and socio-economic characteristics on attitudes toward mental illness have been well documented in the literature. Most of the research in this area deals with demographic characteristics *per se*, the combined effects of age and education, or the overall effects of socio-economic factors. The following discussion will address each of these areas separately.

Some significant relationships between demographic characteristics and attitudes have been observed. It has been shown that demographic characteristics influence the stigma associated with various types of diagnosed mental illness. However, the ranked desirability of various mental disabilities does not vary significantly with respect to differences in the demographic characteristics of the respondents (Farina, 1970). One such factor, sex, has been shown to have a significant effect on the acceptance of an ex-mental patient as a prospective employee by the respondent (Farina et al., 1975). In this case the sex of both the respondent and the ex-mental patient are important. Generally, females were more accepting than males. However, because of a failure in this study to consider all possible combinations of the variables, the findings are not definitive.

Similar findings have been reported by Dear and Taylor (1979). Attitudes were measured on four dimensions - authoritarianism, benevolence, social restrictiveness, and community mental health ideology - and female respondents were found to exhibit more sympathetic attitudes toward mental illness on all but the social restrictiveness scale. Contrary findings, however, are reported by Laine and Lehtinen (1960). A study of attitudes in a rural community indicates that males are more positively disposed toward mental illness than female respondents.

Marital status, a less extensively researched demographic characteristic, has been found to account for highly significant differences in attitudes toward mental illness. Although marital status is partially related to age and number of children, Dear and Taylor (1979) have concluded that married and widowed individuals hold significantly

less positively oriented attitudes toward mental illness than do single or divorced individuals.

Similarly, number of children have been reported by these same researchers to affect responses to mental illness. Again, based on scales of authoritarianism, benevolence, social restrictiveness, it is evident that individuals with children under 19 years of age are more authoritarian and socially restrictive in their attitudes toward mental health.Correspondingly, they score lower on the benevolence and community mental health ideology scales. No significant relationship emerges, however, between attitudes and number of children over 19 years of age (Dear and Taylor, 1979). These findings are consistent with the expectation that protective feelings for one's children decrease as the children become older.

The effects of age have been observed as perhaps the most significant of the demographic characteristics considered. Laine and Lehtinen (1960) report that individuals over 50 years of age exhibit a tendency to be negatively disposed toward mental illness. Such a relationship is not evident with respect to individuals under 30 years of age or between 30 and 50 years. It is important to note that differences in attitudes did not emerge when age was treated as a continuous variable.

More often, relationships between attitudes toward mental health and the combined effects of age and education have been reported. As reviewed by Dear and Taylor (1979), a tendency toward increasingly "enlightened" attitudes, reflecting those of the mental health profession at large, occur in younger and more highly educated individuals (Freeman, 1961; MacLean 1969; Woodward, 1951). Morever, Johannsen (1969) found

that individuals who have attained a high school ecuation are more tolerant of the mentally ill, but that beyond this level education has no further effect on attitudes. Similarly, increased age and a lower level of education are significantly correlated with negative attitudes toward the mentally ill (Clark and Binks, 1966; Freeman, 1961; MacLean, 1969; Ramsey and Seipp,1948a, 1948b; Whatley, 1959). MacLean (1969), however, concludes that although higher education and lower age may, in fact, contribute to a more enlightened knowledge about mental illness, these factors do not actually result in more positive reactions to mental illness.

Thus it has been shown that age and education have definite effects on attitudes toward mental health and the mentally ill. Clearly, age has definite bearing on the education of an individual, since younger individuals tend to be more highly educated. However, it is implicated that other differential socialization processes account for the varied attitudes of the young and old (Freeman, 1961).

Perhaps the most extensively researched individual characteristics influencing attitudes toward mental illness are socio-economic factors, *per se*. Taylor and Hall (1977) report that community response to externalities is conditioned by socio-economic characteristics of residents. The general conclusions of a review of this literature by Rabkin (1972) indicate that, with respect to the attitudes of mental hospital employees towards patients, occupational status plays an important role in determining dispositions toward the mentally ill.

Effects of socio-economic status have been examined with respect to individual variables. Studies by Laine and Lehtinen (1973) and

Freeman and Kassebaum (1960) confirm the positive correlation of education to attitudes, although their relationship emerges only weakly in the latter study. Dear and Taylor (1979) also confirm that if socio-economic status is measured by level of education or occupational status, higher status individuals have a higher propensity to be sympathetic toward mental illness. However, no relationship is evident if income is used to measure socio-economic status. This same study also reports the effect of tenure status. Owners are described as being considerably less sympathetic toward mental illness than renters. This may be suggestive of the greater stake in the environment as experienced by owners as opposed to those who rent their housing.

Other studies have referred to measures of socio-economic status in a more general manner. Hollingshead and Redlich (1958) have reported that whereas higher class individuals were more likely to be referred for treatment by friends or relatives, lower class patients were more often referred by police and other authorities thereby exhibiting greater fear and distrust of mental illness. This same tendency of an unacceptance of deviant or pathological behaviour as mental illness by individuals of lower social class has also been observed by Cumming and Cumming (1957), Lemkau and Crocetti (1962) and Star (1955).

Greater tolerance toward mental illness by higher status groups has been shown by Dohnenwend and Chin-Shong (1967). For identical diagnoses of mental illness, these individuals exhibited more humanistic and liberal views than lower class individuals, as indicated by the nature of treatment prescribed by each of the groups. Dohnenwend and Chin-Shong suggest that lower status individuals are more inclined to define mental illness in a rather narrow sense, encompassing largely

aggressive and anti-social behaviours. Conversely, the more receptive attitudes of higher class individuals reflect those viewpoints of the mental health professions.

Bord (1971) acknowledges the greater exposure of higher status, more educated sectors of society to more enlightened mental health ideologies, but is skeptical of the assertion that increased knowledge predisposes individuals to higher degrees of acceptance of mental illness.

Generally, the evidence consistently indicates that socio-economic differences are related to attitudes toward mental illness. It is evident that as social class increases, individuals are more tolerant and enlightened with respect to mental illness. The extent to which actual reactions to mental illness are affected by socio-economic characteristics, however, is less clear. Also, the importance of demographic and socio-economic variables for predicting reactions to facilities depends on the relationship between attitudes and facility responses, which has not been widely examined in previous studies.

### 3.2 The Effect of Beliefs

In a review of the literature of attitudes toward mental health, Rabkin (1974) points out that "it is commonly suggested or implied that attitudes are precursors or determinants of overt behaviour". Thus it is of interest to examine the effect of beliefs on reactions to facilities, but also its effect on predispositions toward attitudes to mental illness. Specifically, attitudes toward mental illness, familiarity with mental illness and religious beliefs are considered.

The relationship between attitudes toward mental illness and judged desirability of potential community mental health facilities has been researched by Taylor et al. (1979). The findings show, that attitudes, measured on scales of authoritarianism, benevolence, social restrictiveness and community mental health ideology, are all significantly correlated with judged desirability of hypothetical facilities. The effect of authoritarian attitudes on attitudes toward mental patients is reported by Canter and Shoemaker (1960). The results of this study indicate that nursing students scoring highly on authoritarianism scales are likely to be negatively oriented toward the mentally ill, and moreover, were less apt to change these views after a training program about mental illness.

Familiarily with mental illness has also been found to be a determinant of dispositions. Use of mental health services by the respondent or friends or relatives of the respondent positively influences attitudes toward mental illness on authoritarianism, benevolence, social restrictiveness and community mental health ideology scales (Dear and Taylor, 1979). Freeman and Kassebaum (1960) report weaker correlations between knowledge about mental illness and attitudes.

Religious beliefs also appear to affect an individual's response to mental illness. There exists evidence of denominational differences contributing to varying orientations toward mental illness (Dear and Taylor, 1979), however it is suggested that these may be more closely tied to ethnicity (Guttmacher and Elinson, 1971). When religious beliefs are approximated by church attendance, more conclusive relationships emerge. Regular attenders of religious services are more authoritarian

and less community mental health oriented in their attitudes toward mental illness, and are generally less sympathetic in their dispositions (Dear and Taylor, 1979).

### 3.3 Locational Attributes

Locational attributes influencing attitudes toward community mental health facilities have not been extensively covered in the literature but may be important in predicting responses to such facilities.

One locational distinction which may be made is the type of neighbourhood in which one resides. The results of recent research by Dear and Taylor (1979) strongly suggest that suburban residents are less tolerant of community mental health facilities, which they find threatening to their environment. Lesser opposition is exhibited by city residents. This phenomenon may be partially attributable to the existing diverse range of land uses normally found in city neighbourhoods.

Distance relationships and the nature of the externality field emitted by a community mental health facility are also of importance, but again, little empirical work has been completed in this area to date. Smith (1977) suggests several relationships between distance from a facility and the associated stigma, where the shape of the curve is dependent on the facility type. Although it appears that "the externality field of mental health facilities is highly confined spatially", variations in attitudes within this area are evidenced (Dear and Taylor, 1979). Respondents rating the perceived desirability of a community mental health facility indicate that the degree of undesirability increases as the hypothesized distance between the respondent and facility decreases, even though the proportion of "undesirable" responses elicited is relatively low. The most negative reactions are evident when the proximity of the facility is within one

block. These decrease markedly at distances beyond six city blocks.

## 3.4 Summary

Evidence in the literature explicitely links attitudes toward mental health to individual characteristics, including demographic and socio-economic characteristics, beliefs and locational factors.

