

Culture & Mental Health Research Unit
Report No. 6 (Part 1)

**Pathways and Barriers to Mental Health Care
in an Urban Multicultural Milieu:
An Epidemiological and Ethnographic Study**

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Table of Contents

Preface.....	viii
.....	
Résumé.....	ix
Summary.....	xii
Chapter 1. Introduction.....	1
Rationale.....	16
Review of Literature.....	18
Afro-Caribbean Anglophone Immigrants.....	19
Migration History.....	19
Demography & Family Composition.....	20
Psychiatric Symptoms & Syndromes.....	21
Indigenous Explanations & Treatment of Mental Illness.....	22
Utilization of Mental Health Care.....	22
Vietnamese Immigrants.....	23
Migration History.....	23
Demography & Family Composition.....	23
Psychiatric Symptoms & Syndromes.....	25
Indigenous Explanations & Treatment of Mental Illness.....	25
Utilization of Mental Health Care.....	26
Filipino Immigrants.....	27
Migration History.....	27
Demography & Family Composition.....	27
Psychiatric Symptoms & Syndromes.....	28
Health Care Utilization and Barriers to Care.....	28
Chapter 2 . Methods.....	29
Overview.....	29
Design and Sampling.....	29
Measures.....	35
Stage 1 Interview.....	35
Stage 2 Interview.....	36
Procedure.....	38
Training and Supervision of Interviewers.....	39
Data Collection and Modification of Instruments and Procedures.....	39

Data Checking	40
Ethical Considerations	40
Chapter 3. Sociodemographic Characteristics of Sample.....	42
The Côte Des Neiges Area	42
The Sample	45
Anglophone Canadian-Born	45
Francophone Canadian-Born	52
Other Canadians	53
Caribbeans.....	54
Vietnamese	56
Filipinos	57
Other Immigrants (Non-Canadian Born).....	58
Chapter 4. Symptoms, Life Events & Health Care Utilization.....	60
Somatic Symptoms	60
Psychological Distress: The General Health Questionnaire.....	63
Life Events In Last 12 Months	66
Health Care Service Utilization.....	69
Multivariable Analysis of Health Care Utilization	84
Barriers to Care	87
Chapter 5. Somatization	94
Correlates of Nonspecific Somatic Symptoms.....	97
Medically Undiagnosed Symptoms	100
Chapter 6. Acculturation	107
Method	108
Results.....	109
Acculturation Style Across Ethnocultural Groups	113
Symptomatology, Health Care Utilization & Barriers to Mental Health Care...	115
Chapter 7. Illness Narrative Interviews.....	120
Help-Seeking and The Social Meaning of Symptoms	121
Method	124
Measures.....	124
Sample & Procedure	125
Results.....	125

Interim Conclusions..... 127

Chapter 8. Conclusion 130

 Limitations..... 130

 Utilization of Mental Health Services..... 131

 Somatization..... 132

 Acculturation 134

 Illness Narratives..... 135

References..... 136

Appendix 124

 1. Summary of Stage I and Stage II Phonecalls According to Strata

List of Figures

Figure 2-1. Sampling Strategy	31
Figure 2-2. Map of CDN region	Error! Bookmark not defined.
Figure 5-1. Prevalence of Symptoms with No Medical Diagnosis.....	105
Figure 6-1. Acculturation Style of Ethnocultural Groups	114

List of Tables

Table 2-1. Proportion of Vietnamese and Blacks in CLSC Côte-des-Neiges Catchment by Census tract (1991 Census) Area.....	32
Table 2-2. Summary of Stage 1 Interviews According to Postal Code.....	33
Table 2-3. Summary of Stage 1 Interviews According to Census Tract.....	33
Table 2-4. Summary of Stage 2 Interviews According to Strata.....	34
Table 2-5. Summary of Stage 2 Interviews According to Ethnic Group	34
Table 3-1a. Composition of Côte des Neiges Area: Linguistic Groups.....	44
Table 3-1b. Composition of Côte des Neiges Area: Ten Largest Ethnic Groups	44
Table 3-3. Description of Sample by Ethnic Group.....	47
Table 3-4. Canadian-born Sample Parents' Country of Birth	51
Table 3-5. Language Use Among Anglo-Canadians.....	51
Table 3-6. Language Use Among Franco-Canadians.....	52
Table 3-7. Countries of Birth of Second Generation Canadian Subjects' Parents.....	53
Table 3-8. Language Use Among "Other Canadians"	54
Table 3-9. Most Frequent Islands of Origin of Caribbean Sample	55
Table 3-10. Language Use Among Caribbeans.....	55
Table 3-11. Language Use Among Vietnamese	56
Table 3-12. Language Use Among Filipinos	58
Table 3-13. Most Frequent of Birth of "Other Non-Canadian" group.....	59
Table 3-14. Language Use Among "Other Immigrants"	59

Table 4-1a. Reliability Analysis of Somatic Symptom Index by Ethnic Group.....	61
Table 4-1b. Mean Somatic Symptom Scores by Ethnic Group	62
Table 4-2a. Reliability Analysis of GHQ by Ethnic Group.....	63
Table 4-2b. Mean GHQ by Ethnic Group	64
Table 4-3. Recent Events by Ethnic Group	67
Table 4-4. Service Utilization in the Last Year, Immigrants vs Non-immigrants	70
Table 4-5a. Service Utilization in Last Year by Ethnic Group.....	71
Table 4-5b. Service Utilization in Last Year by Ethnic Group	72
Table 4-5c. Service Utilization in the Last Year by Ethnic Group	74
Table 4-5d. Specialty Mental Health Service Utilization in Last Year	75
Table 4-6. Utilization of Non-Medical Sources of Help in Last Year.....	76
Table 4-7. Service Utilization by Ethnic Group (Somatic Symptoms 4).....	79
Table 4-8. Service Utilization by Ethnic Group (GHQ 3)	80
Table 4-9. Utilization of Inpatient Services, Immigrants vs Non-immigrants.....	82
Table 4-10. Utilization of Inpatient Services by Ethnic Group	83
Table 4-11a. Utilization of Health Care Services for an Emotional Problem.....	84
Table 4-11b. Utilization of Health Care Services for an Emotional Problem with Control for Alternative Sources of Help.....	85
Table 4-11c. Utilization of Health Care Services for an Emotional Problem Among Immigrants with Control for Recency of Migration.....	86
Tables 4-12. Mean Number of Reasons for Seeking Help for Emotional Problems	Error! Bookmark not defined.
Tables 4-13. Reasons for Seeking Help for Emotional Problems	Error! Bookmark not defined.
Tables 4-14. Factor Analysis of Barriers to Mental Health Care	Error! Bookmark not defined.
Table 4-15a. Types of Barriers in Immigrants versus Non-immigrants.....	92
Table 4-15b. Types of barriers by Ethnic Group.....	Error! Bookmark not defined.
Table 5-1. Multiple Regression Models of Determinants of Somatic Symptoms.....	97

