

McGILL UNIVERSITY

ETHNIC ORIGIN AND THE USE OF SOCIAL SERVICES:
THE EXPERIENCE OF A HOSPITAL SOCIAL SERVICE DEPARTMENT

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by

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Abstract

The importance of ethnic origin as a factor in delivery of social services has been recognised internationally as relevant at different levels of organization. This study examined 500 dossiers, a random sample of clients referred in 1985 to one hospital social service department in Montreal. Age, gender, status of children, referring hospital service, problems experienced and involvement with community social service agencies were found to be related to ethnic origin, using the Kruskal-Wallis and Pearson chi-squared test. After accounting for differences between ethnic groups in age, type of problem and referring hospital service by the use of logit analysis, ethnic origin significantly affected the chances of involvement with Social Service Centres and Departments of Youth Protection. Among the implications of the results for social services in Montreal were the need for the following: recognition that some ethnic minorities have very different social service needs than the larger ethnic groups; development of skills in cross-cultural social service provision because of the clientele's varied ethnic background; consideration of the impact, desirability and viability of ethnic/socioculturally specific agencies and services. The urgent need for further research is emphasised.

Résumé

Il a été reconnu internationalement que l'origine ethnique est un facteur important dans le recours aux services sociaux et ce, à différents niveaux d'organisation. Pour cette recherche, 500 dossiers pris au hasard des cas référés en 1985 au Département de service social d'un hôpital montréalais ont été étudiés. En utilisant les tests de chi-carré de Kruskal-Wallis et Pearson, on a pu voir que l'âge, le genre le nombre d'enfants, le recours aux services hospitaliers, les problèmes vécus et l'implication des agences communautaires de services sociaux ont un lien avec l'origine ethnique. En utilisant l'analyse logistique, après avoir fait le compte des différences entre les groupes ethniques par rapport à l'âge, le genre de problèmes et le recours aux services hospitaliers, on s'aperçoit que l'origine ethnique est un facteur significatif de devoir avoir recours aux centres de services sociaux et au Département de protection de la Jeunesse. D'après ces résultats, l'implication des services sociaux à Montréal est nécessaire afin de répondre aux besoins suivants: reconnaître que certaines minorités ethniques ont recours aux services sociaux pour des raisons et des besoins différents que d'autres groupes ethniques plus grands; que les services sociaux doivent développer leurs connaissances des différentes cultures du fait que l'origine ethnique de leur clientèle est très variée; qu'il leur faut prendre en considération l'impact, le désir et la viabilité des agences et des services prodigués par elle, sur le plan ethnico-socio-culturel. Il y a un besoin urgent de faire plus de recherches à ce sujet.

General Background

Ethnic and cultural differences are important in the provision of social services at a number of different levels. It can be argued that this is common to all Western democracies attempting to provide services to multi-ethnic communities within the context of some form of welfare state. Therefore themes and issues relevant to the situation in Canada and Quebec can be seen in literature from the United States of America (USA), the United Kingdom (UK) and Australia. A common aim, that is, the protection of the most vulnerable members of society, can be said to underly the provision of social services and social work intervention as part of a welfare state in Western democracies, side by side, and sometimes conflicting, with society's need to control or limit the behaviour of individuals and groups. Differences between groups in a multi-ethnic society therefore add an extra dynamic to the situation in a number of different ways. Underlying this in Quebec, as in differing forms in other societies, the law aims to provide equal access, without discrimination on ethnic, racial or other grounds, to appropriate health and social services (Boucher 1988).

At the level of the client/worker relationship, ethnic and cultural differences raise the necessity of understanding different belief systems, family structures, reactions to psychosocial stress and so forth. The need for workers of other ethnic backgrounds to understand these, and accordingly modify modes of intervention, has been widely discussed both in social work literature and that of related fields (Ahmed, Cheetham,

Small 1986; Christensen 1986a, 1990; Jenkins 1981; Lebel 1986; McGoldrick et al 1982; Pedersen 1981; Rack 1982; Rutter et al 1975;). The ways in which social services are organised and delivered have implications for ethnic minorities and the ways in which they can ensure their needs are met. For example, Jenkins (1981) found differences in attitude between black social workers in the USA and in the UK towards the separate provision of services for ethnic minorities, which could be said to reflect different political structures and their relation to the provision of social services. The organisation of services in Quebec, in particular Montreal, and some of the possible implications for ethnic minority clients, has been the subject of recent debate (Sirros 1987).

On a wider level, the role of ethnicity in societies may differ. These differences may reflect differing tensions between forces towards assimilation and cultural pluralism, variations in the social, economic and political systems and/or systemic inequalities between different ethnic groups. This can be highlighted by examining the differences in literature from the USA, Canada and the UK which is nonetheless dealing with common issues, for example, social work with black families. On examination, these differences can give some important insights into differing historical contexts and have implications for the provision of social services. Differences in means or ease of access by ethnic minorities to decision-making structures may lead to different perceptions of the best way to achieve

appropriate services. This may be particularly true in the arguments for and against ethnically or culturally specific health and social service agencies (Jenkins 1981).

Related to this are the particular position and problems of visible minorities, and the existence of racial discrimination in society which is documented in Britain and Canada, as well as the USA (Winn 1985; Brown 1986). A related issue relevant to the provision of social services is the perception and expectation of discrimination by members of visible minority groups, for which there is evidence in Canada (Christensen 1986 (b); Breton 1981). Conflicts between group and individual rights inherent in attempts to counteract discrimination based on ethnic or racial origin may add another dimension to the tensions outlined earlier between the needs of individuals, groups and the wider society already intrinsic to social service provision. Even reinforcing pluralistic, as opposed to assimilationist, tendencies consistent with a philosophy of "multiculturalism" may also tend to alter the balance between conflicting interests.

Summary of problems and their suggested solutions

A review of the literature suggests a rough typology of possible problems facing government social service agencies and their actual or potential ethnic minority clients:-

1. problems resulting from the legal and political framework of delivery of services, and/or the established system of priorities reflecting the demographic composition of the

dominant ethnic group(s) (Jenkins 1981; Horn 1982; Lebel 1986; Sirros 1987).

2. problems resulting from misunderstanding or ignorance of cultural differences, whether in family life or modes of expression of psychosocial stress, and the consequent need for majority group workers to adapt their models of intervention (Ahmed et al. 1986; Christensen 1986 (a), 1989; Lebel 1986; McGoldrick et al 1982; Rack 1982; Rutter et al 1975; Sirros 1987; Trinh 1986;).

3. problems for some ethnic groups of racial discrimination and/or ethnocentric attitudes, to which social service agencies and workers are not immune, and perceived discrimination by some ethnic groups possibly leading to a reluctance to use services (Ahmed et al 1986; Breton 1981; Christensen 1986 (b), 1989; Jenkins 1981). Also related to this, and to tensions around the acceptability of degrees of cultural pluralism in a society, are the extent to which already existing legal sanctions against direct or indirect discrimination are invoked (Horn 1982).

Using the categories already specified, the literature seems to be more extensive in dealing with problem category 2 than with the others. That is, there is a more extensive body of literature dealing with the importance of ethnic differences at the individual client/worker level of service provision than with the administrative and wider political levels.

A review of the literature also provides a gamut of proposed responses to some of the above problems, for example:-

1. employment of ethnic minority workers by a variety of means, and for a variety of purposes, which tends to reflect wider debates about such issues as affirmative action programmes, indirect or structural discrimination and so forth.

2. arguments for and against the provision of ethnically based social service agencies, or provision of ethnically or culturally-specific services within agencies, again reflecting debates and issues within wider society.

3. emphasis on the importance of recruiting and training workers willing and able to work cross-culturally in a meaningful way.

All of the above have been suggested as appropriate responses in Quebec, most specifically in Montreal (Sirros,1987). The particular situation in Montreal will now be examined more closely.

Social services and ethnic minorities in Montreal

The recognition of ethnic/sociocultural differences are partially institutionalised into the delivery of social services by the sociocultural, as well as geographical, division between the three social service centres; Centre des Services Sociaux

Montréal Métropolitain (CSSMM), Centre des Services Sociaux Ville Marie (CSSVM) and Centre des Services Sociaux Juifs à la Famille (CSSJF). A review of the literature shows a focus of discussion in Quebec, dating back to the 1970's, to be a notion of "accessibility" (Boucher 1988; Ottman-Clish 1986; Sirros 1987). Ottman-Clish has reviewed the Quebec government's policy regarding the health and social service needs of ethnic minorities. This focuses on the need for agencies to be accessible to ethnic minorities, to the point of accessibility being highlighted in the title of the government's committee of inquiry into the relationship between social services and ethnic minorities.

Despite some general examinations of the use of government social service agencies by certain ethnic minorities in Montreal (CSSVM 1986; Bayreuther & Arczy 1983), there has not been a published detailed study. The Comité sur l'Accessibilité de Services Sociaux du Réseau aux Communautés Culturelles (Sirros Committee) seems to have been unable to obtain figures detailing the use of government health and social service agencies by ethnic minorities (Sirros 1987). Horn's (1982) study of Asian and non-Asian referrals to social service agencies in Bradford, England showed differences between the two communities related to the priorities and framework of delivery of services, as well as perceived discrimination. In Montreal, while there have been attempts to look at perceived discrimination as a potential barrier to access on the part of some ethnic groups (Christensen 1986b), there has not been a systematic study of users of social

services and their needs with ethnic origin as a focus. The difficulty of defining and implementing appropriate changes to services in the absence of such information is apparent. This is especially crucial given the wide range of interpretations by agencies of the Quebec government's policy of "accessibility" found by Ottman-Clish (1986). These interpretations ranged from a simple need for translators when required to a complicated concept of "cultural comfort" to be incorporated into all services offered. Easily available factual information is also important given the influence unconscious prejudices and ethnocentric attitudes can exert if not tempered by observable information (Rutter et al 1975). The importance of inter-group comparisons, and the consideration of other factors which may confound the effects of ethnicity, in any research have been discussed by Driedger and Chappell (1987).