The significant demographic variables affecting attitudes have been described by Dear and Taylor (1979) to be representative of life-cycle status, a view which is consistent with the findings of other studies as well. Although sex is reported to be associated with attitudes, the findings pertaining to this variable tend to be in some cases inconsistent, and inconclusive. Marital status has been a lesser researched factor, but is is suggested that married and widowed individuals harbour more negative attitudes toward mental illness. This factor may be closely associated with number of children, a characteristic significant in itself. Parents of pre-school or school age children are prone to be less tolerantly predisposed.

Strong relationships emerge with respect to age, suggesting that older respondents are more negatively oriented toward mental illness. More often, though, the combined effects of age and education have been examined independently of other socio-economic variables. It is recognized that higher levels of education and low age and correlated to "scientific" and enlightened attitudes toward mental illness, but it is not clear whether acutal reactions tothe mentally ill are influenced as a result.

Socio-economic factors *per se* are perhaps the most widely recognized determinants of attitudes. Positive attitudes are characteristic

of respondents with high levels of education and occupational status, and of renters as opposed to home owners. More generally, higher class individuals exhibit more humanistic and tolerant attitudes toward the mentally ill, but again, the assumption that actual reactions are influenced may be questioned.

The importance of beliefs variables has also been suggested. Attitudes toward community mental health facilities are related to attitudes toward mental illness of authoritarinism, benevolence, social restrictiveness and community mental health ideology scales. Familiarity or knowledge with mental illness are also associated with positive attitudes toward mental illness.

Religious beliefs figure prominently as well. Denominational differences seem to contribute to variations in attitudes. Attendance of religious services also affects attitudes. Discernable differences are evident between regular and non-attenders; the latter group exhibiting more sympathetic and more mental health oriented viewpoints.

Lastly, locational variables are the least extensively factors covered in the literature. Differences have been noted between city and suburban residents. The latter group have been found to be more restrictive in their attitudes toward mental health facilities. Also, a spatially limited externality field of community mental health facilities has been demonstrated. Within the externality field, perceived undesirability increases with proximity.

## 3.5 Development of Research Hypothesis

The preceeding discussion of the effect of personal characteristics on attitudes towards mental illness and community mental health facilities suggests several operational research hypotheses to test the relationship between these factors and response to community mental health facilities.

(i) Attitudes toward community mental health facilities vary significantly with demographic characteristics of individuals.

(ii) Attitudes toward community mental health facilities are positively correlated with socio-economic characteristics of individuals.

(iii) Attitudes toward community mental health facilities vary significantly with individuals' beliefs.

(iv) Attitudes toward community mental health facilities are positively correlated with proximity to the facility.

The operationalization of these hypotheses is discussed in the following chapter.

# CHAPTER FOUR

## RESEARCH DESIGN

In this chapter the research design of the study is discussed, including questionnaire and sample design, the development of models of attitudes toward community mental health facilities, and a description of the analytical framework. The questionnaire and sample will be discussed only briefly, since a more thorough discussion may be found elsewhere. Development of the five models tests is covered in more detail, and will focus on selection of the explanatory and dependent variables incorporated within them. Lastly, the section discussing the analytical framework of the study will deal with the statistical techniques chosen for the analysis of the models, the rationale behind these choices, and the manner in which they are used in the statistical testing.

### 4.1 Questionnaire and Sample

The data used in this study were collected by the Survey Research Centre, Institute for Behavioural Research at York University, for a major study of attitudes toward neighbourhood community mental health facilities recently completed by Dear and Taylor (1979). A structured questionnaire was employed to elicit responses to questions concerning residents' awareness of, and attitudes toward, various

community facilities in general, awareness of community mental health facilities, attitudes toward mental illness and the mentally ill, and toward existing or hypothesized community mental health facilities. Also, a set of questions was included to determine personal characteristics, including demographic and socio-economic information about the respondents (Appendix 1).

The questionnaire was administered to residents of neighbourhoods within metropolitan Toronto both with and without community mental health facilities. Selection of respondents in enumeration areas without facilities was accomplished by stratified random sampling techniques, designed to satisfy social class and geographic zone (city or suburban) criteria. Sample selection in areas with facilities, however, was not carried out in a random manner because of the relatively small number of enumeration areas satisfying this criterion and the necessity to include a representative selection of various types of facilities. Included are two major facility types: residential and non-residential care facilities. The final sampling of with facility and without facility areas resulted in 1090 completed interviews. A more complete discussion of questionnaire design, and testing and sampling techniques may be found in Dear and Taylor (1979), and thus will not be covered in more detail here.

This study does not involve the 1090 respondents as outlined above. Rather, in order to study the effects of facilities or residents in their immediate vicinity, selection of respondents is restricted to those residing in neighbourhoods with a community mental health facility. Although 384 respondents fall into this category, three

cases had to be deleted from the sample due to technical difficulties with the data. This leaves a final total of 381 respondents in the sample for this study.

## 4.2 Development of Models of Attitudes Toward Community Mental Health Facilities.

Development of the models is directly linked to the hypotheses to be tested. Hence the models incorporate demographic, socio-economic, beliefs and distance variables as possible explanatory factors to be used as predictors of attitudes toward community mental health facilities. The rationale behind the selection of relevant dependent and independent variables is based on existing literature related to this topic, but is to a large extent determined by the data collected. In the following section, the independent, or explanatory variables with respect to each model and dependent variables will be discussed separately.

### 4.2.1 Independent Variables

*Demographic Model.* The variables in this model describing the demographic characteristics of individuals include age, sex, marital status and number of children under 6 years of age, between 6 and 18 years, and over 18 years. Sex and marital status are variables measured at the nominal level treated as bipolar dummy variables in order to be used as explanatory variables within the discriminant analyses. Accordingly, marital status is coded to distinguish only between married and single individuals, although several distinctions, such as 'divorced' or 'widowed' are included within the latter classification. The remaining

variables, age and number of children are ratio scaled variables.

*Socio-economic Model.* Four ordinal level variables and a nominal level variable comprise the socio-economic model. The ordinal variables include level of education, household income and occupational status. Occupational status is recorded for both the respondent and head of household, and is classified according to the Blishen scale of occupational status (Blishen,1958). Tenure status, the nominal variable included in the socio-economic model, distinguishes between those respondents who own and those who do not own their residences.

*Beliefs Model.* This model is intended to relate individuals' beliefs, namely religious beliefs and ideas pertaining to mental illness,to attitudes toward community mental health facilities. A proxy measure of religious beliefs is given by attendance of religious services, where regular attendance is defined as attendance of religious services at least once a month, according to the criterion stipulated in the questionnaire. Thus, religious beliefs are described by a nominal level variable which differentiates between regular and non-attenders of religious services.

The second measure of beliefs considered is attitudes toward mental illness and the mentally ill. This was originally measured on four separate scales: authoritarianism, benevolence, social restrictiveness and community mental health ideology scales, together comprising 40 statements scored on a five point scale ranging from "strongly agree" to "strongly disagree" (Taylor and Dear, 1979). However, these four scales were collapsed into a single composite scale. The resultant measure, "Total", indicates the extent to which an individuals's attitudes toward

mental illness and the mentally ill are favourably or negatively oriented.

*Distance Model.* This model incorporates not only measures of distance between the facility and respondent, but facility type as well. This latter variable is included, since various facility types may vary in their impact over distance. Distance is measured in two ways, by street distance, that is, the shortest street path from the respondent's home to the facility, and by straight line distance between the two locations. Both measures of distance have been estimated by using large scale street maps of the enumeration areas and converting the results to metres.

Facility type describes three main types of community mental health facilities: outpatient, social/therapeutic and residential care facilities. To render "facility type" appropriate for use as an explanatory variable in the discriminant analyses however, it was necessary to consider it as a dichotomous, nominal measure. Thus the original three facility types were reclassified as residential (group homes, boarding houses) or non-residential (outpatient, social/therapeutic) facilities.

*Composite Model.* The last model to be considered, the composite model is introduced to examine which combinations of factors are the best predictors of attitudes toward community mental health facilities. Clearly, this is an important model to test in addition to the individual models outlined above, since in reality, none of the factors described by these models operate independently of one another. All the variables included in the demographic, socio-economic, beliefs and distance models are incorporated into the composite model, as well as an additional

variable, "zone" (Table 4.1). Zone type is a nominal level variable, which refers to the enumeration area in which the respondent and facility are located, distinguishing between suburban or central city localities. Although this variable is not included in the models previously discussed, it is felt that because of the different land use mix and possibly differing effects of distance between these two zonal types, it should be included in the composite model.

### 4.2.2 Dependent Variables

Two separate attitudinal measures of response to community mental health facilities serve as the dependent variables in this analysis: judged desirability of hypothetical mental health facilities; and reactions to existing facilities.

Judged desirability was measured by asking all respondents how they would rate the desirability of having a community mental health faiclity located within (i) 7-12 blocks, (ii) 2-6 blocks and (iii) 1 block of their homes. Responses to these questions given on a 9 point scale ranging from "extremely desirable" to "extremely undesirable", are indicative of attitudes toward such facilities at various distances from respondents' homes regardless of whether they are actually aware of a facility in their neighbourhood. "Judged desirability" then, is used as the basis for forming three groups representing different responses to community mental health facilities: desirable, slightly undesirable and extremely undesirable.