Table 5-2. Determinants of Somatic Symptoms by Ethnic Group	98
Table 5-3. Correlations of Length of Stay in Canada with Sociodemographic Factors for Immigrants.....	99
Table 5-4. Determinants of Somatic Symptom Reporting Among Immigrants, Controlling for Length of Stay in Canada	99
Table 5-5a. Prevalence of Medically Undiagnosed and Somatic Symptoms by Immigrant Status.....	100
Table 5-5b. Prevalence of Medically Undiagnosed and Somatic Symptoms by Ethnic Group.....	102
Table 5-6. Determinants of Medically Undiagnosed Symptom	104
Table 5-7. Determinants of Medically Undiagnosed Symptom	104
Table 5-8. Determinants of Undiagnosed Symptom and 4 Somatic Symptoms.....	106
Table 5-9. Determinants of Undiagnosed Symptom and 4 Somatic Symptoms.....	106
Table 6-1. Self-Defined Ethnic Identity Label	109
Table 6-2. Self-Defined Ethnic Identity Labels for Ethnocultural Groups.....	110
Table 6-3. Self-defined Ethnicity, Canadian & Quebecker Identity by Ethnic Group ...	111
Table 6-4. Correlations of Ethnic Identities Among Ethnocultural Groups	112
Table 6-5. Distribution of Acculturation Styles for Ethnocultural Groups.....	113
Table 6-6. Symptomatology, Health Care Utilization and Barriers to Care by Acculturation Style	115
Table 6-7. Mean GHQ scores for Acculturation Style by Ethnocultural Group	116
Table 6-8. Visits to a Physician (Generalist or Specialist) in Last Year by Acculturation Style and Ethnocultural Group.....	118
Table 6-9. Number of Barriers to Care for Acculturation Styles	118
Table 7-1. Telephone Call for Ethnographic Interviews According to Ethnic Group.....	126
Table 7-2. Usable Ethnographic Interviews According to Ethnic Group	126

Preface

This report presents selected preliminary findings from Stage 1 of a two stage epidemiological and ethnographic study of the help-seeking and health care utilization of residents in the Côte des Neiges area. Later reports will present results from the second stage follow-up interview and from the ethnographic interviews based on the illness narrative and hierarchies of resort protocol.

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All of these people—and others who took part in focus groups and lent support from the community—have contributed to making a project of this scope possible through their hard work and dedication. We hope that the results of this project will be reflected in improved health care for all of the residents of Côte des Neiges.

Montréal, December 1996

Résumé

Nous avons mené une enquête communautaire auprès de la population d'un secteur urbain multi-culturel, défini comme le territoire du CLSC Côte-des-Neiges. Nous avons focalisé notre recherche sur trois groupes d'immigrants (Antillais anglophones, Vietnamiens et Philippins) et des groupes de comparaison constitués d'individus nés au Canada. Les objectifs incluent:

- (1) identifier l'utilisation des soins de santé des individus souffrant actuellement de symptômes de dépression, d'anxiété et de somatisation, ou éprouvant des problèmes sociaux récents;
- (2) déterminer les entraves perçues à l'obtention de soins en santé mentale, au niveau des soins de première ligne et des secteurs spécialisés en santé mentale;
- (3) examiner la relation entre les modèles culturels de la maladie et de la guérison et (A) des types d'expression de symptômes, de recherche d'aide et d'utilisation des services de soins de santé; (B) les variations dans la résolution de troubles mentaux et sociaux fréquents;
- (4) examiner la relation entre des types d'acculturation et (A) la prévalence et l'expression symptomatique de la somatisation, de la dépression et de l'anxiété et (B) la recherche et l'utilisation des soins de santé.

La recherche comporte deux étapes: (1) une entrevue téléphonique auprès de 2246 personnes, étape définie comme "Entrevue-Stade I" et (2) un suivi téléphonique, trois mois après, auprès de 576 personnes divisées approximativement en cinq groupes culturels égaux (anglophones natifs du Canada, francophones natifs du Canada, Vietnamiens, Antillais et Philippins), étape définie comme "Entrevue-Stade II". Une troisième composante ethnographique fait également partie de l'étude et consiste en 117 entrevues face-à-face, semi-structurées, faites auprès d'un sous-échantillon provenant du deuxième stade, réparties approximativement de façon égale à travers les cinq groupes ethniques. Ce rapport présente des résultats préliminaires du stade I et des entrevues ethnographiques.

Tous les instruments ont été traduits en français et en vietnamien par des personnes parlant couramment les deux langues, et leur équivalence linguistique a été vérifié par le biais d'une contretraduction faite par des traducteurs ignorant tout du texte original. Les résultats principaux incluent-

Les taux globaux d'utilisation des services médicaux au cours de la dernière année sont similaires chez les groupes d'immigrants (78.1%) et de non-immigrants (76.4%). Toutefois, les taux d'utilisation des services de soins de santé pour des problèmes de détresse psychologique sont significativement inférieurs chez les immigrants (5.5 vs. 14.7%, $p < .001$). Cette différence est attribuable à la fois à un taux significativement plus bas d'utilisation de services spécialisés en santé mentale chez les immigrants (2.6 vs. 11.6%, $p < .001$) et à une différence dans l'utilisation de

services médicaux pour des problèmes de détresse psychologique (3.5 vs. 5.8%, $p=0.02$).

Des taux d'utilisation de services de santé mentale supérieurs sont associés à une plus grande détresse émotionnelle (selon le *GHQ*), à un plus grand nombre de symptômes somatiques et à plus d'événements stressants. Les individus ayant un niveau d'éducation supérieur à une 12^{ième} année ont également tendance à utiliser davantage des services pour des problèmes psychologiques.

Les taux d'utilisation sont inférieurs chez les trois groupes ethniques, et particulièrement bas chez les Vietnamiens et les Philippins. Parmi les trois groupes d'immigrants, la durée de séjour au pays n'est pas reliée à la tendance à utiliser les services de santé mentale.

Les analyses multivariées démontrent que le taux inférieur d'utilisation chez les immigrants ne peut pas être entièrement expliqué par des différences socio-démographiques ou par différents niveaux de symptômes somatiques ou psychologiques, ou par les événements stressants de la vie.

Nous avons examiné les raisons invoquées par les personnes présentant au moins un symptôme de détresse psychologique au cours de la dernière année à l'échelle du *GHQ*, et qui n'avaient pas consulté. Le facteur le plus important est la tendance à minimiser, à normaliser et à faire face aux problèmes seul-e (facteur commun chez tous les groupes, mais plus particulièrement chez les immigrants) et, chez les immigrants, à percevoir une disparité d'ordre ethnique. La disparité ethnique consiste à percevoir les fournisseurs des soins comme incapables de comprendre ou ayant des préjugés envers leur culture, les professionnels provenant de leur propre culture étant perçus comme non disponibles. D'autres barrières importantes à l'obtention de soins comprennent la peur d'être stigmatisé, le manque de confiance dans le système médical et des obstacles d'ordre pratique, incluant l'absence du milieu de travail.

Ces analyses suggèrent une sous-utilisation marquée des soins de santé mentale par les groupes d'immigrants, ce qui ne peut pas être entièrement attribué aux différences de genre, de niveau d'éducation, de statut d'emploi, de détresse ou d'utilisation de sources alternatives de soins. Les facteurs les plus importants semblent être la compréhension et l'interprétation des symptômes psychologiques, le désir de faire face aux problèmes personnels seul-e ou au sein de la famille, et la perception que les professionnels de la santé qui pourraient comprendre la culture des immigrants ne sont pas disponibles.

Les symptômes somatiques sont plus fréquemment rapportés par les Vietnamiens. Quand on contrôle l'âge, le niveau d'éducation et le statut d'emploi dans des équations de régression multiple, le fait d'être une femme, l'âge, un niveau d'éducation inférieur, le fait d'être sans emploi ou d'être d'origine vietnamienne contribuent de façon indépendante au fait de rapporter davantage de symptômes

somatique communs. Quand le niveau de détresse psychologique, tel que mesuré par le *GHQ-12*, est rajouté au modèle, il est fortement associé aux symptômes somatiques, et les effets de l'âge, du genre et de l'origine vietnamienne persistent, tandis que les effets de l'éducation et de l'emploi ne sont plus significatifs.

Contrairement aux différences dans les niveaux de symptômes somatiques, il n'y a pas de différence quant à la présence de symptômes sans explication médicale entre les groupes. Ces résultats démontrent que la généralisation affirmant que les groupes ethno-culturels non-occidentaux ont tendance à somatiser est incorrecte. Dans la présente étude, seuls les Vietnamiens ont démontré clairement des taux élevés de symptômes somatiques prouvant peut-être l'existence d'une forme de somatisation.