Area of study: the clients of a social service department in an acute care general hospital

As already discussed, there is a lack of information about the actual use of, and requests made to, government social service agencies by members of ethnic minority groups. It was therefore decided to focus this study on the clients of one social service agency, with particular regard to their ethnic origin and its relationship to other factors, such as demographic differences, problems presented to the agency by the clients and involvement with other health and social service agencies. In this way, comparisons could be made between clients of different ethnic

backgrounds, the main purpose of which would be descriptive, but which also might present some factual basis, if only in terms of identifying possible areas of research, to a discussion of accessibility, as had been attempted by Horn (1982).

There is evidence to suggest that hospital social service departments in Quebec are an important source of access to social services for the population in general. The numbers of both cases carried by, and new referrals to, hospital social service departments have increased in recent years, whilst those in other access points in the social service centres have remained static or declined (Ministère des affaires sociales (MAS) 1985). Over a similar time period, CSSVM found that 60% of their ethnic minority clients received services from hospital social service departments, as opposed to 29% of their majority group clients (CSSVM 1986), suggesting this point of access to be especially important for ethnic minority clients, although the reasons for this were unknown.

The particular hospital department chosen for study is situated in the area of Montreal where most new immigrants now settle (Blanc 1986). The subjective impression of social workers in the department has been that increasingly high numbers of requests for service from certain parts of the hospital have been for clients from ethnic minorities and/or recent immigrants. Two relatively recent studies of the department and the system to which it belongs have not looked at ethnic origin or recency of immigration in any detailed way (Bayreuther & Arzy 1983;

Kislowicz & Aronson 1980). In general terms, the place and importance of descriptive studies in health care social work, and their role in examining patterns of service request and provision, in the wider community as well as within the hospital, has been discussed (Berkman & Weisman 1983). It was therefore felt, that although not a random sample of social service users of the whole system, a study of clients of this particular department might provide some insight into the social service system and its use by ethnic minority clients, especially in light of the extreme paucity of data available.

Objectives

There are two general objectives to the study:-

1. to describe the referrals over a period of time using such variables as ethnic origin, age, type of problem presented and other variables described in detail later. The object of this is to provide objective information, the lack of which has already been discussed.

2. to study an important aspect of social work services in an acute care general hospital, namely referral to community agencies and resources, with the objective of assessing whether there appear to be differences between clients in access to social service agencies which could be due to ethnic origin.

Method

A study of dossiers of a random sample of clients referred to the social services department was chosen as a means of gathering information pertinent to the research questions. This method of collection of data for analysis had advantages in terms of ease of access to a large sample for analysis, with minimal disruption to workers and the agency's clients, but posed a number of restrictions on the quality and type of information available for analysis. These will be discussed in detail throughout, wherever they are relevant to the methods of data collection and interpretation of the findings. The lack of disruption this method entailed led to easy granting of permission to undertake the study. It was decided to exclude from the study any consideration of the actual process between workers and clients, due to the obvious limitations of the method of data collection, and to concentrate instead on recording a number of variables listed below.

Trial Collection of Data

A trial collection of data was designed using 20 closed dossiers chosen at random. This process was used to verify whether the assessment of the amount of information likely to be available for the proposed study was accurate, and also to compare the efficacy of two possible methods of collection and coding of data concerning clients' problems, the results of which are discussed below.

Sample

It was decided to take a random sample of the referrals to the department made approximately two to three years before the data collection commenced. It was hoped that this would lead to as large a proportion as possible of the sample consisting of closed cases where the dossier had been completed and refiled, and to which the researcher had easy access. From a total number of 1993 dossiers opened or reopened in 1985, a random sample of 500 was selected using the Minitab sample function (Minitab 1986). Data from a total of 441 dossiers from this sample were used in the statistical analysis.

The missing 59 dossiers from the random sample consisted of closed dossiers not returned to the central files. It is a reasonable assumption, based on the researcher's informal knowledge of the agency, that these dossiers were likely to consist of mainly brief interventions by social workers that did not lead to referrals to other agencies. This can be supported by studies which show the high incidence of such contacts in the health service social work field (Kislowicz and Aronson 1980). It was also supported by the trial data collection, which showed problems in obtaining resources being documented. Efforts were made to include all dossiers of clients receiving service from the hospital social service department at the time of the study, as they could represent a sub-group of clients with chronic, complex or recurring problems, possibly including those for whom there was, or is, a particular lack of resources in the

community.

The variables collected were:

1. age at time of referral
2. gender of client
3. postal code of residence at time of referral
4. social worker involved at time of referral
5. hospital service from which referred
6. some indicators of family status and living arrangements
7. source of income
8. employment status
9. place of birth
10. length of residence in Canada where relevant
11. language knowledge (in particular whether there was lack of knowledge of French and English)
12. ethnic origin
13. up to 10 problems experienced by the client (the categorisation and coding of which are discussed later)
14. the community agencies the client was referred to, or involved with, if any
15. the services requested for the client
16. whether the client had been re-referred to the department by the time the study was undertaken
17. problems of the client at the time of re-referral

Method of Recording Clients' Problems

Two methods of categorising and recording clients' problems were used during the trial data collection. The first was

developped specifically for a study of referrals to the social work departments of the hospitals in the social service system being studied (Kislowicz and Aronson 1980). It consists of sub-categories within three main headings:

1. problems in patient's or family's adjustment to illness.
2. problems in patient's or family's adjustment to hospital setting.
3. psychosocial problems existing before illness.

The second method used was a problem list developed in a hospital social work department to categorise the requests patients and their families make of social workers in health care settings which has been widely used and validated (Berkman & Weissman,1983). This was the method chosen after the trial data collection.

The full description of the problem categories used is in Appendix 1. The 29 categories of problems were combined into two categories to facilitate multivariate statistical analysis, one consisting of broadly hospital and health related problems, including the need for placement on health grounds, the other consisting of problems concerned with support or services needed in the community. Examples of the problems included in each category were as follows:

1. health and hospital related problems. This includes coping with grief reaction and bereavement, the need for longterm

institutional care and patients and/or families anxious or depressed about illness.

2. problems related to support needed to live in the community, or associated with living in the community, not necessarily directly caused by health problems. This includes categories such as problems with interpersonal relationships (e.g. marital problems, school problems or problems with the care of children), the need for legal services , homemaker services and visiting nurse services;

The cases in the sample were divided into three exclusive categories of type of problem experienced for multivariate analysis, the third category consisting of clients having a mixture of the two problem groupings detailed above and in Appendix 1. In order to clarify the differences between these three groups, it is helpful to consider some examples. A mother with a sick baby, anxious about his/her health and needing supportive counselling, would be included in the first category, that of cases with health-related problems. If she also had financial or family problems, she would be included in the third, or mixed, category of cases. The mother of a healthy baby who had financial or family problems would be included in the second category, those cases whose problems were not specifically health or hospital-related.

Categories of Agencies and Services Requested

The categories of agency and service were broadly defined in

advance, based on the researcher's knowledge of the agency, and were refined after the trial data collection when other categories were added.

The 11 categories recorded in the data collection were as follows:

1. convalescent hospital (conv.hosp.).
2. Centre d'Accueil Hopitalier (CAH) or Centre d'Hopitalier des Soins Prolonges (CHSP).
3. Centre des Services Sociaux (CSS)
4. Youth Protection (DYP)
5. Centre Local des Services Communautaires (CLSC)
6. voluntary agencies, that is, possibly government funded, but not government run, non-profitmaking agencies. (vol.agencies)
7. other statutory agencies, that is, not specifically health or social service agencies; for example, welfare, immigration or legal aid (other stat.).
8. no agency
9. private foster-home (adults or elderly) (priv.f-h.)
10. hospital services, whether as inpatient or outpatient, in any acute care hospital, but excluding convalescent hospital and chronic care institutions (hosp.servs.).
11. other private agencies, for example, private home-maker and/or nursing service (other priv.).

For the purpose of statistical analysis, the number was reduced to 10 by combining the CSS and DYP categories, as there

seemed to be some overlap and confusion between the two categories in recording in the dossiers, especially when clients were already involved with an agency. Only four clients were recorded as explicitly being involved with youth protection. Up to three categories of agency were recorded for each client, and the categories used for analysis are therefore non-exclusive. In addition, where clients were already involved with an agency, this was recorded as though the client was referred to it. This was done to give a more accurate picture of involvement with agencies. During the trial data collection, it became apparent that to exclude clients already involved with agencies, who would continue to receive services from them on leaving the hospital or while continuing to be an outpatient, would give a distorted picture of involvement with community agencies, a major focus of the study.

The categories of services requested for clients were as follows:

1. convalescence
2. long-term institutionalisation, including long-term stay in foster/group home for adults/elderly.
3. palliative care unit
4. home supports
5. financial aid
6. social work intervention and/or counselling
7. private home supports
8. legal or advocacy services
9. other

Up to three categories of service requested were recorded for each client.

Methods Used for Collecting Data from Dossiers

A data collection sheet was designed to record the values for the variables listed above. The conventions that had to be established for the coding of some of the variables are listed in appendix 2. The way in which coding of ethnic origin was carried out is discussed below.

Ethnic Origin and the Sample

Determining ethnic origin.

The information available in the clients' dossiers was used to determine and record the ethnic origin of the sample. A direct statement of ethnic origin was usually included as part of the description of the client and his/her difficulties, indeed more frequently than had originally been anticipated. Where this direct definition was not available, other information contained within the clients' dossiers was used to determine ethnic origin. For example, references to a client's description of his childhood in Italy, an Italian name and Roman Catholic religion would make ethnic origin fairly unambiguous, as it would for a Yiddish speaking Holocaust survivor. Care was taken to ensure that, at no time, involvement with an agency, voluntary or otherwise, was used to influence decisions about ethnic origin. The family, or maiden name, of clients were not used at this stage, except as supporting evidence for several other factors.

When there was any doubt about ethnic origin, it was coded as unknown.

Descriptions used of clients' ethnic origin.