Reactions to existing community mental health facilities provide the attitudinal measure used as the second dependent variable. Unlike

TABLE 4.1

EXPLANATORY VARIABLES INCLUDED IN THE MODELS OF ATTITUDES TOWARD COMMUNITY MENTAL HEALTH FACILITIES

| *Variable* | *Level of Measurement* |
|---|---|
| **Demographic Model** | |
| Sex | Nominal |
| Age | Ordinal |
| Marital status | Nominal |
| Children under 6 years | Ordinal |
| 6-18 years | Ordinal |
| over 18 years | Ordinal |
| **Socio-economic Model** | |
| Level of education | Ordinal |
| occupational status (respondent) | Ordinal |
| Occupational status (head of household) | Ordinal |
| Household income | Ordinal |
| Tenure status | Nominal |
| **Beliefs Model** | |
| Attitudes toward mental illness | Ordinal |
| Church attendance | Nominal |
| **Distance Model** | |
| Straight-line distance | Ratio |
| Street distance | Ration |
| Facility type | Nominal |
| **Composite Model** | |
| Zone | Nominal |
| (plus all variables included in the demographic, socio-economic beliefs and distance models) | |

the first dependent variable, judged desirability, the segment of the sample to which this variable applies is restricted to individuals who are actually aware of a community mental health facility in their neighbourhood. The resultant dependent variable, measurable at the nominal level, distinguishes between individuals who are in favour of, opposed, or indifferent to the existence of a facility in their area.

## 4.3 Analytical Framework

### 4.3.1 Statistical Techniques

Two methods, discriminant analysis and analysis of variance, are utilized. Discriminant analysis, the principal method employed, is used to test the relationship between attitudes toward community mental health facilities, as measured by the dependent variables, and the five models. Several attributes of this particular analytical technique render it an especially appropriate method to apply to the data analysis within this study. Firstly, this technique does not preclude dependent variables measured at the ordinal level or higher, since they are not treated as continuous variables. Rather, they define the basis of defining the discriminant groups used within the analysis. This is an important factor, considering that both nominal and ordinal level dependent variables have been defined within this study.

Secondly, discriminant analysis, by mathematically combining the discriminating variables included in each model, produces a single dimension of possible theoretical significance along which attitudinal responses may be classified. The statistical significance of these dimensions may be computed as an index of their effectiveness as discriminators between the groups. In addition, there exists the added advantage that standardized coefficients of the discriminant functions

may be computed. Not unlike coefficients of a multiple regression analysis, these coefficients indicate for each function the direction and relative importance of each of the independent variables.

A third advantage of the use of discriminant analysis is that discriminant scores are calculated for each case with respect to each discriminant function. More importantly, the group centroids, the means of the discriminant scores for each group, enable the identification of the relative location of the groups along each dimension. Thus it is possible to classify groups holding different attitudes toward community mental health facilities with respect to the explanatory variables as expressed by each discriminant function.

Lastly, a contingency table provides information concerning the predictive capabilities of the discriminant functions. Cases are reclassified into groups, as defined by the dependent variables, on the basis of the newly-defined discriminant dimensions. These are then compared to the groups defined on the basis of the actual data at the outset of the analysis. Thus the contingency table indicates the number of cases reclassified into each group, the original classifications, and the overall percentage of correctly classified cases.

In addition to discriminant analyses, univariate analyses of variance were performed to elicit additional information concerning the separate effects of the explanatory variables. Although this technique is only of secondary importance to the analysis in general, the univariate tests contributed to the data analysis by indicating whether any significant relationship emerged from single discriminating variables and differences in attitudes toward community mental health facilities.

4.3.2 Data Analysis

All of the statistical analysis was performed using the discriminant analysis programs within the Statistical Package for the Social Sciences (Nie, et al., 1975). Each individual model (i.e. demographic, socio-economic, beliefs and distance models) was analyzed by the "Direct" method available in this subprogram, which includes all variables in the discriminant analysis regardless of their power in discriminating between the groups.

The Composite Model was treated in a slightly different manner. Because of the large number of variables included in the analysis, stepwise discriminant analyses were utilized instead of the direct method used in the remaining analyses. The partial F values, (the F-to-enter and F-to-remove) were set at 1.0 in order to allow into the analysis only those variables with the greatest discriminating power. The resultant equation thereby represents the best combination of discriminating factors while eliminating redundancy with respect to the variables entered.

Several analyses were performed for each model, determined by the dependent variables and the subsets of the sample population to be considered. In summary, eleven separate discriminant analyses are performed for each of the five models, with the exception of the distance model, where only eight are necessary. Four dependent variables (judged desirability of a hypothetical facility with 7-12 blocks, 2-6 blocks, 1 block, and reactions to existing facilities) and three population subgroups (aware respondents, unaware respondents, and aware respondents residing within 300 metres of a facility) are tested.

Since response to existing facilities is applicable only to respondents aware of them, eleven possible analysis for each model exist, although not all are performed (Table 4.2).

## 4.4 Summary

This chapter has outlined the basic research design of the study. First, the questionnaire and sample design, completed in a previous study, were discussed. Secondly, the development of the models was outlined with respect to the independent variables, which reflect each of the four research hypotheses suggested in Chapter Three as well as the four dependent variables, which measure attitudes toward community mental health facilities. Finally, a description of the analytical framework was given. Two methods of analysis are utilized, discriminant analysis as well as one-way analysis of variance. These were performed with respect to each of the dependent variables and population subgroups on the individual and composite models. In the following chapter, the results of the analyses outlined above will be reported.

TABLE 4.2

DISCRIMINANT ANALYSES OF ATTITUDES TOWARD COMMUNITY MENTAL HEALTH FACILITIES

| Dependent Variable | Aware | Aware and residing within 300 metres of a facility | Unaware |
|---|---|---|---|
| Judged desirability within 7-12 blocks | * | * | (*) |
| Judged desirability within 2-6 blocks | * | * | (*) |
| Judged desirability within 1 block | * | * | (*) |
| Reactions to existing facilities | * | * | - |

* Analyses performed with respect to all models.

(*) Analyses performed with respect to all models except the distance model.

- No analyses performed.

# CHAPTER FIVE

## DISCUSSION OF THE RESULTS

In this chapter, results of the data analysis will be presented with respect to each of the models considered. First, the effectiveness of individual variables in each model will be discussed, as indicated by analyses of variance. Secondly, the results of the discriminant analyses will be reported, with specific reference to the occurrence of discriminant functions which are statistically significant. Lastly, where applicable, an interpretation of significant discriminant functions will be presented, along with their effectiveness as predictors of response to community mental health facilities, as indicated by the results of the contingency table and the proportion of the sample correctly classified. The analytical results will be presented with respect to each model individually, and in the following order: demographic model, socio-economic model, beliefs model, distance model and composite model.

### 5.1 Demographic Model

The demographic model appears to be only a weak predictor of attitudes toward community mental health facilities. A univariate analysis of the individual variables entered into the analysis reveals that marital status and number of children under 6 years, between 6

and 18 years, and over 19 years, are not significantly related to either of the dependent variables (Table 5.1). The age of the respondent is significantly related to judged desirability of a hypothetical mental health facility in four of nine analyses and in both analyses of response to existing facilities. Also, sex has a significant effect on the judged desirability of a mental health facility at a hypothetical distance of one block from the respondent's home.

The results of the discriminant analyses indicate that the demographic model is not a powerful discriminator between the groups (Table 5.2). Only one analysis produces a signficant discriminant function, that based on the subsample of "aware" residents residing within 300 meters of a mental health facility. In that case, age and sex are the most important independent variables with older males having a relatively higher propensity to rate hypothetical mental health facilities within one block as extremely undesirable (Table 5.3). This model classifies 66.7% of the cases correctly.

Thus, while age and sex of the respondent appear to be significant factors affecting response to community mental health facilities, the general results indicate that the demographic model is not a successful predictor of attitudes toward either existing or hypothetical mental health facilities.

## 5.2 Socio-economic Model

The socio-economic model is not an effective predictor of attitudes toward community mental health facilities, although several of the individual variables within the model are significantly related

TABLE 5.1

EFFECTS[1] OF DEMOGRAPHIC VARIABLES

| | Judged Desirability of a Facility Within: | | | | | | | | | Reactions to Existing Facilities, | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7-12 blocks | | | 2-6 blocks | | | 1 block | | | | |
| | Aware | Aware < 300 | Unaware | Aware | Aware <300 | Unaware | Aware | Aware <300 | Unaware | Aware | Aware <300 |
| Sex | .5981 | 6.11 | .1202 | .3903 | .2665 | .2803 | 3.8793* | 4.2391* | .4064 | .4604 | .8226 |
| Age | 3.3794* | 3.723* | 2.3677 | 2.8883 | 3.9444* | 1.4851* | 2.9605 | 6.1483** | 3.4153* | 3.235* | 4.2348* |
| Marital Status | .3731 | .4395 | .3033 | .3915 | .4112 | 1.0756 | .1913 | .1443 | .2926 | .4576 | .6079 |
| Children under 6 years | .3041 | .1358 | 2.3151 | .4092 | .1595 | 2.0321 | .5601 | .3634 | 1.5433 | .6074 | .7171 |
| Children between 6-18 | .2172 | .3553 | 1.2007 | .0449 | .3100 | 1.5234 | .5861 | .5261 | 2.5212 | .8448 | .509 |
| Children over 18 | .1767 | .1358 | .2288 | 2.9452 | 3.145 | 1.8203 | 1.6635 | 1.7245 | .3544 | .2829 | .3148 |
| Degrees of freedom[2] | (2,45) | (2,33) | (2,184) | (2,49) | (2,37) | (2,207) | (2,50) | (2,39) | (2,208) | (2,70) | (2,58) |

*significant at the .05 level

**significant at the .01 level

[1]Figures are F statistics

[2]Source: Freund, J.E. *Modern Elementary Statistics*, New Jersey: Prentice-Hall Inc. 1973.