Nous avons également examiné le style d'acculturation (Marginalisation, Séparation, Intégration, Assimilation) des groupes d'immigrants en fonction de leur identification avec leur propre groupe ethnique et avec la société canadienne. Les résultats confirment le modèle d'identité ethnique à deux dimensions - selon lequel les individus s'identifient de façon indépendante à leur pays d'origine (ou groupe ethnique familial) et à la culture de la société d'accueil.

Le style d'acculturation n'est pas associé aux niveaux de symptomatologie somatique ou psychologique. L'Intégration est associée à une fréquence inférieure d'événements stressants, mais cet effet n'est significatif pour aucun des groupes ethnoculturels. Le style d'acculturation n'est également pas lié au nombre de visites chez un omnipraticien ou un spécialiste, ni au pourcentage de consultation d'un quelconque service pour problème de santé mentale. La Marginalisation et la Séparation sont associées à des niveaux significativement plus élevés d'entraves à l'obtention de soins en général.

La composante ethnographique de la présente étude a été conçue afin de (1) développer et de raffiner une méthode spécifique de collection et d'analyse de récits concernant la maladie; (2) de clarifier et valider des items spécifiques du questionnaire de l'étude épidémiologique; (3) d'examiner l'expérience quant à la maladie et les hiérarchies des recours d'individus appartenant à différents groupes ethnoculturels et souffrant (a) de symptômes sans explication médicale; (b) de multiple symptômes somatiques; ou (c) de symptômes de détresse psychologique selon le *GHQ*; (4) de clarifier les processus cognitifs et interpersonnels qui contribuent à la production de récits décousus sur la maladie; et (5) d'identifier les problèmes pour les études ethnographiques et épidémiologiques futures.

Les résultats préliminaires démontrent l'utilité des protocoles de récits de maladies. Ils démontrent également l'importance des prototypes d'expériences et de séquences dans les récits des symptômes et de la maladie. Deux versions du protocole de récits de maladies ont été développées à des fins cliniques et communautaires, et la collecte de données complémentaires ainsi que des analyses additionnelles sont présentement en cours.

Summary

We conducted a community survey of the general population in an urban multicultural neighborhood (Côte des Neiges), defined as the catchment area of a community clinic (CLSC). The focus was on three groups of immigrants to Canada (Anglophone Caribbeans, Vietnamese and Filipinos) and Canadian-born comparison groups. The objectives included:

- (1) to identify the health care utilization of individuals with current depressive, anxiety or somatoform symptomatology or with recent social problems;
- (2) to determine the perceived barriers to mental health care in primary care and specialty mental health sectors;
- (3) to examine the relationship between cultural models of illness and healing and (A) patterns of symptom expression, help-seeking and health care utilization; (B) variations in the resolution of common mental disorders and social problems;
- (4) to examine the relationship between patterns of acculturation and (A) the prevalence and symptomatic expression of somatization, depression and anxiety, and (B) help-seeking and health care utilization.

The study had a two-stage design: (1) telephone interview of 2246 persons, designated as the “Stage 1 interview”; and (2) follow-up telephone interview at three months of 576 persons divided approximately equally into five cultural groups (Anglophone Canadian-born, Francophone Canadian-born, Vietnamese, Caribbean, and Filipino), designated as the “Stage 2 interview.” A third, ethnographic component was also part of the study, for which 117 in depth semi-structured interviews were completed face-to-face with a sub-sample from Stage 2, containing approximately equal numbers of persons from the five cultural groups. This report presents preliminary findings from the Stage 1 and Ethnographic interviews.

All instruments were translated into French and Vietnamese by fluently bilingual speakers and checked for semantic equivalence by blind back-translation. The principal findings include—

Overall rates of utilization of medical services in the past year were similar in immigrant (78.1%) and non-immigrant (76.4%) groups. However, rates of utilization of health care services for psychological distress were significantly lower among immigrants (5.5 vs. 14.7%, $p < 0.001$). This difference was attributable both to a significantly lower rate of utilization of specialty mental health services by immigrants (2.6 vs. 11.6%, $p < 0.001$) and to differential use of medical services for psychological distress (3.5 vs. 5.8%, $p = 0.02$).

Higher rates of utilization of mental health services were associated with greater emotional distress (on the GHQ), more somatic symptoms and more life events. Individuals with more than high school education were also more likely to use services for a psychological problem.

The lower rates of utilization were found for all three ethnocultural groups but were most marked for Vietnamese and Filipino groups. Within the three immigrant groups, length of stay in Canada was not related to the tendency to use mental health services.

Multivariate analyses showed that the lower rate of utilization by immigrants could not be explained entirely by differences in sociodemographics or levels of somatic or psychological symptoms, or life events.

For respondents with at least one symptom of psychological distress in the last year on the GHQ we explored the reasons why they did not seek help. The most important factors were a tendency to minimize, normalize and deal with problems on one's own (common to all groups but especially marked among the immigrant groups) and perceived ethnic mismatch among the immigrants. Ethnic mismatch involved the perception that available care providers would not understand or be prejudiced against the respondent's culture and that professionals from their cultural background were not available. Other important barriers to care included the fear of stigmatization, mistrust of the health care system and practical obstacles, including getting time away from work.

Taken together, these analyses suggest substantial under-utilization of mental health services by immigrant groups that cannot be entirely attributed to differences in gender, level of education, employment status, level of distress, or alternative sources of care. The most important factors appear to be the understanding and interpretation of psychological symptoms, the desire to deal with personal problems on one's own or within the family and the perception that health care professionals who understand the immigrants' cultural background are not available.

Somatic symptoms were found to be more frequently reported by Vietnamese compared to all other groups. When age, gender, educational level, and employment status were controlled in multiple regression models, age, female gender, lower level of education, unemployment and Vietnamese origin were all found to be independent contributors to increased reporting of common somatic symptoms. When level of psychological distress as measured by the GHQ-12 was added to the model, it was strongly associated with somatic symptoms and the effects of age, female gender and Vietnamese origin persisted, while the effects of education and employment were reduced to insignificance.

In contrast to these differences in levels of somatic symptoms, there was no difference in the presence of medically unexplained symptoms across ethnocultural groups. These results indicate that the broad generalization that "non-Western"

ethnocultural groups tend to somatize is incorrect. In the present study, only the Vietnamese gave clear evidence of elevated rates of somatic symptoms which might be indicative of some form of somatization.

We also examined the acculturation style (Marginalization, Separation, Integration, Assimilation) of the immigrant groups based on their ratings of identification with their own ethnic group of origin and the host Canadian society. The results confirmed the bidimensional model of ethnic identity—in which individuals identify independently with their country of origin (or heritage ethnic group) and the culture of the host society.

Acculturation style was not associated with levels of somatic or psychological symptomatology overall. Integration was associated with a lower frequency of life events overall but this effect did not reach significance for any specific ethnocultural group. Acculturation style was also unrelated to the rate of utilization of GP and specialist medical care and to percentage seeking any service for mental health overall. Marginalization and Separation were associated with significantly higher levels of barriers to care overall.

The ethnographic component of the present study was designed (1) to develop and refine a specific method for collecting and analyzing illness narratives; (2) to clarify and validate specific questionnaire items from the epidemiological study; (3) to examine the illness experience and hierarchies of resort of individuals from different ethnocultural groups with (a) medically unexplained symptoms; (b) multiple somatic symptoms; or (c) symptoms of psychological distress on the GHQ; (4) to clarify the cognitive and interpersonal processes that contribute to the discursive production of illness narratives; and (5) to identify issues for future ethnographic and epidemiological research.

Preliminary results indicate the usefulness of the illness narrative protocols. They also indicate the importance of prototypical experiences and sequences (chain complexes) in accounts of symptoms and illness. Two versions of the illness narrative protocols have been developed for clinical and community settings and further data collection and analysis are currently underway.