The descriptions used basically correspond to those of Statistics Canada (Kralt 1986), but with some changes made to reflect aspects considered important within the agency. In particular, because of important cultural and linguistic differences, Sephardic Jews were recorded as a separate ethnic group from Ashkenazi Jews, that is, Jews of European origin who were considered very likely to be the largest group in the sample. The category of British origin Canadian was perhaps the least satisfactorily defined, consisting of those clients known, or assumed, to be English-speaking, non-Jewish and born in Canada.

Broader ethnic categories used for analysis.

For the purposes of statistical analysis, five broad groups of ethnic origin were used. British origin (Brit.Can.) and French Canadians (Frch.Can.), and Ashkenazi Jews (Ashk.Jew), were used as defined in the original recording of ethnic origin. The remainder of the sample were divided into two groups, visible minorities (vis.mins.), as defined by Statistics Canada (Kralt 1986) with the addition of Inuit clients, and the rest, referred to as smaller ethnic groups (smllr.grps.).

Recoding of unknown ethnic origin.

From a sample of 441 cases, 37 were originally coded as

being of unknown ethnic origin, that is , less than 8.5% of the sample. This percentage was much lower than originally anticipated. In view of the low proportion, it was decided to guess the ethnic origin of this group by the use of their family name at birth, in conjunction with their mother's maiden name and place of birth, if known. Of this group of 37 cases, 19 were finally judged to be British origin Canadians, 15 were Ashkenazi Jews, and one each were judged to be Italian, Estonian and Polish.

Tests of Statistical Significance Used in Analysis

The SPSS/PC+ package (SPSS Inc. 1986) was used to produce a series of crosstabulations of ethnic origin groupings and other variables. The Pearson chi-square and Kruskal-Wallis tests were administered to assess the level of significance of associations wherever this could be meaningful.

Where expected cell frequencies did not conform to the guidelines suggested by Agresti and Finlay (1986) for the reliability of the chi-square test (that is, expected frequencies should be at least 5 in 75% of cells, and should exceed 1 in all cells), this has been noted. Analyses where any expected cell frequency was less than 1 has not been reported, except where analyses of clients from obstetrics and other services have been analysed separately. Those with expected cell frequencies of less than 5 in more than 25%, but not more than 50%, of cases have been reported, to be noted with caution, because of the

opinion of some statisticians that the above standard (Agresti & Finlay 1986) is considerably too cautious, and that even analyses containing expected cell frequencies of less than 1 can be considered (Snedecor & Cochran 1967).

Both the 29 problem categories and the 11 agencies are non-exclusive categories. Separate crosstabulations were therefore made of each problem and each agency against ethnic origin. The relationship between ethnic origin groupings and involvement with agencies was analysed, whilst controlling for the effects of other "confounding" variables, which could be associated with ethnic origin and also affect agency involvement. In particular, age, problem category and sometimes hospital service were thought likely to confound the association between ethnic origin and agency involvement. A series of logit analyses were administered using the GLIM (Generalised Linear Modelling) package (N.A.G. 1985) for each agency in turn, with age (2 categories), problem category (3 groups) and sometimes hospital service (5 categories) included as well as ethnic origin.

Logit analysis is a method analogous to multiple regression for use when the dependent, or response, variable is dichotomous and there are independent categorical variables. In this study, whether or not a client is involved with a particular type of social service agency was the response variable and problem category was one of the categorical independent variables. This and other models for use with categorical variables are discussed at length by Agresti and Finlay (1986), as have the use of odds

ratios to interpret the results of the analysis (Agresti & Finlay 1986, pp.497-502). The statistical significance of interaction effects was also tested. Use of a single loglinear analysis to analyse the association between ethnic origin and agency involvement would have had some advantages, but would have required arbitrary choices to be made to produce mutually exclusive agency categories. This might have distorted the overall pattern of agency involvement.

Likelihood ratio chi-squared tests were carried out to determine whether clients' ethnic origins significantly affected their chances of involvement with each agency, after accounting for the effects of age and problem type.

The application of logit analysis to social science and social welfare problems is discussed by Agresti and Finlay (1986) and Anderson et al.(1980). It can be validly applied to tables with small cell frequencies, provided the sample size is large, and even zero denominators need not generally be of concern (McCullagh and Nelder 1989). It is therefore a particularly appropriate method to use for this study, with a relatively large sample, but some small cell frequencies.

Findings

Variation in Ethnic Origin

Forty-two different ethnic origins were recorded. The full list, and the numbers involved, is shown in appendix 3. The three largest groups, British origin Canadians (Brit.Can.), French Canadians (Frch.Can.) and Ashkenazy Jews (Ashk.Jew) made up just over 75% of the sample. For the purposes of statistical analysis, the sample was divided into five larger groups according to ethnic origin, as shown in Table 1.

Table 1

Ethnic Group

<u>Ethnic group</u>	<u>Number</u>	<u>% of sample</u>
British origin Canadian	65	14.7
Ashkenazy Jew	220	49.9
French Canadian	47	10.7
Smaller ethnic groups	66	15.0
Visible minority groups	43	9.8
<u>Total</u>	<u>441</u>	<u>100.0</u>

Visible minority groups (vis.mins.), as defined by Statistics Canada (Kralt 1986, and see appendix 3) and with the addition of Inuit clients, make up 9.8% of the sample. Anglophone clients of Caribbean origin made up the largest group of this category, comprising 2.7% of the sample. The other ethnic origins recorded, referred to as smaller ethnic groups

(smaller groups.), consisted of Sephardic Jews of largely North African origin, 2.5% of the sample, and non-Jews of European origin. The two other largest groups in this category were clients of Italian origin, 2.7% of the sample, and Greek origin, 1.8% of the sample.

Ethnic Differences in Source of Referral to the Social Services Department

There were significant differences by ethnic origin between the hospital services clients were referred from. The results are displayed in Table 2. As can be seen, almost half of visible minority clients were referred from obstetrics, as compared to a miniscule proportion of Ashkenazi Jews who were referred from this department. For Ashkenazi Jews, French Canadians and the smaller ethnic groups, the majority of clients were referred from surgical and medical services. Very few visible minority clients were referred from these services and the Emergency department.

Ethnic Differences in Age, Gender and Family Structure

Differences in the ages of clients between the five groupings of ethnic origin were found to be significant using the Kruskal-Wallis test (chi square corrected for ties=113.4, $p < 0.001$). To illustrate this, the sample was divided into three age categories; under 45 years, 45 to 64 years and 65 years and over and the results are shown in figure 1. Again, the most striking contrast was between Ashkenazi Jews, 80% of whom were aged 65 years and over, and clients from visible minorities, over 70% of

whom were aged under 45 years.

Table 2

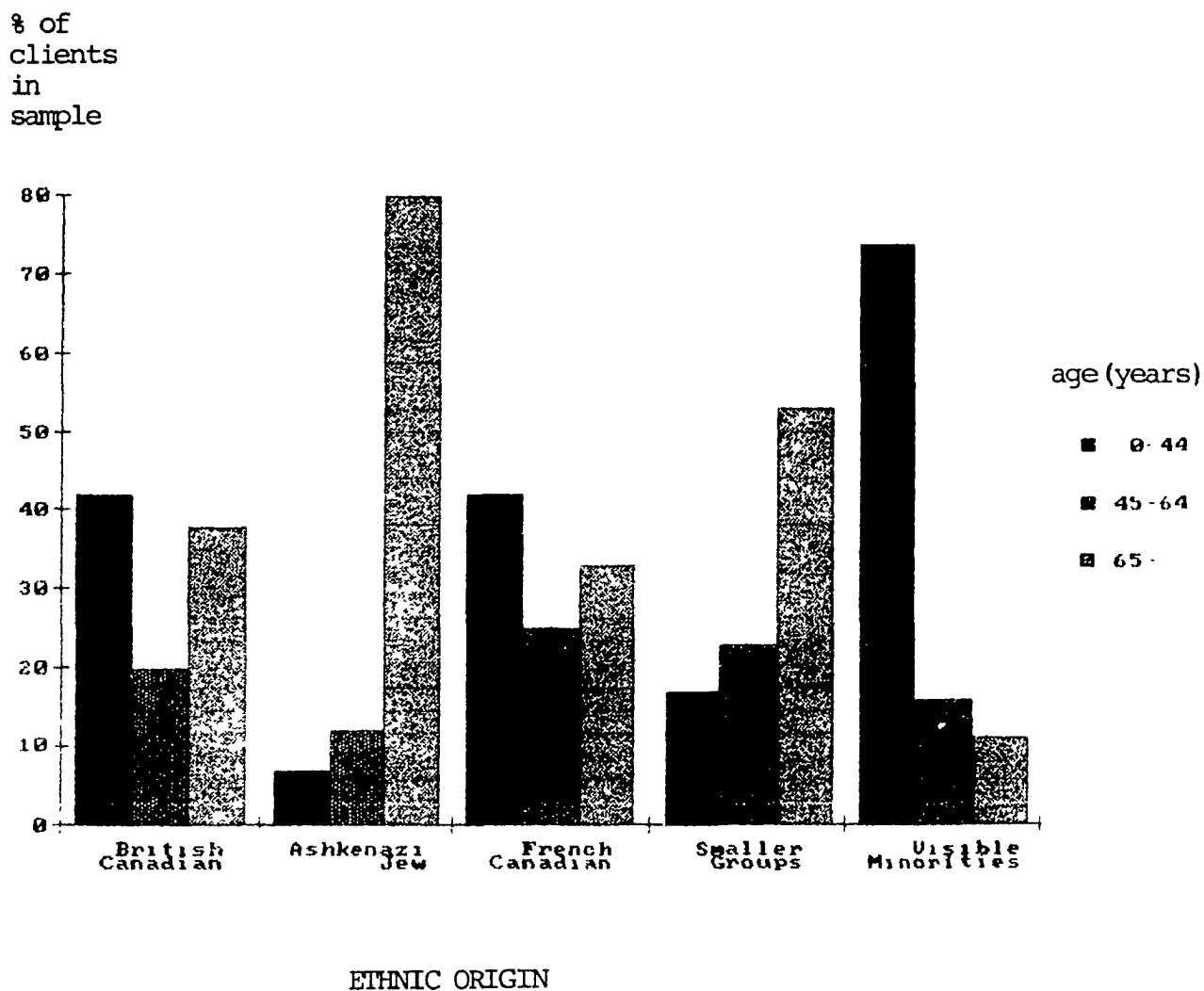
Hospital Department Referring by Ethnic Group