TABLE 5.2

SUMMARY OF STATISTICS OF DISCRIMINANT ANALYSES OF JUDGED DESIRABILITY

| | Aware Respondents | | | | | Aware Respondents Residing within 300 m | | | | | Unaware Respondents | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number Removed | % Trace | Wilk's λ | Significance | % Correctly Classified | Number Removed | % Trace | Wilk's λ | Significance | % Correctly Classified | Number Removed | % Trace | Wilk's λ | Significance | % Correctly Classified |
| Demographic Model | | | | | | | | | | | | | | | |
| 7-12 blocks | 0 | 91.8 | .74088 | .338 | 67 | 0 | 90.6 | .62786 | .288 | 72.2 | 0 | 66.3 | .92971 | .353 | 54 |
| | 1 | 8.2 | .97280 | .948 | | 1 | 9.4 | .94937 | .903 | | 1 | 33.7 | .97552 | .480 | |
| 2-6 blocks | 0 | 95.6 | .76296 | .400 | 51.7 | 0 | 95.5 | .67247 | .321 | 70 | 0 | 72.6 | .9151 | .111 | 49.5 |
| | 1 | 4.4 | .98680 | .987 | | 1 | 4.5 | .97879 | .981 | | 1 | 27.4 | .97566 | .411 | |
| 1 block | 0 | 68.9 | .68779 | .123 | 62.3 | 0 | 62.8 | .56224 | .05 | 66.7 | 0 | 72.6 | .91369 | .100 | 42.7 |
| | 1 | 31.1 | .88522 | .327 | | 1 | 37.2 | .79965 | .148 | | 1 | 27.4 | .97518 | .396 | |
| Socio-economic Model | | | | | | | | | | | | | | | |
| 7-12 blocks | 0 | 78.5 | .55156 | .015 | 76.2 | 0 | 79.6 | .49710 | .052 | 74.2 | 0 | 63.4 | .93231 | .259 | 42.9 |
| | 1 | 21.5 | .86528 | .253 | | 1 | 20.4 | .84693 | .364 | | 1 | 36.6 | .97450 | .334 | |
| 2-6 blocks | 0 | 75.4 | .85675 | .786 | 58.7 | 0 | 67.5 | .86492 | .930 | 60.0 | 0 | 92.6 | .95156 | .447 | 43.4 |
| | 1 | 24.6 | .96162 | .808 | | 1 | 32.5 | .95310 | .837 | | 1 | 7.4 | .99625 | .945 | |
| 1 block | 0 | 79.4 | .77687 | .389 | 55.3 | 0 | 69.0 | .75006 | .513 | 56.8 | 0 | 78.6 | .93812 | .237 | 42.4 |
| | 1 | 20.6 | .94638 | .678 | | 1 | 31.0 | .91172 | .565 | | 1 | 21.4 | .98622 | .596 | |
| Beliefs Model | | | | | | | | | | | | | | | |
| 7-12 blocks | 0 | 94.9 | .73134 | .007 | 79.6 | 0 | 99.4 | .67298 | .010 | 73 | 0 | 99.7 | .77080 | .000 | 68.4 |
| | 1 | 5.1 | .98190 | .362 | | 1 | .6 | .97968 | .407 | | 1 | .3 | .99903 | .67 | |

..... continued

Table 5.2 continued

| | Aware Respondents | | | | | Aware Respondents Residing within 300 m | | | | | Unaware Respondents | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number Removed | % Trace | Wilk's λ | Significance | % Correctly Classified | Number Removed | % Trace | Wilk's λ | Significance | % Correctly Classified | Number Removed | % Trace | Wilk's λ | Significance | % Correctly Classified |
| Beliefs Model | | | | | | | | | | | | | | | |
| 2-6 blocks | 0 | 96.9 | .63444 | .000 | 79.6 | 0 | 10.0 | .6657 | .001 | 73 | 0 | 99.7 | .68210 | .000 | 62.1 |
| | 1 | 3.1 | .982714 | .353 | | 1 | 0 | .99984 | .554 | | 1 | .3 | .99856 | .582 | |
| 1 block | 0 | 92.2 | .42175 | .000 | 75.9 | 0 | 93.0 | .38274 | .000 | 74.4 | 0 | 93 | .61815 | .000 | 62.6 |
| | 1 | 7.8 | .91102 | .03 | | 1 | 7.0 | .90705 | .05 | | 1 | 7 | .960 | .03 | |
| Distance Model | | | | | | | | | | | | | | | |
| 7-12 blocks | 0 | 87.5 | .88083 | .456 | 61.2 | 0 | 84.1 | .81813 | .357 | 51.4 | * | | | | |
| | 1 | 12.5 | .98365 | .69 | | 1 | 15.9 | .96674 | .572 | | | | | | |
| 2-6 blocks | 0 | 64.5 | .93662 | .782 | 34. | 0 | 97.4 | .83068 | .334 | 39 | | | | | |
| | 1 | 35.5 | .97686 | .563 | | 1 | 2.6 | .99479 | .908 | | | | | | |
| 1 block | 0 | 82.2 | .87104 | .33 | 40.7 | 0 | 93.9 | .83888 | .335 | 48.8 | | | | | |
| | 1 | 17.8 | .97483 | .529 | | 1 | 6.1 | .98851 | .798 | | | | | | |
| Composite Model | | | | | | | | | | | | | | | |
| 7-12 blocks | 0 | 70.9 | .36376 | .000 | 85.4 | 0 | 58.3 | .28075 | .002 | 90.0 | 0 | 88.1 | .70214 | .000 | 74.9 |
| | 1 | 29.1 | .71566 | .037 | | 1 | 41.7 | .57313 | .018 | | 1 | 11.9 | .95371 | .083 | |
| 2-6 blocks | 0 | 81.1 | .62792 | .016 | 77.8 | 0 | 100 | .0026 | .0 | 73.5 | 0 | 89.2 | .62387 | .000 | 62.9 |
| | 1 | 18.9 | .90652 | .264 | | | | | | | 1 | 10.8 | .94164 | .067 | |
| 1 block | 0 | 74.8 | .26554 | .000 | 89.1 | 0 | 88.6 | .12584 | .000 | 94.4 | 0 | 80.7 | .54272 | .000 | 68.5 |
| | 1 | 25.2 | .66442 | .005 | | 1 | 11.4 | .6505 | .045 | | 1 | 19.3 | .87300 | .001 | |

—— Significant at or beyond the .05 level

*No analysis performed

TABLE 5.3

SIGNIFICANT DISCRIMINANT DIMENSIONS
OF THE DEMOGRAPHIC MODEL

| Sample Group | Variables | Standardized Coefficients |
|---|---|---|
| Judged desirability | Sex | .54348 |
| at 1 block | Age | 1.00534 |
| Aware/ 300 m | Marital status | -.11651 |
| | Children < 6 | -.12084 |
| | Children 6-18 | -.40934 |
| | Children > 18 | -.07967 |

to the judged desirability of a hypothetical facility. Analysis of variance reveals, that three of the five variables are significantly related to this dependent variable, although only at a distance of seven to 12 city blocks from the respondents' home (Table 5.4). Occupational status of both the respondent and the head of household show signficant relationships with this measure of judged desirability for both the "aware" group and those "aware" respondents residing within 300 metres of a facility. Level of education is significant with respect to the aware group only. Income and tenure status, as individual variables, show no significant relationships with the dependent variables.

Only one discriminant function is found to be significant, and, not surprisingly in light of the results of the analysis of variance, describes the judged desirability of a hypothetical facility located 7-12 blocks of respondents homes by "aware" respondents (Table 5.2). The function suggests that a low level of education of the respondent and low occupational status of the head of household are likely to result in undesirable ratings of the hypothesized facility (Table 5.5). This function is able to accurately predict 76.2% of cases included within the analysis.

Although some significant relationships occur between the socio-economic (explanatory) variables and facility attributes, the overall results show that the socio-economic model is not an effective predictor of attitudes toward community mental health facilities.

TABLE 5.4

EFFECTS[1] SOCIO-ECONOMIC VARIABLES

| | Judged Desirability of a Facility Within: | | | | | | | | | Reactions to Existing Facilities | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7-12 blocks | | | 2-6 blocks | | | 1 block | | | | |
| | Aware | Aware/ <300 | Unaware | Aware | Aware/ <300 | Unaware | Aware | Aware/ <300 | Unaware | Aware | Aware/ <300 |
| Level of Education | 3.3417* | 2.7327 | .8715 | .796 | .6521 | .7525 | .3782 | .4338 | .4625 | .9009 | .6556 |
| Occupational status (respondent) | 5.4877** | 5.0937* | .9819 | 1.0153 | .8012 | .8516 | .8276 | .6569 | 2.6600 | .1701 | .3332 |
| Occupational status (head of household) | 5.2081** | 6.0984* | 2.3401 | .0242 | .4482 | 1.2244 | .0623 | .0648 | .2528 | .4207 | .5024 |
| Household income | 1.8368 | 1.5551 | .2566 | .3237 | .2065 | .3141 | 2.8858 | 2.6249 | .5539 | .6701 | .5672 |
| Tenure status | .6458 | .6569 | 1.9898 | .0246 | .3916 | 2.6454 | .4202 | 1.3602 | 1.0418 | .0323 | .2253 |
| Degrees of Freedom[2] | (2,39) | (2,28) | (2,179) | (2,43) | (2,32) | (2,202) | (2,44) | (2,34) | (2,202) | (2,65) | (2,54) |

*Significant at the .05 level

**Significant at the .01 level

[1] Figures are F statistics

[2] Source: Freund, J.E. *Modern Elementary Statistics*, New Jersey: Prentice-Hall, Inc. 1973.