CHAPTER 1. INTRODUCTION

The present report summarizes preliminary findings from an interdisciplinary study of ethnocultural influences on symptom expression, help-seeking, health care utilization and problem resolution among five cultural groups in a multicultural neighbourhood. We conducted a community survey of the general population with over-sampling and parallel ethnographic research on Vietnamese, Caribbean-born,

Filipino and Canadian born Anglophone and Francophone subjects in the Côte des Neiges area of Montreal. The overall objectives included:

- (1) to identify the pathways to care and health care utilization of individuals with current depressive, anxiety or somatoform symptomatology or with recent social problems;
- (2) to determine the perceived barriers to mental health care in primary care and specialty mental health sectors;
- (3) to examine the relationship between cultural models of illness and healing and (A) patterns of symptom expression, help-seeking and health care utilization; (B) variations in the resolution of common mental disorders and social problems;
- (4) to examine the relationship between patterns of acculturation and (A) the prevalence and symptomatic expression of somatization, depression and anxiety, and (B) help-seeking and health care utilization.

RATIONALE

The reports of the Federal Task Force on Mental Health Issues Affecting Immigrants and Refugees (Federal Task Force on Mental Health Issues Affecting Immigrants and Refugees, 1988) and of the Comité de Santé du Québec (Bibeau, Chan-Yip, Lock & Rousseau, 1992) clearly indicated the need to develop culturally sensitive health care for all citizens. Despite the policy of equal access to care for everyone, significant barriers to care continue to exist for immigrants and ethnic minorities by reason of language, culture and ethnicity in Québec, as elsewhere in Canada (Beiser, Gill & Edwards, 1993; Jacob & Blais, 1992).

Although problems of under-utilization of services and under-detection and treatment of common mental disorders affect many groups in society, there is evidence that they are particularly severe for immigrants and ethnic minorities who experience additional barriers of language and cultural difference in their interactions with health care providers. At present, we have little information on which culturally mediated strategies for coping and help-seeking are successful and which compound the individual's problems within specific ethnocultural groups. To redress this lack of basic information, several authorities recently have emphasized the need for research focused on help-seeking and pathways to care (Beiser, 1988b; Rogler & Cortes, 1993).

Accordingly, this project examined help-seeking for common mental health problems in an ethnically diverse neighborhood in Montreal in the following innovative ways:

- (1) The research employed a broad definition of mental health symptoms or problems, including *social*, *somatic* and *emotional* dimensions and examined help-seeking along these lines independently. Much research on help-seeking frames mental health problems primarily in terms of psychological symptoms. From a

cross-cultural perspective, however, it is clear that somatic symptoms are integral to the experience of depression, anxiety and other mental disorders and may form the core of the self-defined problem and the chief reason for seeking help (Kirmayer, Robbins, Dworkind & Yaffe, 1993; Kirmayer & Young, in press). As well, in many cases individuals view their problems in terms of significant life events or situations which are not simply the antecedents of mental disorder (as they are usually conceptualized in the stress literature) but problems motivating help-seeking in themselves. Consequently, studying help-seeking exclusively in terms of identified mental health problems may give a misleading picture of health care needs and utilization.

(2) The measures of help-seeking canvassed a broad range of sources of help including family, social support, hospital emergency room, primary care, specialty medicine, traditional or alternative medicine and nonmedical professional and community resources. While much research indicates high rates of under-utilization of mental health care and under-detection of common mental disorders, it fails to take into account the fact that many individuals use sources of help other than primary care medicine or mental health professionals (Rogler & Cortes, 1993). Specifically, family and community “natural helpers,” traditional, alternative or unorthodox medicine, religious healers and self-help groups all constitute important resources (Chrisman & Kleinman, 1983). They may contribute to symptom or problem resolution and so, obviate the need for professional medical or mental health care. At times, they may also contribute to delays in seeking more appropriate care for specific problems (Lin, Inui, Kleinman & Womack, 1982; Snow, 1974; Sussman, Robins & Earls, 1987; Ying, 1990).

(3) The study surveys a community population. Most studies of help-seeking for psychiatric problems begin with a sample of individuals identified through clinic populations. Such a design excludes those with symptoms who go unlabeled and those who are labeled and treated exclusively within the family or community. In this study, we documented sources of help with psychiatric distress among ethnically diverse community members and can therefore, include individuals who do not seek medical help either because they are able to cope successfully on their own or because they perceive significant barriers to care (Hough et al., 1987; Lin, Tardiff & Goresky & Donnely, 1978; Sussman et al., 1987; Takeuchi, Leaf & Kuo, 1988).

(4) The research involves a longitudinal study of symptom or problem emergence and resolution. Most studies are cross-sectional and do not give a clear portrait of the process of help-seeking and coping. The process of symptom or problem resolution in the community is a particularly neglected area in epidemiological research (Goldberg & Huxley, 1992; Rogler & Cortes, 1993). In the present study, both epidemiological and ethnographic techniques will be used to examine factors contributing to the successful resolution of problems in different ethnocultural groups.

(5) The research combines epidemiological and anthropological methods to allow representative sampling of the general population and in depth study of specific ethnic groups. Ethnographic data will be used to interpret epidemiological findings. Epidemiological data, in turn, will be used to test ethnographic observations against the larger sample.

REVIEW OF LITERATURE

While psychiatric symptoms are more common among some ethnic group members than those in the majority (Robins & Regier, 1991), immigrant and ethnic minorities are less likely than majority groups to receive care in the specialty mental health sector (Cheung & Dobkin de Rios, 1982; Cheung & Snowden, 1990; Sue, 1992; Sue, Fujino, Hu, Takeuchi & Zane, 1991). Many members of minority groups are treated by other formal sources including general medical physicians, alternative practitioners and traditional healers (Beiser et al., 1993; Federal Task Force on Mental Health Issues Affecting Immigrants and Refugees, 1988). Most distress, however, remains outside the formal network of health care and is recognized, identified and treated only in the lay sector. For ethnic minorities, treatment and referral decisions are often shaped by community and family beliefs and directed by traditions within the community. Family and friends are usually the first to recognize unusual feeling displays or behaviors and may often be the only ones to notice mild distress (Horwitz, 1982). Culturally specific idioms of distress may lead ethnic groups to differ in which signs, symptoms and behaviors are recognized as unusual. Although symptoms may be charged with cultural significance, studies of ethnic groups in North America usually accept the significance of symptoms as defined by pre-established psychiatric framework (Greenley & Mullen, 1990). As a result, little is known of the differences between culturally defined symptomatology and existing psychiatric nosology.

In ethnic communities where mental illness is stigmatized, referral to a formal help source may come only after progressive deterioration of the distressed person's psychiatric symptoms (Ying, 1990). Closely knit ethnic families may go to elaborate lengths to protect the mentally ill (Gans, 1962; Kitano, 1969; Sussman et al., 1987). Referral outside the popular sector of family, friends may be to a variety of professionals or to folk or traditional healers closely tied to the ethnic community. Despite the growing literature on folk practices cross-culturally, there is little published material on traditional healing in Canadian ethnic communities. (Beiser et al., 1993; Federal Task Force on Mental Health Issues Affecting Immigrants and Refugees, 1988).