Hosp. service	Ethnic Group						Total
	Brit. Can.	Ashk. Jew	Frch. Can.	Smlr. grps.	Vis. mins.		
E.R. (med)	% 15.4 n 10	18.2 40	19.1 9	10.6 7	7.0 3	15.6 69	
Surg./med.	% 49.2 n 32	61.4 135	55.3 26	69.7 46	27.9 12	56.9 251	
Fam. med.	% 7.7 n 5	4.1 9	0.0 0	3.0 2	7.0 3	4.3 19	
Psych.	% 13.8 n 9	15.5 34	4.3 2	9.1 6	14.0 6	12.9 57	
Obst.	% 13.8 n 9	0.9 2	21.3 10	7.6 5	44.2 19	10.2 45	
Total	% 100.0 n 65	100.0 220	100.0 47	100.0 66	100.0 43	100.0 441	

Note. services are medical emergency room (E.R.(med.));surgical and medical services, inpatient and outpatient (surg./med.); family medicine clinic (fam.med.);psychiatry (psych.);obstetrics (obst.);

chi square (16,N=441)=97.74, p < .001;

Figure 1
Age Distribution by Ethnic Origin



There were also significant differences between ethnic groups in terms of the gender of clients, whether clients had children and those childrens' status. The results are displayed in Table 3, and it can be seen that again Askenazi Jews and visible minority clients were at the opposite extremes of the range of differences between ethnic groups.

Table 3

Gender of Clients, Age and Status of Clients' Children by Ethnic Group

Gender	Ethnic Group						Total
	Ashk. Jew	Brit. Can.	Frch. Can.	Smlr. grps.	Vis. mins.		
Male	% 45.5 n 100	35.4 23	34.0 16	47.0 31	20.9 9	40.6 179	
Female	% 54.5 n 120	64.6 42	66.0 31	53.0 35	79.1 34	59.4 262	
Total	% 100 n 220	100 65	100 47	100 66	100 43	100 441	
chi-square(4,N=441)=11.73; P < .05;							
No children	% 25 n 55	40 26	38.3 18	22.7 15	11.6 5	27 119	
Independ. children	% 69.1 n 152	35.4 23	25.5 12	53.0 35	20.9 9	52.4 231	
Dependent children	% 3.2 n 7	23.1 15	34.0 16	22.7 15	67.4 29	18.6 82	
Unknown	% 2.7 n 6	1.5 1	2.1 1	1.5 1	0.0 0	2.0 9	
Total	% 100 n 220	100 65	100 47	100 66	100 43	100 441	

chi-square(12,N=441)=132.9, p < .001;

As Table 3 shows, although a majority of clients from all five ethnic groupings were female, the difference in proportions of male and female clients was particularly marked for visible minority clients, of whom 79.1% are female. The differences between Ashkenazi Jews and visible minorities in the proportion of clients having dependent and independent children were striking.

There were no significant differences between the ethnic origin groups in the types of living arrangements recorded for adult clients (chi square (8,N=432)=11.01,p >.05).

Language Knowledge, Source of Income and Employment Status by Ethnic Group

Altogether, 7.7% of the sample (n=33) had little knowledge of French or English. Among those clients who were members of visible minorities, 16.3% (n=7) had little knowledge of French or English. For clients coming from the smaller ethnic groups, and Ashkenazi Jews, the proportions having little knowledge of either official language were 15.2% (n=10) and 7.7% (n=17) respectively.

The differences between clients from different groupings of ethnic origin in sources of income are displayed in Tables 4 and 5. These appear to be significant for clients aged 65 years and over (Table 5), where a higher proportion of Ashkenazi Jewish clients have income derived from pensions and savings. However, the data may be biased because of recording differences discussed

earlier.

There are no significant differences between the ethnic groupings in the employment status of clients aged under 65 years, although for 11.8% of this sub-sample, employment status was unknown.

Table 4

Income Source by Ethnic Origin: Clients Younger than 65

Income source	Ethnic Group					Total
	Ashk. Jew	Brit. Can.	Frch. Can.	Smlr. grps.	Vis. mins.	
Welfare	% 18.2 n 8	36.6 15	21.9 7	12.9 4	39.5 15	26.3 49
pensions	% 11.4 n 5	7.3 3	9.4 3	12.9 4	2.6 1	8.6 16
pensions & savings	% 6.8 n 3	4.9 2	3.1 1	0 0	0 0	3.2 6
salary	% 36.4 n 16	29.3 12	46.9 15	54.8 17	34.2 13	39.2 73
U.I.C.	% 11.4 n 5	4.9 2	9.4 3	6.5 2	2.6 1	7.0 13
other	% 11.4 n 5	14.6 6	6.3 2	9.7 3	10.5 4	10.8 20
unknown	% 4.5 n 2	2.4 1	3.1 1	3.2 1	10.5 4	4.8 9
total	% 100.0 n 44	100.0 41	100.0 32	100.0 31	100.0 38	100.0 186

Table 5

Income Source by Ethnic Origin: Clients Aged 65 Years and over

Income source	Ethnic Group					TOTAL
	Ashk. Jew	Brit. Can.	Frch. Can.	Smlr. Grps.	Vis. mins.	
welfare	% 0	0	0	2.9	20.0	0.8
	n 0	0	0	1	1	2
pensions	% 61.9	79.2	80.0	68.6	60.0	65.5
	n 109	19	12	24	3	167
pensions & savings	% 29.5	12.5	13.3	17.1	0	24.7
	n 52	3	2	6	0	63
salary	% 6.3	4.2	6.7	2.9	0	5.5
	n 11	1	1	1	0	14
other	% 0.6	0	0	5.7	20.0	1.6
	n 1	0	0	2	1	4
unknown	% 4.2	1.7	0	2.9	0	2.0
	n 1	3	0	1	0	5
total	% 100.0	100.0	100.0	100.0	100.0	100.0
	n 176	24	15	35	5	255

Note. As there are over 20% of cells in this crosstabulation with an expected cell frequency of less than 5, the estimated probability attached to chi-square may not be reliable.

chi square (20,N=255)=53.28, $p < .01$;

Problem categories by ethnic group

Significant relationships exist between ethnic group and problem category (Table 6). Clients from visible minorities had the highest percentages needing medically recommended concrete aids, help with interpersonal relationships, financial and legal problems and visiting nurse services. All 16 clients needing co-

ordinated homecare programmes were Ashkenazi Jews.

Table 6

Clients' Problems by Ethnic Group

Problem	Ethnic Group						Total	
	Ashk. Jew	Brit. Can.	Frnch. Can	Smlr. grps.	Vis. mins.			
Concrete aids	% 1.4 n 3	1.5 1	2.1 1	3.0 2	9.3 4	2.5 11	*	(1)
Grief	% 9.1 n 20	4.6 3	2.1 1	10.6 7	4.7 2	7.5 33	*	
Rel./fam. problems	% 10.5 n 23	15.4 10	14.9 7	6.1 4	27.9 12	12.7 56		(2)
Fam. needs help	% 22.7 n 50	13.8 9	19.1 9	27.3 18	16.3 7	21.1 93		
Financial	% 8.6 n 19	15.4 10	17.0 8	9.1 6	32.6 14	12.9 57		(3)
Health education	% 2.3 n 5	4.6 3	0 0	3.0 2	9.3 4	3.2 14	*	
Co-ord. hme/care	% 7.3 n 16	0 0	0 0	0 0	0 0	3.6 16	*	(4)
Home supports	% 26.4 n 58	15.4 10	29.8 14	18.2 12	14.0 6	22.7 100		
Legal	% 1.8 n 4	1.5 1	0 0	3.0 2	11.6 5	2.7 12	*	(5)
Letters/reports	% 13.6 n 30	9.2 6	6.4 3	10.6 7	16.3 7	12.0 53		
Ambly. care	% 7.3 n 16	4.6 3	4.3 2	4.5 3	0 0	5.4 24	*	
L-t inst. care	% 18.6 n 41	10.8 7	12.8 6	15.2 10	11.6 5	15.6 69		
P/f role probs.	% 4.5 n 10	0 0	2.1 1	7.6 5	2.3 1	3.9 17	*	

Table 6 (cont.)

Problem	Ethnic Origin					Total		
	Ashk. Jew	Brit. Can.	Frnch. Can.	Smlr. grps.	Vis. mins.			
P/f probs. wth staff	% n	5.5 12	9.2 6	2.1 1	7.6 5	7.0 3	6.1 27	*
P/f asd illness	% n	35.9 79	32.3 21	29.8 14	42.4 28	20.9 9	34.2 151	
P/f asd	% n	23.2 51	29.2 19	27.7 13	22.7 15	34.9 15	25.6 113	
Fstr/grp home	% n	13.6 30	9.2 6	4.3 2	4.5 3	4.7 2	9.8 43	
Social isolation	% n	4.1 9	0 0	0 0	4.5 3	0 0	2.7 12	*
Conval. hosp.	% n	22.7 50	24.6 16	21.3 10	16.7 11	4.7 2	20.2 89	
Temp. inst.	% n	8.2 18	1.5 1	6.4 3	7.6 5	0 0	6.1 27	*
Transport	% n	4.5 10	3.1 2	4.3 2	10.6 7	7.0 3	5.4 24	*
Visiting nurse	% n	4.1 9	12.3 8	6.4 3	4.5 3	23.3 10	7.5 33	*(6)

Note. Each line of data represents the "yes" line of a 2x5 crosstab of the whole sample; "no" lines have been omitted. Each chi-square calculation was based on the complete 2x5 table.

* expected frequencies of less than 5 in 40% of cells in crosstabulation. The probability of chi-square may not be exact.