TABLE 5.5

SIGNIFICANT DISCRIMINANT DIMENSIONS
OF THE SOCIO-ECONOMIC MODEL

| Sample Group | Variables | Standardized Coefficients |
|---|---|---|
| Judged desirability | Education | -.59193 |
| at 7-12 blocks, aware respondents | Occupational status | |
| | (respondent) | .34005 |
| | (head of household) | .76770 |
| | Income | -.29250 |
| | Tenure status | .23578 |

## 5.3 Beliefs Model

Of the four individual models tested, the beliefs model is the most successful predictor of attitudes toward mental health facilities. Due to the large number of discriminant functions produced, results of the analyses of each dependent variable will be treated separately.

### 5.3.1 Judged Desirability of a Hypothetical Mental Health Facility

As revealed by analysis of variance, attitudes toward mental illness are consistently related to judged desirability at all hypothesized distances (Table 5.6). Religious beliefs, as measured by regular attendance of religious services, is a factor of noticeably less importance, since it is significantly related to desirability in only one test. Accordingly, all discriminant analyses produced discriminant fucntions dominated by "Total" (attitudes toward mental illness) as the explanatory variable (Table 5.2).

In those cases where judged desirability of a hypothetical facility located within 7 to 12 blocks or 2 to 6 blocks of the respondents' homes served as the dependent variable, one significant discriminant function is produced for each analysis. These functions consistently represent a mental health beliefs dimension. The sign of the discriminant coefficient on Total in each analysis indicates that those individuals holding negative attitudes toward mental health and the mentally ill display a strong propensity to rate hypothetical mental health facilities as undesirable (Table 5.7). The predictive capabilities of this model are relatively high; for the 7-12 block and

TABLE 5.6

EFFECTS[1] OF BELIEFS VARIABLES

| | Judged Desirability Within a Distance of: | | | | | | | | | Reactions to Existing Facilities | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7-12 blocks | | | 2-6 blocks | | | 1 block | | | | |
| | Aware | Aware/ <300 | Unaware | Aware | Aware/ <300 | Unaware | Aware | Aware/ <300 | Unaware | Aware | Aware/ <300 |
| Critical value (.05 significant level) | 3.32 | 3.32 | 3.0 | 3.2 | 3.23 | 3.0 | 3.2 | 3.23 | 3.0 | 3.15 | 3.15 |
| Variables | | | | | | | | | | | |
| Church attendance | .7346 | 1.0972 | 2.1035 | .568 | .3434 | 1.8141 | 2.7488 | 2.8867 | 5.4981** | 2.893 | 2.0157 |
| Attitudes toward mental illness | 7.6713** | 7.1994** | 27.271** | 13.534** | 1.061** | 41.788** | 28.576** | 24.735** | 58.34** | 9.6491** | 8.2966** |
| Degrees of Freedom[2] | (2,46) | (2,34) | (2,187) | (2,50) | (2,38) | (2,211) | (2,51) | (2,40) | (2,211) | (2,71) | (2,59) |

*Significant at the .05 level

**Significant at the .01 level

[1] Figures are F-statistics

[2] Source: Freund, J.E. *Modern Elementary Statistics*, New Jersey: Prentice-Hall Inc. 1973.

TABLE 5.7

SIGNIFICANT DISCRIMINANT DIMENSIONS
OF THE BELIEFS MODEL

| Sample | Variables | Standardized Coefficient | |
|---|---|---|---|
| | | 1st discriminant function | 2nd discriminant function |
| 7-12 blocks: | | | |
| aware | Church attendance | .1664 | |
| | Total | 1.1075 | |
| aware/300 m | Church attendance | .2733 | |
| | Total | 1.1008 | |
| unaware | Church attendance | .1246 | |
| | Total | 1.101 | |
| 2-6 blocks: | | | |
| aware | Church attendance | .1188 | |
| | Total | 1.2118 | |
| aware/300 m | Church attendance | .0964 | |
| | Total | 1.2171 | |
| unaware | Church attendance | .0551 | |
| | Total | 1.1932 | |
| 1 block: | | | |
| aware | Church attendance | .1999 | 1.0178 |
| | Total | 1.4283 | -.1401 |
| aware/300 m | Church attendance | .3421 | .9984 |
| | Total | 1.4509 | -.2681 |
| unaware | Church attendance | -.0096 | 1.0329 |
| | Total | 1.2420 | -.1795 |
| Reactions to Existing Facilities: | | | |
| aware | Church attendance | .05715 | 1.0242 |
| | Total | 1.10920 | -.0836 |
| aware/300 m | Church attendance | .2793 | .9780 |
| | Total | 1.0602 | -.3415 |

and 2-6 block ratings respectively, the discriminant functions are able to correctly classify 79.6% and 73.6% of those aware of facilities, 68.4% and 62.1% of those unaware, and 73% and 73.2% of aware individuals residing within 300 metres of a facility.

Analyses performed on the beliefs model incorporating judged desirability at a distance of one block from the hypothesized facility yield even stronger results, each analysis producing two significant functions. Interpretation of the first function, the mental health beliefs dimension, is consistent with that describing judged desirability within 7 to 12 or 2 to 6 city blocks: negative attitudes toward mental illness indicate negative attitudes toward the facilities as well.

Attendance of religious services is the predominant predictor of attitudes toward mental health facilities within the second dimension. Regardless of resultant level of significance, however, the explanatory power of the second dimension is marginal in comparison with the first, as shown, for example, by the percent of trace accounted for by each function (Table 5.2).

Interpretation of the second dimension is not entirely clear. The direction of the group centroid of individuals rating the hypothetical facility as desirable suggests that they are not regular attenders of religious services, although the magnitude of the centroid is quite small since it is very close to zero. A similar but stronger relationship is apparent with respect to individuals rating facilities as extremely undesirable, who also exhibit a higher propensity to be non-attenders. Conversely, regular attenders of religious services are

predicted to rate facilities as only slightly undesirable.

The beliefs model exhibits good predictive capabilities of judged desirability at a hypothesized distance of one block, classifying between 62.6% (unaware) and 75.9% (aware) cases correctly.

Thus the beliefs model is the best predictor of judged desirability of hypothetical facilities, and is able to explain a significant proportion of variance by one and in some cases two significant dimensions.

### 5.3.2 Reactions to Existing Facilities

The performance of the beliefs model in explaining response to existing facilities is similar to the results discussed above. Considered individually, only the attitudes toward the mentally ill (Total) exhibits significant relationships with responses.

Considered in combination in the discriminant functions it is apparent that the beliefs model is a successful predictor of reactions to existing facilities. Analysis of the aware group yields two significant discriminant functions. When the sample is restricted to aware respondents residing within 300 metres of a facility, only one significant discriminant function emerges (Table 5.8). In both cases, the first discriminant function represents a mental health beliefs dimension. Individuals holding favourable attitudes toward the mentally ill exhibit a higher propensity to be in favour of existing facilities of which they are aware. Moreover, when the opposite is true, i.e. when individuals hold negative attitudes, it is more likely that opposition to facilities will result (Table 5.7).

TABLE 5.8

SUMMARY STATISTICS OF DISCRIMINANT ANALYSES
OF RESPONSE TO EXISTING FACILITIES

| Model | Aware Respondents | | | | | Aware Respondents Residing Within 300 m of a Facility | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Number Removed | % Trace | Wilk's λ | Significance | % Correctly Classified | Number Removed | % Trace | Wilk's λ | Significance | % Correctly Classified |
| Demographic Model | 0 | 92.3 | .83372 | .424 | 46.6 | 0 | 88.1 | .78416 | .334 | 47.5 |
| | 1 | 7.7 | .98513 | .962 | | 1 | 11.9 | .96905 | .883 | |
| Socio-economic Model | 0 | 70.1 | .93935 | .950 | 42.6 | 0 | 64.4 | | .935 | 47.4 |
| | 1 | 29.9 | .98128 | .880 | | 1 | 35.6 | | .822 | |
| Beliefs Model | 0 | 77.2 | .72742 | .000 | 51.4 | 0 | 87.2 | .73632 | .001 | 48.4 |
| | 1 | 22.8 | .92558 | .02 | | 1 | 12.8 | .95765 | .112 | |
| Distance Model | 0 | 76.1 | .85574 | .091 | 62.7 | 0 | 76.4 | .84899 | .148 | 43.5 |
| | 1 | 23.9 | .96236 | .261 | | 1 | 23.6 | .96091 | .315 | |
| Composite Model | 0 | 78.1 | .68061 | .002 | 58.2 | 0 | 73.8 | .6032 | .013 | 67.9 |
| | 1 | 21.9 | .91261 | .126 | | 1 | 26.2 | .86621 | .202 | |

— Significant beyond the .05 level.

A second significant discriminant function for all aware respondents again represents a religiosity dimension, as measured by regular attendance of religious services. Regular attenders are predicted to be in favour of existing facilities but non-attenders have a higher propensity to remain undecided. It is suggested that those in opposition to such facilities may be non-attenders as well, but the discriminant scores of the group are very close to zero, as indicated by the group centroid (.00812). Thus although considered individually, church attendance does not exhibit any significant relationships with this dependent variable, this belief measure exhibits significant discriminating capabilities after removing the first, most important mental health dimension.

Regardless of the number of significant discriminant functions and consistent interpretation with beliefs models of judged desirability, the overall predictive capabilities of these models are lower than the desirability models. These functions yield only between 48.4% and 51.4% correctly classified cases.

### 5.3.3 Summary

The results indicate that an individual's beliefs, as they have been measured in this study, represent an extremely important factor in determining response to community mental health facilities. The strongest of these is an individual's attitudes toward mental illness. The role of religious beliefs is less easily discerned, although this too may be a factor of lesser importance. Thus, the beliefs model is an effective discriminator of attitudes toward

existing and hypothetical community mental health facilities.