Takeuchi et al. (1988) explored differences among four Hawaiian ethnic groups (Caucasian, Filipino, Japanese and Native Hawaiian) in their perception of barriers to help-seeking for two distinct types of problems: alcoholism and severe emotional problems. They observed that Caucasians perceived fewer barriers for both types of problem than did the three minority ethnic groups. Logistic regression analysis

found that this ethnic difference held when other demographic variables were controlled. Lin et al. reconstructed pathways of help-seeking by severely disabled mental patients of different ethnic groups in Vancouver: Chinese, Middle European, Native Indian and Anglo-Saxon (Lin, Tardiff, Donetz & Goresky, 1978). Ethnicity appeared to be a prime factor differentiating patterns of help-seeking in that Chinese patients were kept for prolonged periods of time within their families at the beginning of pathways, while Anglo-Saxons and Middle Europeans were referred by their families or themselves to multiple social and mental health agencies. Native Indians were referred by social and legal agencies in the community rather than by family members. Lin et al. concluded that there were major impediments to treatment due to culture, most notably isolation and deterioration of patients within confines of families reluctant to seek help and lack of coordination among agencies in the community.

Most American studies indicate that economic status is a major barrier to care. In the Canadian health care system this is less of an issue, so that other social factors may play a much larger role. At present, however, we have very little information on the mental health care utilization patterns of immigrants and ethnic minorities. The present study surveyed an ethnically diverse neighborhood to obtain some of this information for many different cultural groups. In a second stage interview, we focused on three ethnic groups and appropriate linguistic comparison groups: Vietnamese, black Anglo Caribbean and Filipino immigrants, and French and English Canadian-born residents of the same neighborhood. The choice of these ethnic groups reflects their relative size, recency of migration, and the existence of literature suggesting important cultural issues for health care delivery. The survey questionnaires and measures were adapted to address specific symptoms, concerns and sources of help-seeking in these groups. Accordingly, we next present a brief review of the literature on Vietnamese, Anglo Caribbean and Filipino immigrants abstracted from more comprehensive reviews prepared by our research team.

Afro-Caribbean Anglophone Immigrants

Migration History

There was a long standing black population in Montreal, as in the rest of Canada, dating back to the days of the Underground railroad, as well as a steady trickle from the United States and the Caribbean into the twentieth century. The first Anglo-Caribbean immigrants to Canada in any significant numbers were women who came in the 1950's, under the auspices of the Domestic Labor Scheme, to work as domestics. Once established in Canada, they were allowed to sponsor fiancés and family members.

Following changes to immigration laws in 1962, immigration from the Caribbean increased substantially. The first large waves of migration took place in the 1960s, from both the English speaking and French speaking (Haiti) parts of the Caribbean. This migration used the skill requirements of the points system, and involved largely the professional, middle class, including many nurses, teachers, and

academics. As late as 1981, the average educational attainment of Black Canadians was *greater* than the Canadian average.

Following that first wave, a second wave of Caribbean immigrants arrived in the late 1970s and 1980s. These consisted of refugees from Haiti, as well as legal and illegal immigrants working as domestics or taxi drivers, with lower educational attainment than the earlier Caribbean migrations. In addition, many of the women who migrated in the first or second waves decided in the 1980s and 1990s to reunite with their children who they had left back on the islands. The new immigrants and their children—arriving to a strange country with no paternal supervision—encountered difficulties in school, and by 1986 had lowered the relative educational attainment of black Canadians.

The majority of Anglophone Caribbean immigrants are from Jamaica, Guyana and Trinidad and Tobago. There are also substantial populations of Trinidadians of East-Indian origin and Guyanians of Chinese origin. While there are interesting differences to be found among the various islands, for the purposes of this brief overview we shall use the generic term Caribbean. In general, studies on the area have focused more on Jamaicans than other groups.

Demography & Family Composition

Caribbean society is culturally and racially diverse. Differentiation of color plays a key role in the stratification system, with light skinned blacks in general enjoying higher social status. Immigrant Caribbeans can be divided into those from predominantly urban middle class background and those from working class rural backgrounds.

The English Caribbean family had its origins under slavery and British rule (Cohen, 1956). Under slavery an extra-residential mating system developed, which remains a common feature of Caribbean family life today (Dechesnay, 1986). The mother has remained the focus of the Caribbean family. Caribbean kinship boundaries are highly flexible. "Near family" can include first cousins, uncles, aunts, nephews and nieces, as well as parents and grandparents, but may range farther than that. Children born out of wedlock are usually cared for by the maternal grandparents.

Most of the research on the Caribbean family tends to date from the 1960s with relatively little done in recent years. The research findings caution against equating the family unit with the household unit as Caribbean households are often loosely established, because of extra residential visitation and mating practices (Rubinstein, 1983). All recent studies confirm the importance of matrifocality and the marginality of the male, though males do often enjoy a dominant relation with female partners outside the family/household framework. Despite these patterns, the nuclear family types remains the idealized one, and is most common among the upper classes. But in general, and among lower class males, status is related to virility, which is established through fathering many children with different women (Wilson, 1969).

Among Caribbean immigrants to Canada, single parent families headed by women are common. It is common for women to emigrate alone and work in Canada for several years before sending for their children. Reunification of their families may be complicated by the children's sense of loss of their primary caretaker (usually a grandmother) in the home country, mother's disappointment that a close relationship cannot be easily reinstated, and the presence of new partners and siblings. Families in Canada may not have the same extended network of relatives and friends that assist with child care in the Caribbean. This lack is compounded by a reluctance to depend on resources outside the family. Cultural differences in child rearing values and practices may also create inter-generational strain. For example, Jamaican family values tend to emphasize respect for authority and obedience. In contrast, North America attitudes may encourage a youth's brashness and non-conformity. Jamaican parents are generally tolerant of children's behavior problems as long as they remain within broad social limits (Lambert, Weisz & Knight, 1989; Lambert et al., 1992). This tolerance may stem from the cultural belief that problematic behavior is transient and does not reflect ingrained personality traits.

Psychiatric Symptoms & Syndromes

Caribbean immigrants in England have been reported to have a high prevalence of psychotic disorders (Carpenter & Brockington, 1980; Littlewood & Lipsedge, 1982). However, there is also evidence of significant under-diagnosis of affective disorders (and a corresponding overdiagnosis of schizophrenia) among Black Americans. (Littlewood, 1991; Littlewood & Lipsedge, 1982; Lopez & Hernandez, 1986; Lopez & Nunez, 1987; Lopez, 1989; Loring & Powell, 1988; Neighbors & al., 1989) In part, this may reflect clinicians tendency to misinterpret paranoid ideas that stem from the realities of routinized racism in society. In some groups, loss of consciousness or other dissociative phenomena may be more common and may be misdiagnosed as evidence of psychosis or a toxic or organic neurological impairment (Lefley, 1979; Weidman, 1979). Dissociative states involving transient psychotic behavior have been reported in Jamaican immigrant adolescents in Canada (Roberts, 1990).

Indigenous Explanations & Treatment of Mental Illness

Many Caribbeans perceive their bodies as permeable and open to outside influences (Sobo, 1993). Most sickness is believed to originate from the belly and is conceptualized as blockages of the normally continuous flow of materials in and out of the body. To balance this flow, people perform “washouts” with bitter herbal concoctions and laxatives for both to maintain health and cure minor ailments (Laguerre, 1987). Monthly cleansing is recommended for both men and women (Sobo, 1992). Households maintain medicinal supplies of laxatives, herbal concoctions and castor oil.

Physical health and sociomoral factors are closely linked in popular Caribbean concepts of illness (Taylor, 1988). Proper expulsion of wastes promotes ‘good living’ construed as altruistic behavior that strengthens the social and moral order. Sin undermines both the moral fabric and the individual’s physical well being. Sinful people are unclean people who may use deceitful means to gain their desires such as various magic and sorcery techniques and poisons. Children learn early on that the very food that maintains them in good health can be used covertly to convey poisons or unclean substances by others that wish to take advantage of them. As a result they may grow up wary of others (Cohen, 1955). On the other hand, those ‘right with God’ have been washed of the self-centered sinfulness that leads unclean people to manipulative deeds. An example of such manipulation is the use of menstrual blood by women to gain power over men (Sobo, 1992). Belly aches in men are often associated with malign magic and magic specialists may be consulted to confirm the diagnosis and provide a cure.