- (1) chi square (4,N=441)=9.699, p < .05;
- (2) chi square (4,N=441)=13.22, p < .05;
- (3) chi square (4,N=441)=20.23, p < .001;
- (4) chi square (4,N=441)=16.68, P < .01;
- (5) chi square (4,N=441)=15.25, p < .01;
- (6) chi square (4,N=441)=22.20, p < .001;

These relationships were then analysed separately for clients referred from obstetrics and those referred from the rest

of the hospital. No significant differences were found between ethnic groupings for the clients referred from obstetrics (n=45). For the rest of the sample (n=396), the differences between ethnic groups in the percentages of clients needing help with interpersonal relationships and visiting nurse services were no longer significant.

The relationship between the ethnic groupings and the broad problem categories described earlier are shown in Table 7. Visible minority clients had the lowest percentage of health/hospital related problems and the highest percentage of community support problems. Ashkenazi Jews reported the lowest percentage of community/support problems.

Table 7

Broad Problem Category by Ethnic Group

Problem type	Ethnic Group					Total	
	Ashk. Jew	Brit. Can.	Frch. Can.	Smllr. grps.	Vis. mins.		
Health	%	37.7	40.0	31.9	45.5	25.6	37.4
	n	83	26	15	30	11	165
Community /support	%	11.8	26.2	25.5	15.2	41.9	18.8
	n	26	17	12	10	18	83
Mixed	%	50.5	33.8	42.6	39.4	32.6	43.8
	n	111	22	20	26	14	193
Total	%	100	100	100	100	100	100
	n	220	65	47	66	43	441

chi square (8,N=441)=29.81, p < .01;

Documented Problems with Obtaining Services

For twenty-five clients, there was documented evidence of refusal or extreme difficulty in obtaining services. There was no significant difference here by ethnic group.

Length of residence in Canada by ethnic group.

For 82 clients (18.6% of the sample) length of residence in Canada was not recorded. For those clients where this information was available, 104 Ashkenazi Jews (63.8%), 50 clients from the smaller ethnic groups (92.7%) and 31 clients from visible minorities (88.6%) were born outside Canada.

Factors Influencing Involvement with Health and Social Service Agencies

Age and type of problem are two factors which obviously influence the kind of agency with which a client is involved. As has been shown, these two are associated with ethnic group.

Age and agency involvement.

All levels of government and non-governmental agencies, and self-help groups, use age as a criteriom for entitlement to such varying services as Federal financial benefits, psychogeriatric clinics or membership of a social centre. Whether someone is aged 65 years or under is especially relevant in this regard. The association of age with involvement with types of health and social service agencies for the sample are shown in Table 8. As can be seen from the table, clients 65 and older were significantly more likely to be referred to, or involved with, convalescent hospitals and institutions providing chronic care (CAH/CHSP). Clients under 65 were more likely to be referred to, or involved with, CLSC's and statutory agencies.

Table 8

Agency Involvement by Age

Agency type	Age<65yrs (n=186)	Age>64yrs (n=255)	Total (n=441)	chi2 (1DF)	
Convalescent hospital	% 8.6 n 16	23.9 61	17.5 77	16.47	***
CAH/CHSP	% 1.1 n 2	15.3 39	9.3 41	24.13	***
CSS/DYP	% 10.2 n 19	15.7 40	13.4 59	2.33	
CLSC	% 27.4 n 51	18.4 47	22.2 98	4.52	*
Voluntary agencies	% 12.9 n 24	7.1 18	9.5 42	3.61	
Statutory agencies	% 10.2 n 19	2.4 6	5.7 25	11.01	***
Private f.-home	% 1.6 n 3	5.5 14	3.9 17	3.38	
Other priv. agencies	% 3.2 n 6	5.1 13	4.3 19	0.52	
Hospital services	% 13.4 n 25	7.5 19	10.0 44	3.66	
No agency	% 30.1 n 56	29.0 74	29.5 130	0.02	

Note. Clients can be referred to more than one agency. Categories of agency are not mutually exclusive so percentages can add to more than 100. For each line, chi-square is calculated on a 2x2 table using the total sample for which only the "yes" row is shown.

* p <.05
 ** P <.01
 *** P <.001

Problem category and agency involvement.

Different broad categories of problems are likely to be dealt with by separate health and social service agencies, which often have different mandates. Someone with a chronic illness requiring long term institutional care is likely to be appropriately referred to a different agency from someone with financial or family problems. The relationship between involvement with a type of agency and the sort of problems experienced by the clients in the sample is shown in Table 9. Clients with health problems had the highest percentage involvement with convalescent and chronic care institutions (CAH/CHSP) and with no agency; clients with community problems had the highest percentage involvement with CLSC's and statutory agencies. As the relationship between ethnic origin and broad problem category in the sample has already been shown (see Table 7), it is obviously important to take account of these relationships in any consideration of the effects of ethnic origin on agency involvement.

Ethnic group as a factor in agency involvement.

The crude relationship between ethnicity and agency involvement is shown in Table 10. As this table shows, clients from visible minorities and Ashkenazi Jews were more likely to be involved with CSS/DYP than clients from other ethnic groups. Clients from visible minorities, followed by French Canadians, were also more likely than the others to be involved with CLSC's, while clients of British Canadian origin had the highest

involvement with other statutory agencies.

Table 9

Agency Involvement by Clients' Problems

Agency	Problem			Total (n=441)	chi2 (2df)	
	Health (n=165)	Community (n=83)	Mixed (n=193)			
Convalescent hospital	% 27.9 n 46	1.2 1	15.5 30	17.5 77	28.14	***
CAH/CHSP	% 15.2 n 25	0 0	8.3 16	9.3 41	15.45	***
CSS/DYP	% 4.8 n 8	14.5 12	20.2 39	13.4 59	18.21	***
CLSC	% 3.6 n 6	36.1 30	32.1 62	22.2 98	53.23	***
Voluntary agencies	% 4.2 n 7	7.2 6	15.0 29	9.5 42	12.63	**
Statutory agencies	% 1.8 n 3	10.8 9	6.7 13	5.7 25	9.14	*
Private f-home	% 2.4 n 4	1.2 1	6.2 12	3.9 17	5.39	
Other priv. agencies	% 0 n 0	7.2 6	6.7 13	4.3 19	11.90	**
Hospital services	% 6.1 n 10	12.0 10	12.4 24	10.0 44	4.51	
No agency	% 41.2 n 68	26.5 22	20.7 40	29.5 130	18.39	***

Note. Clients can be involved with more than one agency. Categories of agency are not mutually exclusive so percentages may total more than 100. For each line, chi-square is calculated on a 3x2 table using the total sample, for which only the "yes" line is displayed.

* P <.05
 ** P <.01
 *** p <.001

Table 10

Agency Involvement by Ethnic Origin

Agency type n	Ethnic Group						Total (441)	chi2 (4df)	
	Ashk. Jew (220)	Brit. Can. (65)	Frch. Can. (47)	Smlr. grps. (66)	Vis. mins. (43)				
Conv. hosp.	% n	20.0 44	21.5 14	17.0 8	15.2 10	2.3 1	17.5 77	8.82	
CAH /CHSP	% n	11.8 26	3.1 2	8.5 4	7.6 5	9.3 4	9.3 41	4.91	
CSS /DYP	% n	18.2 40	4.6 3	8.5 4	6.1 4	18.6 8	13.4 59	13.71	**
CLSC	% n	18.6 41	16.9 11	34.0 16	16.7 11	44.2 19	22.2 98	19.67	***
Vol. agencies	% n	10.5 23	7.7 5	4.3 2	10.6 7	11.6 5	9.5 42	2.30	
Stat. agencies	% n	2.7 6	12.3 8	4.3 2	9.1 6	7.0 3	5.7 25	10.66	* @
Private f-home	% n	5.0 11	6.2 4	2.1 1	1.5 1	0 0	3.9 17	4.78	@
Private agencies	% n	5.9 13	3.1 2	4.3 2	3.0 2	0 0	4.3 19	3.80	
Hospital services	% n	8.2 18	13.8 9	8.5 8	12.1 5	11.6 44	10.0	2.45	
No agencies	% n	30.0 66	27.7 18	27.7 13	36.4 24	20.9 9	29.5 130	3.22	

Note. Clients can be involved with more than one agency. Categories of agency are not mutually exclusive so percentages may total more than 100. For each line, chi-square is calculated on a 5x2 table using the total sample, for which only the "yes" line is displayed.

@ less than 75% of cells in 5x2 table have expected frequencies of 5 or more, therefore the estimated probability attached to chi-square may not be reliable.

* P < .05 *** p < .001
** P < .01

Using Logit Analysis and Odds Ratios to Show the Effects of Ethnicity

It has already been shown that differences in age and problem type are related to both agency involvement and ethnic origin, and therefore it is important to see how the relationship between ethnic origin and agency involvement changes on controlling for age and problem type. To illustrate the data to be analysed, Table 11 shows the sample divided by ethnic origin, age, problem type and whether or not clients were involved with CSS/DYP agencies. Before controlling for age and problem type, there is a clear and significant pattern of differences in involvement with this group of agencies by ethnic origin (Table 10). A higher proportion of Ashkenazi Jews and visible minorities than the other ethnic groups are involved with these agencies, as can be seen from the totals at the bottom of Table 12. Logit analysis reveals whether this pattern persists on average after controlling for the effects of age and problem type. Although this question could be examined by looking at each row of Table 11 separately, the numbers are then so small that patterns are hard to see. In addition, the reliability of chi-square tests on 2x5 tables would be doubtful, as has already been discussed, due to low cell frequencies.