## 5.4 Distance Model

It is evident from the analysis, that the distance model is not an effective predictor of attitudes toward mental health facilities. No significant relationships emerge between either of the dependent variables and straight line distance, street distance or facility type. Furthermore, the discriminant analyses do not produce any significant discriminant functions (Table 5.2). Accordingly, the percentage of correctly classified cases is lower than any of the other models tested.

One reason contributing to the poor performance of the distance model are the assumptions made concerning the interpretation of "awareness" as reported by the respondents. Throughout the analyses, distance measures were estimated by the actual (straight-line) or street distances of an "aware" respondents home to the mental health facility in the respondent's neighbourhood. However, the poor results prompted a more thorough examination of the actual extent of awareness reported by the respondent. Of the 133 "aware" respondents, 33 were actually aware of and could name or locate, the mental health facility in their neighbourhood. Another 31 respondents reported awareness of a community mental health facility in their neighbourhood yet could not name or indicate the location of such a facility. The remaining 69 "aware" respondents, on the other hand, were able to name and/or indicate the location of a community mental health facility, however, not the facility located in their neighbourhoods. These results have important implications for the nature of awareness and perceptions of

community mental health facilities, and certainly for the validity of the distance model in this analysis.

Discriminant analyses of the subset of cases (33) where it is known with certainty that the facility mentioned by the repondent was, in fact, the facility located in the respondents neighbourhood, yielded no significant results. It may be important to note, however, that the small number of cases may have been partially responsible for these results.

Therefore, contrary to the hypothesis that distance from a mental health facility is directly related to the negative effects of these facilities, the distance model is not an effective predictor of attitudes toward community mental health facilities.

## 5.5 Composite Model

The best predictor of attitudes toward community mental health facilities is the composite model, which incorporates the best explanatory variables from each of the four individual models. Due to the wide range of discriminant functions produced, the results in conjunction with each of the dependent variables will be discussed individually.

### 5.5.1 Judged Desirability of a Hypothetical Community Mental Health Facility.

There is consistency in the variables entered into the stepwise analyses of judged desirability of facilities (Table 5.9). The variable "Total", which measures attitudes toward the mentally ill, is entered into the analysis in every case, ranking first in order of importance as an

TABLE 5.9

VARIABLES ENTERED INTO THE STEPWISE COMPOSITE MODEL[1]

| Dependent Variables | Aware Respondents | | Aware Respondents Residing within 300 meters | | Unaware Respondents | |
|---|---|---|---|---|---|---|
| Judged desirability within: | | | | | | |
| 7-12 blocks | Total | 5.999 | Total | 6.53993 | Total | 26.215 |
| | Occupational status (respondent) | 5.144 | Occupational status (head of household) | 5.86323 | Occupataional status (head of household) | 2.481 |
| | Marital status | 3.992 | Marital status | 4.864 | | |
| | Age | 4.182 | Age | 2.658 | Children < 6 yrs | 2.416 |
| | Occupational status (head of household) | 3.301 | Occupational status (respondent) | 2.531 | Education | 1.594 |
| | | | Zone | 1.529 | Children 6-18 | 1.671 |
| | Education | 2.073 | Children < 6 yrs | 1.026 | | |
| | Zone | 2.446 | Sex | 1.333 | | |
| 2-6 blocks | Total | 7.354 | Total | 5.75788 | Total | 43.725 |
| | Church attendance | 1.015 | | | Children > 19 | 1.977 |
| | Age | 1.1 | | | Education | 1.95 |
| | Zone | 1.273 | | | Occupational status (head of household) | 1.7 |
| | | | | | Children 6-18 | 1.681 |
| | | | | | Zone | 1.339 |
| | | | | | Street distance | 1.966 |

Table 5.9 Continued

| Dependent Variables | Aware Respondents | | Aware Respondents Residing within 300 meters | | Unaware Respondents | |
|---|---|---|---|---|---|---|
| Judged desirability within: | | | | | | |
| 1 block | Total | 19.839 | Total | 17.391 | Total | 54.181 |
| | Sex | 5.939 | Sex | 8.533 | Church attendance | 4.936 |
| | Church attendance | 3.449 | Church attendance | 4.119 | Education | 2.428 |
| | Children > 18 | 3.0 | Children 6-18 | 3.855 | Zone | 2.407 |
| | Income | 1.472 | Income | 2.933 | Children < 6 | 2.126 |
| | Zone | 1.077 | Tenure status | 2.53 | Age | 2.157 |
| | | | Children > 19 | 1.56 | Children 6-18 | 1.402 |
| | | | | | Occupational status (respondent) | 1.161 |
| | | | | | (head of household) | 1.135 |
| Reactions to existing facilities: | Total | 6.56 | Total | 5.649 | | |
| | Church attendance | 2.69 | Facility type | 2.44 | | |
| | Facility type | 1.9 | Sex | 1.564 | | |
| | Age | 1.777 | Children 6-18 | 1.402 | | |
| | | | Church attendance | 1.482 | | |
| | | | Age | 1.224 | | |

[1]Figures are F-to-enter statistics

individual variable. This is not surprising given the good explanatory capabilities of "Total" as observed for the beliefs model. Also, occupational status of the respondent and head of household, level of education, neighbourhood type (suburban or urban) and attendance of religious services are also entered in the majority of the analyses. Other variables entered include age, marital status, number of children, street distance, sex, household income and tenure status.

5.5.1.1 Desirability: 7-12 blocks

Each of the three analyses of judged desirability of facilities located within 7 to 12 blocks from the respondents' homes rendered at least one significant discriminant function. For both aware groups one additional significant discriminant function emerged (Table 5.2). The first discriminant function in this analysis for both aware groups is not dominated by the variable "Total". Instead, the primary discriminant function in this case represents a socio-economic status dimension (Table 5.10).

This dimension predicts, that individuals who are married, have a low level of education and where the occupational status of the head of household is low are more likely to rate the hypothetical facility negatively. As these factors are reversed, the propensity to rate facilities as desirable increases. In addition to these factors, city dwellers , as opposed to suburbanites , are predicted to rate facilities as undesirable by the model which incorporates only those "aware" respondents who reside within 300 metres of a facility. It is not clear, however, whether this distinction is a factor in the

TABLE 5.10

SIGNIFICANT DISCRIMINANT DIMENSIONS
OF THE COMPOSITE MODEL:
JUDGED DESIRABILITY AT 7-12 BLOCKS

| Sample | Variables | Standardized Coefficients | |
|---|---|---|---|
| | | 1st discriminant function | 2nd discriminant function |
| Aware | Age | .6279 | .3402 |
| | Marital status | -1.0039 | .223 |
| | Level of education | - .6106 | -.1474 |
| | Occupational status (respondent) | .3416 | -.3674 |
| | (head of household) | .9840 | -.0571 |
| | Total | .0401 | -.8753 |
| | Zone | -.3670 | -.4916 |
| Aware/300 m | Sex | .4238 | |
| | Age | 1.1439 | |
| | Marital status | -1.2437 | |
| | Children under 6 yrs | - .5499 | |
| | Occupational status (respondent) | 1.2814 | |
| | Total | - .0800 | |
| | Zone | - .3858 | |
| Unaware | Children under 6 yrs | - .0671 | |
| | Children 6-18 yrs | - .2271 | |
| | Level of education | - .2465 | |
| | Occupational status (head of household) | - .2984 | |
| | Total | 1.1231 | |

prediction of attitudes due to the nature of the characteristics of city-dwellers, of the facilities themselves, or a combination of these factors.

Mental health beliefs emerge as the second dimension describing both "aware" groups, but the sole dimension with respect to the "unaware" respondents. Judging from the percent of trace and the increase in values of the Wilk's lambda statistics due to the inclusion of this variable with respect to both "aware" groups, this dimension is of noteable importance in discriminating between the groups. This dimension shows that individuals with negative attitudes toward the mentally ill exhibit slightly undesirable, and to a lesser extent, extremely undesirable attitudes toward community mental health facilities. In addition, isolating "aware" individuals residing within 300 metres of a facility resulted in the emergence of a dimension dominated by regular attendance of religious services and low occupational status. This dimension reflects the same tendencies discussed above.

At a hypothesized distance of 7 to 12 blocks, then, the composite model is very successful in predicting attitudes. Taken together, the socio-economic status and mental health beliefs dimensions are able to correctly classify 85.4% and 90.0% of both aware groups. The predictive capabilities of the beliefs dimension with respect to the "unaware" group is lower, but nevertheless predicted 74.9% of cases correctly.

5.5.1.2 Desirability: 2-6 blocks

Using the 2 to 6 block desirability rating as the dependent variable, one significant discriminant function emerges for each

analysis (Table 5.2). These functions again represent a mental health beliefs dimension, with those holding negative attitudes toward mental illness rating facilities negatively as well (Table 5.11). These models are able to correctly classify between 62.9% of cases ("unaware" group) and 77.8% of cases ("aware" group) correctly.