Beliefs in spirit possession and spiritism are common features of some religious practices in Caribbean countries. Possession by spirits or supernatural forces of ‘obeah’ may cause behaviours associated with mental illness. Indigenous healers (*obeah man*) may be consulted for diagnosis and treatment through ritual magic and exorcism (Schwartz, 1985). Emotional problems in women are often attributed to a breakdown in male-female relationships, whereas men’s emotional problems are generally denied or stigmatized. Littlewood describes *tabanka*, a pattern of reactive depression common in Trinidad that typically occurs among working class men when their wife deserts them for another man (Littlewood, 1985). *Tabanka* is characterized by wandering aimlessly about or remaining alone at home, feeling worthless and preoccupied with angry thoughts of the faithless wife. Common symptoms include a ‘heavy heart’, lassitude, anorexia, stomach contractions, insomnia and a loss of interest in work and social life.

Utilization of Mental Health Care

There is evidence for numerous potential barriers to mental health care among Anglo Caribbean groups and significant underutilization (Brown, 1982; Rwegellera, 1980). Although they speak English, dialect differences may impede communication with care providers (Cassidy, 1980). Mental disorders may be understood in terms of moral, religious, magical and physical illness models for which corresponding forms of help may be sought (Griffith, English & Mayfield, 1980; Sussman et al., 1987;

Thompson & Peebles-Wilkins, 1992; Walls & Zarit, 1991). To date, there is very little information on patterns of resort to health care in Canada available for these groups (Lefley, 1984; Lefley, 1990; Lefley, 1991; Littlewood & Lipsedge, 1982).

Vietnamese Immigrants

Migration History

There were two main Vietnamese waves of migration to Canada. The first wave consisted of refugees from Indochina, known as the “boat people,” who began to arrive in the mid 1970s, consisted of government officials, officers, and professionals. The second wave began in 1978, when Vietnam invaded Kampouchea, and they faced ethnic persecution as Sino-Vietnamese. This wave consisted mainly of small merchants, blue collar workers, and shopkeepers with relatively little formal education. Since the end of the Vietnam war in 1975, there has been an exodus of both ethnic Vietnamese and Sino-Vietnamese. It is estimated that over 600,000 migrated to the United States, and 70,000 to Canada (Beiser, 1988a).

Ethnic Vietnamese and Sino-Vietnamese have different histories reflecting their respective situations in Vietnam and their exposure to Western influences when leaving. Ethnic Vietnamese from South Vietnam were the most exposed to Western influences, and to French and English, as compared to ethnic Vietnamese in the North (Woon, 1986). Sino-Vietnamese from the South were segregated from mainstream Vietnamese society, and were less exposed to Western influences before migration (Kunz, 1981).

Many Vietnamese chose Montreal as a destination because of their own francophone background. Many Canadians were involved in matching sponsorship efforts with the government to help the Vietnamese refugees arrive in Canada (Adelman, 1980). In all Canada, there were 78,570 Vietnamese speaking residents in 1991 of whom 17,790 resided in Quebec. Many of them were of middle class and urban background, having fled the communist regime, and thus were equipped to do well in the Canadian, and specifically Montreal, setting.

Demography & Family Composition.

Vietnamese immigrants are culturally diverse and studies to date have generally failed to consider regional variations in culture and distinguish between ethnic Vietnamese and ethnic Chinese from Vietnam or other Southeast Asians (Haines, 1988; Woon, 1986). It is therefore difficult to establish to what extent findings in the literature apply specifically to ethnic Vietnamese.

Three themes dominate the literature on Vietnamese refugee families in North America. First, there is a fragmentation and simplification of the extended family structure due to the loss of kin from death and separation at the time of migration, and also from the pressures of adapting to North American ways (Kibria, 1990; Nguyen, 1983; Phung, 1979). Secondly, marital roles are shifting away from the traditional patriarchal locus of power within the family unit (Gold, 1992; Woon,

1986). Thirdly, the greater acculturation of children is undermining the traditional authority of parents and the elders in the family (Boman & Edwards, 1984; Chan & Lam, 1983; Charron & Ness, 1981; Gozdzia, 1988; Williams & Westermeyer, 1983).

The traditional Vietnamese family is described as an extended kinship group structured around patrilineage lines (Kibria, 1990). Filial piety requires that all Vietnamese think of their parents and family first before considering their own interests (Timberlake & Cook, 1984). Parents have ultimate authority over the children, including determining their educational and career goals. The role of Confucian principles is also evident regarding marriage. Marriage partners are chosen by the families, women marry young, divorce is rare, as it is an embarrassment to the family. In some circles, including in the United States, wife beating may be tolerated (Kibria, 1990). Keyes (Keyes, 1977) claims that the females' subservience in Vietnamese families has been overstated, and that Vietnamese law governing family affairs make women inheritors of property equal to men. Moreover, the impact of the French, and later American influence, stressing individual freedoms, may have weakened the collectivist family tradition among the Vietnamese.

As refugee families have moved to North America, family patterns have been forced to adapt. There has been a fragmentation and simplification of the extended family structure resulting from a loss of kin through death or separation. While Sino-Vietnamese emigrated as families, ethnic Vietnamese usually migrated in serial fashion (Beiser, 1988a). Very often strains ensued as a result of having to share households. Sino Vietnamese families from both North and South Vietnam were relatively better able to adjust to a shared household in Canada. This was due to their pre-migratory experience of living in shared quarters, as well as recognition that sharing a household might cut down on expenses and lead to greater economic mobility. But South Vietnamese families resented this more, since they had tended to live as nuclear families prior to migration (Woon, 1986).

Second, there has been a shift in marital roles undermining patriarchal power. Woon (1986) also found that middle class Vietnamese families were more likely to experience marital conflict while adapting to Canada. The stress generally was caused by the husbands who resented the growing power of their wives. By contrast, lower class and Sino-Vietnamese respondents were less conflicted.

Third, there is a greater acculturation of children which undermines traditional parental authority. Vietnamese families are caught in a dilemma. On the one hand they want their children to preserve old customs and traditions. On the other they sense they will be judged as parents by how their children succeed in the new society, where values of self-sufficiency and individualism— which run counter to the Vietnamese traditions— are crucial (Boman & Edwards, 1984). Conflicts are most extreme when Vietnamese adolescent girls adopt values of independence (Vignes & Hall, 1979), parents often lose status when they cannot help children with schoolwork, or when they must rely on children to translate for doctors or other

officials (Gold, 1989). Elders are also losing their authority, finding themselves in a state of economic and social-psychological dependency (Gold, 1992).

Psychiatric Symptoms & Syndromes

Studies of Vietnamese refugees report elevated scores on measures of anxiety (Lin, Masuda & Tazuma, 1982), depression (Felsman, Leong, Johnson & Felsman, 1990; Kinzie, Manson, Vinh & al., 1982; Lin, Ihule & Tazuma, 1985), post-traumatic stress disorder (Gong-Guy, 1986; Kinzie et al., 1990; Mollica, Wyshak & Lavelle, 1987; Mollica et al., 1990), and somatic symptoms (Mollica et al., 1987; Mollica et al., 1990; Westermeyer, Bouafuely, Neider & Callies, 1989). Vietnamese immigrants who report higher symptom levels are more likely to have experienced traumatic events and spent more time in refugee camps (Chung, 1991), have more immediate family still in Vietnam (Rumbault, 1985), lower levels of education (Meinhardt, Tom, Tse & al., 1985), and a tendency to engage in nostalgic reminiscence about life in Vietnam (Beiser, 1988a).