The logit analysis produces coefficients which give a numerical representation of the comparative effects of ethnic origin on involvement with CSS/DYP after controlling for differences between age and problem categories. The likelihood

Table 11

CSS/DYP Involvement by Age, Problem Type and Ethnic Origin

		Ethnic group					Total	
n		Ashk. Jew (220)	Brit. Can (65)	Frch. Can (47)	Smlr. grps. (66)	Vis. mins. (43)	(441)	

Age < 65 years								

Prob1	I	0	0	0	0	0	0	
	NI	12	11	8	9	6	46	

Prob2	I	1	1	1	2	4	9	
	NI	8	15	8	5	14	50	

Prob3	I	2	1	3	1	3	10	
	NI	21	13	12	14	11	71	

All probs.	I	3	2	4	3	7	19	
	NI	41	39	28	28	31	167	

Age 65 years and over								

Prob1	I	6	1	0	0	1	8	
	NI	65	14	7	21	4	111	

Prob2	I	3	0	0	0	0	3	
	NI	14	1	3	3	0	21	

Prob3	I	28	0	0	1	0	29	
	NI	60	8	5	10	0	83	

All probs	I	37	1	0	1	1	40	
	NI	139	23	15	34	4	215	

Total: all age and problem categories								

		I	40	3	4	4	8	59
		NI	180	62	43	62	35	382

Note. Totals are given for each age group as well as the whole sample. R=involved with, or referred to agency; NR=not involved with agency; prob1=health-related problems; prob2=community/support problems; prob3=mixed problems;

ratio chi-squared test identifies whether differences between ethnic groups in involvement with CSS/DYP agencies, after controlling for other factors, is statistically significant. The significance of interaction effects can also be tested. Interaction effects are patterns of agency involvement by one factor dependent on the level of another factor. For example, using the data displayed in Table 11, one interaction effect could be that, after controlling for age and problem type, Ashkenazi Jews could still have a higher pattern of involvement with CSS/DYP agencies than other ethnic groups, but only for one age group or problem type.

To understand how to interpret the logit analysis coefficients, it is useful to consider the case of a simple analysis, not controlling for the effects of age and problem type, and so using only the data represented in the last line of Table 11. In this case the odds of each ethnic group being involved with CSS/DYP agencies can be calculated directly. For example, the odds of Ashkenazi Jews being involved with CSS/DYP agencies are $40/180 = 0.22$, those of British origin Canadians are $3/62 = 0.048$. It is useful to produce odds ratios, that is to compare the odds of each ethnic group to one baseline group. In this analysis, Ashkenazi Jews have been chosen as the baseline group because they are the largest ethnic group in the sample. Therefore, using the data from Table 11, a simple analysis would produce an odds ratio for involvement with CSS/DYP agencies for British Canadians relative to Ashkenazi Jews of $(3/62)/(40/180) =$

$0.048/0.22 = 0.22$. This is smaller than one, showing British Canadians are less likely than Ashkenazi Jews to be involved with CSS/DYP agencies. An odds ratio of more than one would indicate an ethnic group more likely than Ashkenazi Jews to be involved with CSS/DYP agencies.

The exponential of the coefficients from a logit analysis controlling for age and problem type may be interpreted as the average of the odds ratios obtained when the data are subdivided by age and problem type, that is, as in the rows of Table 11. Specifically, the odds ratio was obtained as the exponential of the coefficients produced by the logit analysis, with Ashkenazi Jews as the baseline group (see N.A.G., 1985, ps. 39-40). Confidence intervals may be obtained from the standard errors of the coefficients (see N.A.G., 1985, ps. 40-41).

The statistically significant results of the logit analysis, including the analysis of the data displayed in Table 11, are shown in Tables 12 and 13. Involvement with two types of agency, CLSC and CSS/DYPP, were found to be affected by ethnic origin to a statistically significant degree after accounting for age and problem type. Table 12 shows the results of the chi-squared tests for the effects of age, problem type and ethnic origin on involvement with these agencies, as calculated by the logit analysis.

Table 12

Agency Involvement: the Effects of Age, Problem Type and Ethnic Origin

Agency	Effects of		
	Age (<65;65+) chi-square (1 d.f.)	Problem chi-square (2 d.f.)	Ethnic group chi-square (4 d.f.)
CLSC	4.98*	59.99***	14.20*
CSS /DYP	2.85	23.41***	10.54*

Note. Effects of problem type shown are those calculated after controlling for age; those for ethnic origin were calculated after controlling for age and problem type. The chi-square values are produced by likelihood ratio chi-square tests.

- * p < .05
- ** p < .01
- *** p < .001

The odds ratios displayed in Table 13 show that, after controlling for age and problem type, as shown above, there are still significant ethnic effects. Clients from visible minorities were four times more likely, and French Canadian clients two and a half times more likely, than Ashkenazi Jews to be involved with CLSC's. Ashkenazi Jews were almost three times more likely than British origin Canadians and the smaller ethnic groups to be involved with CSS/DYP agencies, while visible minority clients were more likely to be involved than Ashkenazi Jews.

Table 13

Agency Involvement by Ethnic Origin, Controlling for Age and Type of Problem

Agency type	Ethnic origin	Coeff.	S.E.	Odds ratios (95% C.I.)
CLSC	A shk. Jew	0	-	1 (baseline)
	Brit. Can.	0.07	0.43	1.08 (0.47- 2.49)
	Frch. Can.	0.98	0.42	2.66 (1.18- 6.04)
	Smlr. grps.	0.11	0.41	1.12 (0.50- 2.50)
	Vis. mins.	1.42	0.45	4.15 (1.70-10.10)
chi square (4,N=441)=14.20, p < .01;				
CSS/DYP	Ashk. Jew	0	-	1 (baseline)
	Brit. Can.	-1.21	0.65	0.30 (0.08- 1.06)
	Frch. Can.	-0.63	0.59	0.53 (0.17- 1.68)
	Smlr. grps.	-0.98	0.56	0.38 (0.13- 1.14)
	Vis. mins.	0.43	0.53	1.54 (0.54- 4.38)
chi square (4,N=441)=10.54, p < .05;				

Note. The coefficients and standard errors shown above are those produced by the logit analysis. The raw data for the logit analysis of involvement with CSS/DYP is shown in Table 12.

As already shown (Table 2), there are significant differences in the proportions of clients from different ethnic origins referred from different hospital services. It was also suspected that the hospital service clients were referred from affected referral to agencies. In particular referrals to CLSC's, and possibly also CSS/DYP, were thought to be higher from obstetrics clients, because of specialised services offered to new born babies and their families. The effects of ethnic origin were therefore re calculated for CLSC's and CSS/DYP's after controlling for the effects of hospital service referred from, as well as for the effects of age category and problem type. The differences between ethnic groups in involvement with CLSC's ceased to be statistically significant after controlling for hospital service. The results and the re-calculated odds ratios for CSS/DYP are shown in Table 14.

As can be seen from the odds ratios in Table 14, after controlling for the effects of hospital service, Ashkenazi Jews are now almost four times more likely than British origin Canadians to be involved with CSS/DYP, and the fact that the upper limit of the confidence interval is less than 1 is additional confirmation that this cannot be explained by chance. Visible minority clients were more likely than Ashkenazi Jews to be involved with CSS/DYP agencies. No interaction effects were found to be statistically significant.

Table 14

CSS/DYP Involvement by Ethnic Origin, Controlling for Age, Type of Problem and Hospital Service

Ethnic origin	Coeff.	S.E.	Odds ratio (95% C.I.)
Ashk. Jew	0	-	1 (baseline)
Brit. Can.	-1.28	0.64	0.28 (0.08- 0.98)
Frch. Can.	-0.64	0.60	0.53 (0.16- 1.71)
Smllr. grps.	-0.92	0.57	0.40 (0.13- 1.21)
Vis. mins.	0.37	0.57	1.44 (0.47- 4.42)

chi square (4,N=441)=9.93, p < .05;

Discussion

Even allowing for the limitations already discussed, there would still seem to have been differences in the patterns of age and family structure, problems experienced by clients and involvement with social agencies that varied significantly between ethnic groups. As a prelude to further discussion, it is useful to summarise the main findings for each ethnic group.

Ashkenazi Jews

This group comprised almost half of the sample (Table 1). A very small proportion of Ashkenazi Jews were referred from obstetrics (Table 2) and over 80% of clients from this group were over 65 years old (figure 1). A higher proportion of clients from this group were men than from other ethnic groups with a larger proportion of younger age groups. Although Ashkenazi Jews aged over 65 years appear to have had more financial resources than other ethnic groups (Table 7), this result is likely to have been particularly affected by recording and coding biases already discussed, and its significance is therefore doubtful. Ashkenazi Jews were assessed as needing co-ordinated home support programmes in higher proportions than the other ethnic groups, whereas the low number needing visiting nurse services was probably related to the very small number of clients from this group referred from obstetrics. In the broad problem categories (Table 7), Ashkenazi Jews had the highest proportion of clients with mixed health and community/support problems, and the lowest proportion of clients with purely community/support problems. After having controlled for

differences in age and problem category, and the hospital service clients are referred from, Ashkenazi Jews were almost four times more likely to be involved with CSS/DYP agencies than British origin Canadians. Their involvement with these agencies is three and a half times more likely than clients from the smaller ethnic groups and almost twice as likely as French Canadian clients. The difference in involvement with CSS/DYP agencies between Ashkenazi Jews and British origin Canadians is particularly significant due to the confidence intervals (Table 14) and cannot be explained by chance.

British Origin Canadians

This group of clients had a very different age distribution to Ashkenazi Jews (figure 1), with a more even pattern, although the highest proportion of clients (42%) was aged under 45 years of age. Not surprisingly, a much higher proportion of British origin Canadians (23.1%, Table 3) than Ashkenazi Jews had dependent children. Clients from this ethnic group were not at either extreme of the variation between ethnic groups in both the detailed and broad problem categories (Tables 6 & 7). They were, however, the group least likely compared to Ashkenazi Jews to be involved with CSS/DYP agencies, after accounting for differences in age and problem category, and hospital service (Table 14).