5.5.1.3 Desirability: 1 block

Two significant discriminant functions emerge from each of the three analyses performed using within one block ratings as the dependent variable (Table 5.2). The most important function in each case consistently represents the mental health beliefs function (Table 5.12). Individuals in both "aware" groups holding negative attitudes toward the mentally ill exhibit a higher propensity to rate facilities slightly or extremely undesirable. However, the interpretation of the functions is made more difficult by the lack of consistency with which other variables are entered. Sex is included in the mental health beliefs dimension for the "aware" groups in addition to "Total". Females are shown to have a higher propensity to rate facilities as undesirable. The same dimension, applied to the "aware" group residing within 300 metres of a facility, however, shows that males and individuals without children between 6 and 18 years, holding negative attitudes toward mental illness, have a higher propensity to rate the facilities as undesirable. Interpretation of the beliefs function discriminating between "unaware" cases is more straightforward; the degree of undesirable attitudes toward a facility increases with intensity of negative attitudes toward the mentally ill. Thus, the

TABLE 5.11

SIGNIFICANT DISCRIMINANT DIMENSIONS
OF THE COMPOSITE MODEL:
JUDGED DESIRABILITY AT 2-6 BLOCKS

| Sample | Variables | Standardized Coefficients |
|---|---|---|
| Aware | Age | .1954 |
| | Church attendance | - .3330 |
| | Total | -1.0536 |
| | Zone | - .3195 |
| Aware/300 m | Total | 18.9882 |
| Unaware | Children 6-18 yrs | - .2474 |
| | Children over 18 yrs | .0126 |
| | Level of Education | - .2369 |
| | Occupational status (head of household) | - .2112 |
| | Total | 1.1918 |
| | Zone | - .0527 |
| | Street distance | .1196 |

TABLE 5.12

SIGNIFICANT DISCRIMINANT DIMENSIONS
OF THE COMPOSITE MODEL:
JUDGED DESIRABILITY WITHIN 1 BLOCK

| Sample | Variables | Standardized Coefficients: 1st discriminant function | Standardized Coefficients: 2nd discriminant function |
|---|---|---|---|
| Aware | Sex | -.5975 | .2380 |
| | Children over 18 yrs | .1256 | -.5743 |
| | Household income | .1248 | -.4121 |
| | Church attendance | -.1505 | -.6613 |
| | Total | -1.3275 | -.3599 |
| | Zone | -.3144 | .0699 |
| Aware/300 m | Sex | -.9119 | .2969 |
| | Children 6-18 yrs | -.8401 | -.0267 |
| | Children over 18 yrs | .1777 | -.5694 |
| | Household income | .3609 | -.4455 |
| | Church attendance | -.2701 | -.6535 |
| | Total | -1.6895 | -.1817 |
| | Tenure status | .5927 | .1323 |
| Unaware | Age | -.0315 | .4829 |
| | Children under 6 yrs | -.1244 | .4705 |
| | Children 6-18 yrs | .1211 | -.2527 |
| | Level of education | .3214 | -.0463 |
| | Occupational status (respondent) | .1589 | .4636 |
| | (head of household) | -.8831 | -.3701 |
| | Church attendance | .0408 | -.6364 |
| | Total | -1.2951 | .1365 |
| | Zone | .1035 | -.4891 |

three analyses of judged desirability at one block exhibit consistencies in the general trends produced in the mental health beliefs dimensions.

A second discriminant function, representing religiosity, is significant for the "aware", "unaware", and "aware" residing within 300 metres of a facility groups, although problems of interpretation arise with respect to the last group. It is clear, however, for the "aware" and "unaware" groups, that regular attenders of religious services are the most likely to rate hypothetical facilities as extremely undesirable. The noteable increase in values of the Wilk's lambda statistics upon the addition of this second dimension suggests that although religiosity is not as important as attitudes toward the mentally ill, it nevertheless represents an important factor contributing to differences in attitudes of individuals toward mental health facilities.

In all cases, the two dimensions are able to discriminate between attitudes toward the hypothetical facilities well. As indicated by the contingency table, only 68.5% of "unaware" cases are correctly classified by these dimensions, but the percentage of correct classifications increased to 89.1% and 94.4% for the "aware" and "aware" and residing within 300 metres groups respectively.

### 5.5.2 Reactions to Existing Facilities

When reaction to existing facilities is used as the dependent variable, the variables which consistently enter into the discriminant functions are: "Total" (attitudes toward the mentally ill), church attendance, facility type and age. In addition to these variables, sex

TABLE 5.13

SIGNIFICANT DISCRIMINANT DIMENSIONS
OF THE COMPOSITE MODEL:
REACTIONS TO EXISTING FACILITIES

| Sample | Variables | Standardized Coefficients |
|---|---|---|
| Aware | Age | .4923 |
| | Church attendance | .2912 |
| | Total | -.7897 |
| | Facility type | .4769 |
| Aware/300 m | Sex | .3993 |
| | Age | .4017 |
| | Children 6-18 yrs | -.3991 |
| | Church attendance | .0833 |
| | Total | -.7171 |
| | Facility type | .4615 |

and number of children between the ages of 6 and 18 years are entered into the analysis of the "aware" group residing within 300 metres of a facility (Table 5.9).

Both analyses produce the significant discriminant fucntion in which attitudes toward the mentally ill is the strongest discriminator (Table 5.8). Thus the emergence of the mental health beliefs dimension is as clear in these as in previous analyses, and may be interpreted in the same way: individuals holding favourable attitudes toward the mentally ill have a higher propensity to rate facilities favourably, while those individuals with negative attitudes are more likely to be opposed to the community mental health facilities they are aware of (Table 5.13). The predictive capabilities of this composite model are not as high as the corresponding models of judged desirability, yielding only 58.2% and 67.9% correctly classified cases.

### 5.5.3 Summary

The composite models, which incorporate the best combinations of explanatory variables from each of the individual models tested, are the best predictors of both judged desirability of a hypothetical mental health facility and reactions to existing facilities. The latter measure of attitudes, however, yields weaker results than judged desirability of facilities, consistently classfying a lower percentage of cases accurately. The mental health beliefs dimension emerges as the dominant explanatory factor in all of the analysis, but in addition, socio-economic status and religiosity are factors which influence the judged desirability of community mental health facilities.

## 5.6 Conclusions

Two types of conclusions may be drawn from the results of the data analysis. The first and most important concern is the relative significance of the five models tested. Also, differences in the predictive capabilities for the various population sub-groups and dependent variables may be discerned.

The results show that the Beliefs Model is the best individual predictor of attitudes toward community mental health facilities. Within this model, the most important measure of "beliefs" is an individual's attitudes toward the mentally ill, although religious beliefs are also an important factor of response to either existing or hypothetical facilities.

The demographic and socio-economic models are approximately equally successful predictors of response to mental health facilities, but produce only one significant discriminant function each. Age and marital status with respect to the demographic model, and occupational status and education with respect to the socio-economic model are the most important variables individually as well as within the discriminant functions. Taken together, however, the results suggest that neither the demographic nor the socio-economic models are effective predictors of attitudes toward mental health facilities.

The least successful model of community attitudes is the distance model. Although ambiguities concerning "awareness" as reported by respondents in the initial analysis seem to be a contributing factor to the failure of the model to correctly predict responses, even analysis of a small subset of cases, where no ambiguities with respect to

awareness are present, fail to give significant predictions of attitudes.

The composite model incorporates predominantly beliefs, as well as demographic and socio-economic variables. The variables most commonly entered into the models include attitudes toward the mentally ill, church attendance, occupational status, level of education and neighbourhood type (suburban or urban). Thus, incorporating the most effective indicators of attitudes from each of the individual models results in discriminant dimensions representing attitudes toward the mentally ill, religious beliefs and demographic/socio-economic factors which are capable of classifying up to 94.4% of the cases correctly.

Differences in predictive capabilities for the different dependent variables and the various population sub-groups may also be observed. All analyses relating to the judged desirability of facilities yield consistently stronger results in terms of the percentage of cases correctly classified than the corresponding models of reactions to existing facilities. Furthermore, there exist differences between the three judged desirability ratings. Ranking the outcomes based on the percentage of correctly classified cases shows that responses based on a hypothesized distance of 7 to 12 blocks are the most accurately predicted. Perhaps it is at this distance that the impact of the externality is best defined. Predictions are weaker and approximately equal for ratings for the 2 to 6 and within 1 block distances (Table 5.14).

Generally, responses of the "aware" group render the best results in terms of the predictive accuracy of the discriminant functions (Table 5.15). Analysis of the "aware" group residing closer to

TABLE 5.14

RANKED EFFECTIVENESS OF THE MEASURES OF JUDGED DESIRABILITY

| | 7-12 blocks | 2-6 blocks | 1 block |
|---|---|---|---|
| Demographic Model | | | |
| Aware | 1 | 3 | 2 |
| Aware/300 m | 1 | 2 | 3 |
| Unaware | 1 | 2 | 2 |
| Socio-economic Model | | | |
| Aware | 1 | 2 | 3 |
| Aware/300 m | 3 | 2 | 1 |
| Unaware | 2 | 1 | 3 |
| Beliefs Model | | | |
| Aware | 1 | 3 | 2 |
| Aware/300 m | 3 | 2 | 1 |
| Unaware | 1 | 2 | 3 |
| Distance Model | | | |
| Aware | 1 | 3 | 2 |
| Aware/300 m | 1 | 2 | 3 |
| Composite Model | | | |
| Aware | 2 | 3 | 1 |
| Aware/300 m | 2 | 3 | 1 |
| Unaware | 1 | 3 | 2 |

TABLE 5.15

RANKED EFFECTIVENESS OF THE POPULATION SUB-GROUPS OF JUDGED DESIRABILITY

| | Aware Respondents | Aware Respondents Residing within 300 m of a facility | Unaware Respondents |
|---|---|---|---|
| Demographic Model | | | |
| 7-12 blocks | 1 | 3 | 2 |
| 2-6 blocks | 2 | 1 | 3 |
| 1 block | 1 | 2 | 2 |
| Socio-economic Model | | | |
| 7-12 blocks | 1 | 2 | 3 |
| 2-6 blocks | 2 | 1 | 3 |
| 1 block | 2 | 1 | 3 |
| Beliefs Model | | | |
| 7-12 blocks | 1 | 3 | 2 |
| 2-6 blocks | 1 | 2 | 3 |
| 1 block | 1 | 2 | 3 |
| Distance Model | | | |
| 7-12 blocks | 1 | 2 | - |
| 2-6 blocks | 2 | 1 | - |
| 1 block | 1 | 2 | - |
| Composite Model | | | |
| 7-12 blocks | 2 | 1 | 3 |
| 2-6 blocks | 1 | 2 | 3 |
| 1 block | 2 | 1 | 3 |

a facility resulted in a slightly lower overall proportion of correctly classified cases, although this difference is not great. The unaware group consistently produced the lowest percentage of correctly classified cases than the other two subroups of the sample population residing within an area with a community mental health facilities. This result suggests that more systematic attitudes may be observed among those who are familiar with the facilities and know what they are like.