Several studies report that depressed Vietnamese refugees score high on somatic symptoms related to respiratory, gastrointestinal, skin and nervous systems (Kinzie et al., 1982; Westermeyer et al., 1989). Common somatic complaints include headaches, insomnia, chest aches, fatigue, dizziness and fainting and palpitations (Nguyen, 1982). Beiser and Fleming suggest that depressed Southeast Asians in clinics may comprise only that sub-group of depressed patients who also suffer from prominent somatic symptoms because Southeast Asians are likely to consider somatic symptoms as more legitimate reasons for consulting a physician (Beiser & Fleming, 1986). There is also evidence for culture-specific symptoms of depression among Vietnamese including feelings of dishonoring the family and fear of loss of control or 'going crazy' (Kinzie et al., 1982).

Indigenous Explanations & Treatment of Mental Illness

Vietnamese folk concepts of health and illness are influenced by Chinese concepts of the balance of vital essences, energies or 'winds' (Nguyen, 1985). An excess of either *yin* or *yang* leads to disequilibrium and disease. Diarrhea, for example, is attributed to a "cold" stomach whereas a skin rash may be attributed to an excess of "hot" elements in one's body. Depression is commonly viewed as an imbalance of winds with predominately somatic symptoms (Eisenbruch, 1983).

There are many treatments inspired by the concept of opposing forces. For example, in the practice of *cao gio*, a coin is rubbed briskly over a child's back and chest with hot balm oil to cure colds and other minor ills (Gray & Cosgrove, 1985; Nguyen, 1985). *Be bao* ("skin pinching") and *Giac* ("cup suctioning") are variations of the coin rubbing practice (Eyton & Neuwirth, 1984). These practices produce ecchymoses that may be misinterpreted by clinicians as child abuse (Yeatman & Dang, 1980). Despite an elaborate system of folk medicine, Vietnamese readily use Western medicine concurrently. Self-medication is popular in Vietnam since prescriptions are not required to purchase medicines. Intra-muscular injections are held superior to oral preparations (Nguyen, 1985).

Vietnamese health attitudes are influenced by several sets of religious beliefs. Buddhism promotes a fatalism that may lead people to endorse depressive symptoms on inventories even if they are not depressed because these symptoms fit a view of the world as a place of inevitable suffering (Obeyesekere, 1985). Taoism advocates that its followers take no unnatural actions because processes move towards harmony and perfection when they are allowed to follow their natural course. This attitude might delay seeking health care except in the event of major crises. Confucian ethics dictate appropriate behavior toward authority figures. The doctor is perceived as an authority who is expected to be directive—an egalitarian approach is seen as a sign of weakness or incompetence (Slote, 1986). Similarly, family elders who have authority within Vietnamese culture as the guardians of tradition are often consulted on health matters (Nguyen, 1985). Finally, Christian beliefs have more recently been introduced in Vietnam but are followed only by a minority of Vietnamese and their impact on health behavior is unknown.

Vietnamese place a high value on self-control of emotions. This influences both coping with distress and interactions with health care providers. Vietnamese may give affirmative answers when faced with delicate or embarrassing questions to prevent confrontations that could lead to the expression strong emotions—a behavior considered to be a “weakness of the mind” (Nguyen, 1985). A lack of control over one's emotions is described as “losing *lien*” which is akin to “losing face.” To maintain *lien* is to demonstrate that one has control over his moral character (Eyton & Neuwirth, 1984). In clinical settings Vietnamese patients will tend to smile and not complain even when desperate or depressed. (Tran, 1981) However, Lin et al. found that the Vietnamese had no reluctance to report psychological symptoms on psychometric instruments (Lin, Tazuma & Masuda, 1979). Vietnamese may express emotions more readily in a neutral situation such as an anonymous questionnaire. A similar phenomenon was observed by Chan among Hong-Kong Chinese university students with the General Health Questionnaire (GHQ) (Chan, 1985).

Utilization of Mental Health Care

The literature generally reports a lower utilization rate of mental health services among Vietnamese and other Southeast Asians. However, few studies specifically address barriers to care (D'Avanzo, 1992; Hoang & Erickson, 1985; Woon, 1986). Some have argued that differing expectations for psychological intervention between Vietnamese patients and Western caregivers account for their lower utilization of services. For example, Gold claims that most Vietnamese lack the cultural prerequisites for Western style psychotherapeutic intervention such as the willingness to confide, a belief in the unconscious, and the ability to criticize their parents openly (Gold, 1992). Vietnamese refugees also perceive mental health problems and the use of social services as sources of shame and embarrassment (Chan & Lam, 1983; Wong, 1981).

Lower rates of utilization of mental health services by the Vietnamese can also be linked to reliance on family members for support (Yu & Liu, 1992), and to the way these services are delivered to the population. Hoang and Erickson report that the Southeast Asians in general find the North American style health care system inconvenient (Hoang & Erickson, 1985). They have previously experienced a health care system that is crisis oriented, where appointments are not needed, diagnostic tests are fewer and drugs are administered in injectable form in concert with traditional medicines. A poor command of English language also poses a barrier in US settings (D'Avanzo, 1992). The situation in Québec, where many Vietnamese immigrants may have used French prior to migration, requires further study. The role of somatization among Vietnamese and other Asian peoples remains a controversial issue. (Kawanishi, 1992; Kirmayer, 1984; Kirmayer & Weiss, 1996).

Filipino Immigrants

Migration History

The Filipino migration to Canada is of very recent vintage, beginning in the 1970s. It is a diverse migration, motivated mainly by economic considerations. Because of the strong tie with the United States, many Filipino migrants felt at home in moving to North America, including Canada, and many came with significant fluency in English. Two streams in particular characterized the migration to Canada. The first consisted of a large number of educated women, mainly nurses and medical technicians. A second wave shortly thereafter included thousands of domestic workers and nannies. Arriving on two year work contracts, almost all would apply successful for landed immigrant status upon completion of their contract, with employer sponsorship.

Demography & Family Composition.

Filipinos have surpassed the Chinese as the largest Asian immigrant group in the United States, numbering roughly 1.4 million (Takeuchi & Young, 1994). Most Filipino Americans are immigrants, and most have entered the country since 1965; about 64% of Filipinos in the U.S. are foreign born. While there has been a pronounced American influence on Filipino culture and society, dominant traits in areas such as family relations. Filipino children are expected to be obedient and dependent (Kieth & Narranda, 1969). Spousal relations may become strained, since in general personal communication skills have not been highly valued (Card, 1978.)

Unlike some other Asian families, family authority is bilateral, not patriarchal (Yu & Liu, 1980). In the family, hierarchy is valued but not dominant; grandparents are respected but do not control other family members. Filipino family members are expected to rely on each other for emotional and psychological support (Almirol, 1982). Kinship relations are highly valued, and regarded like family relations (Lynch, 1981). As in other Asian families, one sacrifices for the good of the Filipino family. Related to this is the value of smooth interpersonal relationships, minimizing

any signs of anger or aggression, and emphasizing the notion of reciprocal obligations (Lynch, 1981).

Again, as in other groups, the process of acculturation creates conflict in Filipino families, both between spouses and between parents and children (Yu & Liu, 1980). Filipino youth have traditionally been more sheltered from independence than American youth (Kieth & Narranda, 1969).

It is important to stress again that the Filipino population in Montréal differs significantly from that in the United States. The sex ratio is skewed dramatically toward women, who are clustered either as nurses or as domestic workers. There is a negligible Canadian born Filipino population, and we have instead a very recent immigrant group. While not refugees—as were many Vietnamese—their recency in Montreal poses significant challenges.

Psychiatric Symptoms & Syndromes

Little work has been done on Filipino American mental health (Araneta, 1993). One study did find Filipinos with a higher depression rate than white Americans (Kuo, 1984). Among Asian Americans, Filipino Americans have been identified as high risk for mental disorders because they score lower on other socioeconomic indicators, compared to Chinese and Japanese (Tompar-Tiu & Sustento-Seneriches, 1995). It is likely that depression is underestimated among Filipinos because of a cultural tendency to deny emotional strains and somatize emotional problems (Flaskerud & Soldevilla, 1986).