French Canadians

Although forming a smaller proportion of the sample (Table 1), French Canadians had a similar age distribution to that of

British Canadian clients (figure 1). They did however form a higher proportion of clients referred from obstetrics than did British Canadians (Table 2). The comparatively small number of French Canadian clients referred from psychiatry could be explained by the sectorisation of services in this hospital service, which is partly on linguistic as well as geographic and sociocultural lines. This group's pattern of presentation of problem categories did not differ widely from that of British Canadians (Table 6), but for broad problem categories, French Canadians had a higher proportion with mixed problems, and a lower proportion with health/hospital related problems, than British Canadians (Table 7). The chances of French Canadians being involved with CSS/DYP agencies were almost half those of Ashkenazi Jews (Table 14) after controlling for the confounding factors discussed earlier.

Smaller ethnic groups

Although comprising only 15% of the sample (Table 1), this group shows a similar, though less marked age distribution to Ashkenazi Jews (figure 1). This group was the least likely to be identified as needing help with interpersonal relationships, although this may have been due to the small proportion of clients from this group referred from obstetrics (Table 2, Table 6 and subsequent discussion of separate analyses for obstetrics and other services). Despite their broad similarity to Ashkenazi Jews in age and gender distribution, the smaller ethnic groups were not identified as sharing their need for coordinated homecare services, and had a higher proportion of

clients with health/hospital related problems (Tables 6 & 7). They were approximately three and a half times less likely than Ashkenazi Jews to be involved with CSS/DYP agencies (Table 14).

Visible Minorities

This group constituted just under 10% of the sample (Table 1), and almost half of the clients in this group were referred from obstetrics (Table 2), where 42% of the clients are from visible minorities. This may explain the higher proportion of female clients from visible minorities (Table 3). As can be seen from figure 1, this group is the opposite to Ashkenazi Jews in terms of age distribution, as it is in the proportion of clients having dependent children (Table 3). Visible minority clients had the highest proportions needing help with medically recommended aids, legal and financial problems, whether clients referred from obstetrics were included in the analysis or not (Table 6 and subsequent discussion). Visible minority clients had the lowest proportion with health/hospital related problems, and the highest with community/support related problems (Table 7). The chances of clients from this group being involved with CSS/DYP agencies were higher than those of Ashkenazi Jews, but because the 95% confidence interval spans 1 (Table 14), it is not certain this is not due to chance.

Some General Implications of the Findings

Some of the differences between the ethnic groups could be explained by differences in distribution across the age

categories and/or by different proportions of clients referred from certain hospital services (Table 2 and figure 1). For example, differences between groups in gender distribution and status of children shown in Table 3 could be said to follow the pattern of both these differences. The higher proportion of female clients from visible minorities could reflect the high proportion of clients referred from obstetrics in this group; the differences in age between the groups could account for differences in proportions of clients with dependent and independent children. However, not all differences between ethnic groups can be explained in this way.

Visible minorities and Ashkenazi Jews: two disparate groups

It is not so easy to relate the high proportion of clients from visible minority groups experiencing legal and financial problems, and the need for medically recommended concrete aids (Table 6) with age and hospital service differences. Although the significance of the high proportion of visible minority clients with legal problems and the need for concrete aids needs to be approached with caution (see note to Table 6), it may be that it reflects particular characteristics of this group of clients. For example, two of these problems are not related necessarily directly to health problems, but rather to problems of everyday living, and all three problem categories imply problems with financial and other resources. People do not usually need help from social workers with medical aids or in finding legal advice if they have adequate financial resources or knowledge of the way the legal system functions. This cannot, on

the basis of this study, be explained by a higher proportion of relatively new immigrants in this group, lacking knowledge and resources. However, this possibility cannot be excluded (see earlier discussion of findings on length of residence in Canada), and would be congruous with the change in recent years in the ethnic origin of immigrants to Quebec (Sirros 1987).

Despite relative similarities in age distribution and status of children, Ashkenazi Jews show a different pattern of broad problem categories from clients from the smaller ethnic groups (Table 7). The higher proportion of Ashkenazi Jews with mixed health and community/support problems, coupled with a greater need for co-ordinated homecare programmes (Table 6), suggests that Ashkenazi Jews may be more likely than clients from the smaller ethnic groups to be cared for at home with complicated problems. Their higher level of involvement with CSS/DYP may reflect this, but the absence of significant interaction effects between ethnic origin and age and problem categories in the logit analysis makes it impossible to state whether this is true or not. There is however another possible explanation for the higher chances of Ashkenazi Jews being involved with CSS/DYP agencies. It is clear that Ashkenazi Jews, though the largest group in this study, are a well-established ethnic minority in the context of Montreal, with a social service centre (CSSJF) specifically mandated, at least in part, to meet its needs (Lebel 1986; Sirros 1987;). Their higher rate of involvement may be a result of use of ethnically or socioculturally specific, or at

least sensitive, services well known in the community. In other words, Ashkenazi Jews may experience a high degree of "cultural comfort" (Ottman-Clish 1986) in their use of CSS/DYP services, which may have a higher degree of accessibility to them than other agencies.

In summary, the visible minority clients in this study are ethnically a heterogenous group (forty-three clients from seventeen different ethnic origins, see appendix 3), but the pattern of problems presented, coupled with the high level of involvement with CSS/DYP agencies, suggests the possibility that they constitute a group of clients, possibly relatively newly established, or socio-economically deprived, in Montreal with few community resources and a need to rely on government agencies. The absence of significant interaction effects in the logit analysis means that the high level of involvement with CSS/DYP agencies cannot be interpreted as relating to a particular age or problem category (e.g. youth protection issues). In contrast, Ashkenazi Jewish clients are an ethnically homogenous group with the opposite pattern of age proportions to clients from visible minorities. They constitute a well established group, with a well developed network of private and para-public services which may explain their high level of involvement with CSS/DYP agencies. The high need for co-ordinated homecare may reflect such development of resources, or be related to culturally specific preferences.

Implications for social work practice, social service provision and future research

The large variety of ethnic origins amongst the sample (appendix 3) shows the need for clinical practice that is sensitive to cultural differences. In particular, a little less than 14% of the clients in the sample come from 34 different ethnic backgrounds. This shows the necessity for workers to develop skills in working cross-culturally; providing workers from as many cultural backgrounds as there are among clients is not a realistic possibility. The information on language knowledge shows that 15 to 16% of clients from visible minorities and the smaller ethnic groups have poor knowledge of French and English, a figure which is almost certainly an underestimation given the method of data collection. Again, this is not a situation easily resolved because of the numbers of different ethnic groups involved. Whilst this study may show that a social agency with a specific ethnic/sociocultural mandate may lead to a higher involvement of clients (CSS/DYP involvement by Ashkenazi Jews), it is apparent that this is not a realistic option for most ethnic groups. In addition, the comparatively low chance of British origin Canadians being involved with CSS/DYP agencies (Table 14), despite the existence of CSSVM primarily as an agency to serve anglophones, suggests that this issue is a complex one.

It is also obvious that the differences in age category and children's status between the ethnic groups in the sample, especially between Ashkenazi Jews and visible minorities, lead to

very different needs in terms of social service provision (Table 3 & figure 1). Problems that can arise in provision of appropriate social services when an ethnic minority has a very different age and family status structure to that of the majority group have already been discussed. The potential may exist for a similar situation to that described by Horn (1982). In that instance, differences in age and family structure between the majority and Asian populations led to priority being given to services which effectively excluded Asian clients from access to social services. In this study, we can see that visible minority clients, almost 10% of the sample, are likely to have very different needs for social service than Ashkenazy Jews (49.9% of the sample) even before discussing differences between ethnic groups in the problems they experienced leading to their involvement with social services.

The different pattern of problems experienced by visible minority clients, as opposed to the other ethnic groups, has already been described. This pattern needs further investigation and suggests a number of possibilities, which are not necessarily mutually exclusive. First, because of the lack of information, it is not possible to know what proportion of visible minority clients are relatively recent first generation immigrants, implying a relative lack of family and community supports and organisations as compared to more established ethnic groups. In addition, there may also be problems of access to community agencies, either because of lack of information, linguistic or cultural barriers or perceived prejudice such as

discussed by Breton (1981) and Christensen(1986b). It may be that hospitals are more universally seen and accepted as helping institutions than other agencies, or that other agencies are giving priority to services that are not relevant to the problems of most clients from visible minorities; for example, homecare services for the elderly rather than comprehensive pre-natal services, including a psychosocial component. A third possible explanation, which could not be explored due to the impossibility in this study of taking into account motives for referral, may be that clients from visible minorities are identified by hospital staff as having more problems than other groups, in a similar process to that described by Rutter et al (1975). This could lead to more referrals to social services, either directly from staff or at their instigation, of clients from visible minorities, whilst clients from other ethnic groups with similar problems would not be referred. Therefore, as well as social work practice which is sensitive to the possibility of prejudice, both conscious and unconscious, studies are needed to examine ethnic origin as a factor in the use of social agencies, in a way which avoids some of the handicaps of using dossiers. For example, information sheets filled out by workers and/or clients at the time services were offered would provide more complete information about recency of immigration and the clients' preferences for type of services,(as opposed to the social workers' need to fit the clients into what is available), as well as an accurate definition of ethnic origin, and the clients' own explanation of their route to involvement with the agency.

Conclusion

There are no studies documenting the use of government social service agencies in Montreal which give information on clients' ethnic origin. This study of a sample of clients of one social service agency, the social services department of an acute care hospital, shows the need for systematic analysis. Although not exhaustive, for many reasons discussed earlier, a number of conclusions can be drawn which point the way to further research.

Firstly, possibly due to geographical location of the hospital, the age differences, and other demographic characteristics of the sample, broadly reflect the pattern of the different ethnic groups of Montreal. This confirms that there are very different social service needs for different ethnic groups, along the lines of that suggested by Horn (1982). There is therefore a need to be especially vigilant that the social service needs of ethnic minorities are met when they are incongruent with the needs of the majority. It is hard to see how current notions of the need for accessibility have much value in the vacuum left by the lack of hard information on the provision of service and unmet needs.