In conclusion, there exist discernable differences with respect to the predictive capabiliites of the discriminant functions, dependent on the dependent variable used and the groups analysed, as well as between the five models tested. The hypothesis that demographic, socio-economic and distance models are good predictors of attitudes toward community mental health facilities is not supported. The Beliefs model and Composite model, on the other hand, give relatively accurate predictions of reactions to facilities.

# CHAPTER SIX

# CONCLUSIONS

The empirical findings of this study provide considerable insight into the manner in which the characteristics of individuals affect response to community mental health facilities. Although previous research indicates that these factors play an important role in determining attitudes toward mental illness, the evidence presented in this study suggests that these same factors do not necessarily influence reactions toward existing or hypothetical community mental health facilities. In this concluding chapter, a summary of the major findings of this study are reported. Following this, the advances represented by this study and the policy implications of the results are discussed.

## 6.1 Discussion of the Major Findings

Overall, the findings indicate that not all of the hypothesized relationships can be conclusively confirmed. In this section they are discussed with respect to each of the hypotheses separately.

In the first instance, it was hypothesized that attitudes toward community mental health facilities vary significantly with the demographic characteristics of individuals. This hypothesis can be only weakly confirmed. Marital status and number of children are not significantly related to reactions to the facilities. Previous studies, however, have

established a link between these variables and attitudes toward mental illness. Age and,to a lesser extent,sex are significantly related to response to community mental health facilities.

Linear combinations of the demographic variables produce only one statistically significant result. In this case age and sex are the important explanatory variables, with older males having a relatively higher propensity to rate mental health facilities as extremely undesirable. Thus although it has been shown that demographic characteristics are in some cases related with attitudes toward community mental facilities,their overall impact on response is limited.

The impacts of socio-economic characteristics upon attitudes toward mental illness, as reported in the literature,are not demonstrated to be as strongly related to response to community mental health facilities. Thus the hypothesis that attitudes toward these facilities are positively correlated with socio-economic characteristics can also be only weakly confirmed.

Occupational status of the head of household and respondent, and level of education individually exhibit significant relationships with attitudes toward community mental health facilities. Other socio-economic variables, income and tenure status, are not significant. When these characteristics are combined linearly, only one analysis is significant,with occupational status of the head of household and level of educational status of the respondent emerging as the important factors. These results show, that respondents of higher occupational and educational status have a greater propensity to rate hypothetical facilities as undesirable. It may be concluded that although the

direction of these results is consistent with those of previous studies linking socio-economic characteristics with attitudes toward mental illness, the overall explanatory powers of these factors with respect to the actual rating of community mental health facilities is low. This may confirm the hypotheses of some researchers that although higher socio-economic status may predispose individuals to more enlightened attitudes toward mental illness, their actual responses to the mentally ill may not be affected.

No evidence emerges to confirm the hypothesis relating proximity to a community mental health facility and attitudes toward it. Although it was hypothesized that the incidence and degree of negative attitudes toward the facility would increase with proximity, analyses of the locational variables either individually or in combination produce no significant results.

Lastly, it was hypothesized that attitudes toward community mental health facilities vary significantly with individuals' beliefs. This relationship is strongly confirmed in this study. Clearly, the most important belief is an individual's attitudes toward mental illness. It is consistently demonstrated that sympathetic attitudes toward mental illness are positively related to attitudes toward hypothetical or existing mental health facilities.

The effect of religious beliefs is considerably weaker. Few statistically significant relationships emerge when this variable is considered individually. In those cases where religious beliefs emerge as the dominant factor among a linear combination of the beliefs variables the overall predictive contribution of the discriminant

dimension is marginal in comparison with the mental health beliefs dimension. Controlling for the differences in attitudes attributed to attitudes toward mental illness, regular attenders of religious services are apt to be in favour of community mental health facilities.

The best predictions of attitudes toward community mental health facilities are achieved using a combination of demographic, socio-economic, distance and beliefs variables. Consistent with the results reported above, attitude toward mental illness is entered as the dominant variable in every analysis. Other, less important factors entered into the majority of the analyses include age, occupational status, level of education, neighbourhood and facility type and attendance of religious services.

Three distinct dimensions emerge as predictors of reactions to community mental health facilities when all variables are considered in combination. The first and most important, the mental health beliefs dimension emerges in every analysis. Clearly, this is the most powerful discriminator of attitudes, showing that individuals who are positively disposed toward mental illness are more accepting of hypothetical or existing community mental health facilities.

The other two dimensions - socio-economic status and religiosity - emerge less frequently, and are more limited to certain sample groups in their abilities to discriminate between facility attitudes. The socio-economic dimension discriminates between attitudes on the basis of marital status, eduction and occupation, and in one case, neighbourhood type as well. It is predicted that when the occupational status of the head of household is low, married individuals with a low level of

education, (residing in the central city) have a higher propensity to object to community mental health facilities,a result consistent with previous findings. This dimension explains a larger proportion of variance among attitudes, but was found to be applicable only to judged desirability of facilities within 7 to 12 blocks.

Thirdly,the religiosity dimension is of least importance and is applicable only to the analysis of judged desirability of facilities within one block. These results suggest that regular attenders of religious services are more likely to rate hypothetical facilities as undesirable. Although this result is opposite to patterns exhibited by the independent beliefs model, it is statistically stronger and furthermore, consistent with those of previous studies.

Clearly, the general results indicate that attitudes toward mental illness are the most direct link to community response to mental health facilities. Demographic and socio-economic characteristics and religious beliefs, which have been extensively reported in the literature to affect attitudes toward mental illness,are only weakly and indirectly linked to reactions to hypothetical or existing community mental health facilities.

In conclusion , only the hypothesis that an individual's beliefs are directly related to attitudes toward mental health facilities can be confirmed with certainty. The effects of demographic and socio-economic characteristics are confirmed only weakly, while the hypothesized relationship between proximity and attitudes toward community mental health facilities must be rejected.

## 6.2 Advance on Previous Studies

The findings presented in this study represent significant advances on research completed to date in the area of mental health care planning, which encompass both theoretical and empirical considerations. On one hand, these findings bring us one step closer to the formulation of a theory of neighbourhood reactions to community mental health facilities. The relationships between individual characteristics and reactions to facilities had not been previously examined. Of special interest was the hypothesized effects of distance, which although considered in the theoretical literature, had not been investigated empirically. On the other hand, the treatment of the explanatory variables in this study may also be regarded as an improvement on the research completed to date. A considerably wider range of variables has been considered. Furthermore, each set of these were examined individuallly as well as in linear combinations. Finally, the interaction between the four major factors identified *a priori* has been recognized and examined by linearly combining the total variable set.

## 6.3 Policy Implications

The results of this study provide definite implications for policy formulation and further research. Generally, three major points can be made. Firstly, the confirmed effect of attitudes toward mental illness on reactions toward community mental health facilities suggests a methodology for predicting the potential response of residents toward the introduction of a mental health facility in their neighbourhood.

The second implication of these results is in terms of the profiles of accepting and rejecting communities. This takes on added importance, given the amendments being made to restrictive zoning regulations which allow mental health facilities into residential neighbourhoods, as can be seen in Hamilton and Toronto. At the individual level, utilizing profiles of accepting or rejecting communities which incorporate immediately observable population characteristics such as demographic or socio-economic variables, is not supported by this analysis. However, for planning purposes it may be of greater importance to construct neighbourhood profiles at the aggregate, rather than the individual level, and there exists evidence which confirms the valdity of such an approach using census tract data (Dear and Taylor, 1979).

Thirdly, the very vague awareness of small-scale community mental health facilities in one's own neighbourhood exhibited by respondents suggests that opposition to community mental health centes may be overanticipated by planners and other officials. Further research in this area is recommended, since increased understanding of the effects of physical form, facility type and function with respect to community characteristics on awareness and reactions, could render additional implications for the location of noxious facilities. Taken together, such policy considerations may lead to the successful social integration of the mentally ill by means of community-sheltered care.

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# APPENDIX

## SURVEY QUESTIONNAIRE

SURVEY RESEARCH CENTRE
INSTITUTE FOR BEHAVIOURAL RESEARCH
YORK UNIVERSITY

80

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

SURVEY RESEARCH CENTRE
INSTITUTE FOR BEHAVIOURAL RESEARCH
YORK UNIVERSITY

81

L A B E L

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. |

The mentally ill should not be denied their individual rights.

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

Mental health facilities should be kept out of residential neighbourhoods.

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

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

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

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

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

The mentally ill should not be given any responsibility.

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

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

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

Virtually anyone can become mentally ill.

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

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 | _____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 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 THREE EFFECTS YOU REGARD AS THE MOST IMPORTANT.

92

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 neighbourhood? 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 | ___ ___ |

15. 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?

_____

_____

_____

95

C.5

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

| | |
|---|---|
| Yes | 1 |
| No | 2 |
| Don't Know | 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.*

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