Secondly, whilst in this study, the relatively high level of involvement of Ashkenazi Jews with CSS/DYP's may be a sign of the existence of ethnically, or socioculturally, specific services accessible to this group, the wide variety of ethnic origins in the sample suggest this may not be a valid option for other

ethnic groups. Indeed, the drastically lower involvement rate of British origin Canadians, despite misgivings about their definition as a group, suggests that sociocultural mandates have not led to accessibility for this group, at least within the bounds of this study. In addition, whilst numbers have not been large enough in this study to produce statistically significant results, there is a question as to whether ethnically specific services, if too widely developed, may restrict access to other services. For example, studies may be needed to assess whether over-representation of Ashkenazi Jews needing complicated homeecare services is linked to under-representation in CAH/CHSP beds, and if so, most importantly, does this represent a choice on the part of consumers of social services and their families?

As has been discussed earlier (Jenkins 1981), the choice between ethnically specific and modified mainstream services for ethnic minorities is influenced by wider political and social systems. This study suggests very different results for British Canadian, Ashkenazi Jews and visible minority clients in Montreal's confused system of sociocultural mandates, which given the paucity of information can only point to the urgent need for further research based on the current caseload of social service agencies.

Appendix 1

The full descriptions of the problem categories used are as follows:-

- (1) Concrete aids medically recommended (telephone, appliances, prosthesis, equipment etc.)
- (2) Coping with grief reaction and bereavement.
- (3) Coping with interpersonal relations (e.g., marital problems; school problems; care of children)
- (4) educational or vocational functioning problems.
- (5) family relationships adversely affect patient's condition and/or response to hospital.
- (6) family members need help in coping with patients' needs.
- (7) financial management/assistance/applications.
- (8) health education needed (e.g. family planning).
- (9) home health supports needed (coordinated homecare programme).
- (10) home supports needed (e.g. homemaker, babysitter, daycare).
- (11) hospital service complaints.
- (12) housing unsuitable for continuing needs (e.g. too many stairs, inadequate kitchen, security).
- (13) legal services needed.
- (14) letters or reports needed for other agencies.
- (15) long-term ambulatory care needed (e.g. psychiatric OPD services; day hospital).
- (16) long-term institutional care needed.
- (17) patient/family having role disorder problems as a result of illness/disorder/pregnancy.
- (18) patient/family problems with staff.
- (19) patient/family anxiety stress or depressive reactions related to diagnosis, medical procedures, prognosis or treatment, dying etc.
- (20) patient/family anxiety stress or depression (e.g. thought and mood disturbance/psychosomatization).

(21) patient has problems in self-esteem; feelings of inadequacy; or in sexual functioning.

(22) permanent placement required for child(ren) (e.g., adoption, foster home).

(23) psychosocial evaluation only for assessment for ability to use treatment or readmission to hospital.

(24) sheltered care needed (e.g. halfway-house; foster-home for adults).

(25) social isolation, withdrawal.

(26) temporary placement in convalescent hospital.

(27) temporary institutional care away from home.

(28) transportation services needed.

(29) visiting nurses service needed.

Category (26) was changed from temporary care of dependent children during parent's hospitalisation. This was done as the above category was thought unlikely to occur, and to allow convalescence to be included separately from other, less straightforward, needs for temporary institutional care. It was thought possible to add the original category for (26) should the need arise.

The larger, combined problem categories were as follows:

- (1) health and hospital related problems. These were the following problem categories above:-
1,2,4,5,6,8,11,16,17,18,19,23,24,26,27,28.
- (2) problems related to support needed to live in the community, or associated with everyday life, not necessarily related directly to health problems. These were the following problem categories above:-
3,7,9,10,12,13,14,15,20,22,29.
- (3) clients with a combination of problems from both the above categories.

Appendix 2

Coding Conventions for Variables

Age;-age in years at the time of referral.

Hospital service referred from:-the specific service at time of referral was recorded, but for all description and analysis, four categories of emergency (medical), surgical and medical, Herzl Clinic (family medicine), psychiatry and obstetrics were used.

Income source:- people over 65 years were coded as "pension" for income source unless it was specifically stated they were working or had savings. People who were self-employed were coded as salary.

Recency of unemployment:-those working or retired (i.e. over 65 and not working) were coded as "not applicable" for this variable.

Language knowledge:- people were assumed to speak English, unless stated otherwise, and recorded appropriately.

Appendix 3

The Ethnic Origins of the Sample

Ethnic Origin	Number	%ge of Sample
Ashkenazy Jew	220	49.9
British Canadian	65	14.7
French Canadian	47	10.7
Italian	12	2.7
Sephardic Jew	11	2.5
Caribbean (English-speaking)	11	2.5 *
Greek	8	1.8
Haitian	7	1.6 *
Others (see note below)	60	13.6
total sample	441	100.0

Note. The category "others" above is broken down as follows:-

Armenian 4, Ukrainian 3, Chinese 3*, Yugoslavian 3, Vietnamese 3*, Scottish 3, Guyanian 3*, Inuit 3, Austrian 2, Polish 2, Hungarian 2, Pakistani 2*, English 2, Chilean 2, Turkish 2, Sri Lankan 2*, Russian 2, Salvadorean 1, Cambodian 1*, Spanish 1, West African 1*, Guinean 1*, Lebanese 1* Phillipino 1*, Laotian 1*, French 1, Zairean 1* Portugese 1, Korean 1*, Estonian 1, American (USA & Eng.speaking) 1, Irish 1, Czechoslovakian 1, Indian(south) 1*

* denotes ethnic origins identified by Statistics Canada as "Visible Minority" groups (1986).

References

- Agresti, A., & Finlay, B. (1986). Statistical methods for the social sciences (second edition). San Francisco/London: Dellen/Macmillan.
- Ahmed, S., Cheetham, J., & Small, J. (Eds.). (1986). Social work with black children and their families. London: Batsford.
- Anderson, S., Auquier, A., Hauck, W., Oakes, D., Vandaele, W., & Weisberg, H. (1980). Statistical methods for comparative studies. New York: Wiley.
- Bayreuther, J., & Artzy, D. (1983). Client and service profiles: A non-official working document. Montreal: Department of Professional Services, Jewish Family Services Social Services Centre.
- Berkman, B., & Weissman, L. (1983). Applied social work research. R. Miller, & H. Rehr (Ed.), Social work issues in health care. Prentice-Hall.
- Blanc, B. (1986). Problématique de la localisation des nouveaux immigrants à Montréal. Canadian Ethnic Studies, 18(1), 89-108.
- Boucher, N. (1988). L'accessibilité des services aux communautés culturelles: Un principe ou une réalité? Service Social, 37(3), 445-462.
- Breton, R. (1981). The ethnic community as a resource in relation to group problems: Perceptions and attitudes Toronto: Centre for Urban and Community Studies, University of Toronto.
- Brown, C. (1983). Ethnic pluralism in Britain: The demographic and legal background. N. Glazer, & K. Young (Ed.), Ethnic pluralism and public policy: Achieving equality in the USA and Britain. London: Heineman.
- Christensen, C. (1986a, May). Cross-cultural social work: Fallacies, fears and failings. Intervention, 17, 6-16.
- Christensen, C. (1986b, May). Chinese residents' perceptions and expectations of mainstream social services: Clues to service underuse? Intervention, 74, 41-49.
- Christensen, C. (1989). Protecting our youth: cultural issues in the application and administration of the youth protection act. Intervention, 84, 31-40.
- Christensen, C. (1990) Towards a framework for social work education in a multicultural and multiracial Canada. Proceedings of a conference: The settlement and integration of immigrants Sir Wilfred Laurier University Press.

CSSUM. (1986). A review of the main issues in the delivery of service to ethnic and visible minorities in a social service centre. Department of Professional Services (unpublished document).

Driedger, L., & Chappell, N. (1987). Aging and Ethnicity: Toward an interface. Toronto: Butterworths.

Horn, E. (1982). A survey of referrals of Asian families from four social service offices in Bradford. J. Cheetham (Ed.), Social work and ethnicity. London: NISW/RKP.

Jenkins, S. (1981). The ethnic dilemma in social services. New York: The Free Press.

Kislowics, L., & Aronson, J. (1980). Hospital social services: A study of patients' and professionals views. Montreal: Jewish Family Services.

Kralt, J. (1986). Atlas of residential concentration: Montreal. Ottawa: Statistics Canada.

Lebel, B. (1986). Les relations entre les membres des communautés culturelles et les services sociaux et de santé. Canadian Ethnic Studies, 18(2), 79-89.

McCullagh, P., & Nelder, J. (1989). Generalized Linear Models (second edition). London/New York: Chapman and Hall.

McGoldrick, M., Pearce, J., & Giordano, J. (1982). Ethnicity and family therapy. New York: Guilford.

Ministère des affaires sociales. (1985). Le system de santé et de services sociaux au Quebec: Annexe statistique. Quebec.

Minitab (1986). Minitab Handbook (second edition). Boston: Duxbury Press.

N.A.G. (1985). The Generalised Linear Interactive Modelling system release 3.77: Manual (C.D.Payne, Ed.). Oxford: the Numerical Algorithms Group.

Ottman-Clish, L. (1986). Accessibility of health and social services for cultural communities in the Montreal Metropolitan area. Montreal: Political Science Department, Concordia University.

Pedersen, P. (Ed.). (1981). Couselling across cultures. University Press of Hawaii.

Rack, P. (1982). Race, culture and mental disorder. London: The Tavistock Press.

Rutter, M. et al. (1975). Children of West Indian immigrants 3: Home circumstances and family patterns. Journal of child psychology and psychiatry, 16, 105-123.

Sirros, C. (Deputé de Laurier). (1987). Rapport du comité sur l'accessibilité des services de santé et des services sociaux du réseau aux communautés culturelles. Quebec: Gouvernement du Quebec.

Snedecor, G., & Cochran, W. (1967) Statistical Methods. 6th edition The Iowa State University Press.

SPSS inc. (1986). SPSS/PC+. Chicago: SPSS inc.

Trinh, P. (1986). Intervention en contexte d'autorité auprès des réfugiés d'origine Vietnamiennne. Intervention, 74, 50-55.

Winn, C. (1985). Affirmative action and visible minorities: Eight premises in quest of evidence. Canadian Public Policy, 11(4), 684-700.