Health Care Utilization and Barriers to Care

Along with other Asian-Pacific groups, Filipinos immigrants in the U.S. are presumed to have much the same pattern of under-utilization, increased perceived barriers to care and somatization of distress (Sue, 1994). The potential shame and loss of face (*hiya*) associated with revealing emotional troubles or mental illness may lead Filipinos to mask or suppress their distress. Underlying psychological and social problems may only be revealed after a helper has established his or her reliability and a secure relationship has been built up over several meetings (Tompar-Tiu & Sustento-Seneriches, 1995).

CHAPTER 2 . METHODS

OVERVIEW

The original design of the study called for (1) an initial telephone screening interview of subjects; (2) a second stage face-to-face structured interview of 400 subjects (200 probable cases on the GHQ, 200 probable non-cases) divided equally into four cultural groups; and (3) ethnographic interviews of 80 subjects (20 Vietnamese, 20 Anglo-Caribbean and 20 from each of two comparison groups, Anglophone and Francophone Canadian-born residents). The initial telephone screening interview was to gauge current distress. This was to be used to estimate prevalence in the general population and to select probable cases and non-cases for follow-up at three months with a face-to-face interview.

Practical constraints encountered during pilot testing forced a re-design of the study. Low response rates, time constraints and a limited budget required elimination of the selection criteria for Stage 2 so that the first 100 interviewees eligible and agreeing to a follow-up interview in each group were interviewed. Obstacles in arranging for face-to-face interviews for large numbers of subjects and the success of the telephone interview in Stage 1 led to a decision to use telephone interviews for Stage 2 as well. Finally, the original study aimed to oversample only Anglo-Caribbeans and Vietnamese. In the course of sampling, it was discovered that the ethnic composition of the Côte-des-Neiges area had changed substantially since the 1991 census such that Blacks were moving away (to NDG, Brossard and elsewhere) and Filipinos were a growing group. Accordingly, we added a sample of Filipinos to our study. Unfortunately, timing did not allow us to include any questions specific to the Filipino community or to translate the instruments. However, there was a very high rate of English fluency among this group so that interviews were successfully conducted with our existing questionnaires.

DESIGN AND SAMPLING

The study had a two-stage design: (1) telephone interview of 2246 persons, designated as the “Stage 1 interview”; and (2) follow-up telephone interview at three months of 576 persons divided approximately equally into five cultural groups (Anglophone Canadian-born, Francophone Canadian-born, Vietnamese, Caribbean, and Filipino), designated as the “Stage 2 interview.” A third, ethnographic component was also part of the study, for which 117 in depth semi-structured interviews were completed face-to-face with a sub-sample from Stage 2, containing approximately equal numbers of persons from the five cultural groups. The Stage 1 interview gauged current distress, recent life events, past health care utilization and perceived barriers to mental health care in addition to sociodemographics and ethnic identity. The Stage 2 interview repeated measures from the first stage and collected

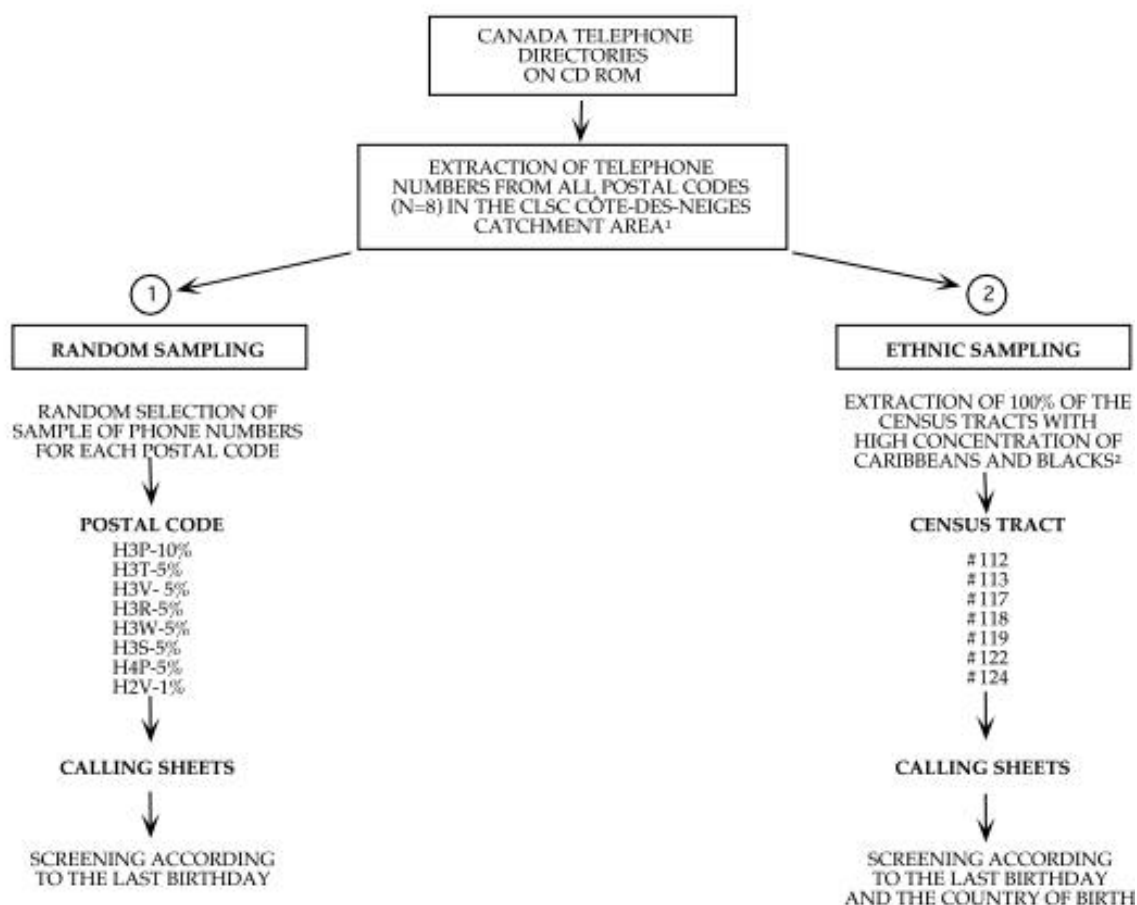
more detailed information on sociodemographics, ethnic identity, acculturation, health care utilization, symptomatology and psychiatric diagnosis.

The five cultural groups were defined as follows. Anglophone Canadian persons were born in Canada and used English most often when growing up. Francophone Canadian persons were likewise born in Canada but used French most often when growing up. For the purposes of interviewing, Vietnamese persons were those born in Vietnam (and could include persons of Sino-Vietnamese heritage; these were eliminated in later data analysis; see below). Caribbean persons were those born in the following countries: Jamaica, Guyana, Trinidad/Tobago, St. Lucia, Grenada, Dominica, St. Vincent, Antigua, St. Kitts/Nevis, Montserrat, Anguilla, Barbados, St. Martin, Bahamas, or Bermuda. Those born in predominantly French or Spanish-speaking Caribbean countries were not included in this group (i.e., born in Haiti, Martinique, Guadeloupe, Cuba, Dominican Republic, or Puerto Rico); however, Caribbean-born persons of East Indian heritage were interviewed (these were eliminated in later data analyses). The Filipino group included all those born in the Philippines irrespective of any East Asian heritage.

The sampling strategy for the Stage 1 interview involved two phases (See Figure 2-1). In the first phase (“Random Sampling”), two-stage sampling was carried out. First, telephone numbers were randomly selected for calling using stratified random sampling from a list of numbers on a CD-ROM (Canada Phone, 1994). The strata were the eight postal codes in the CLSC Côte-des-Neiges catchment area, according to the Régie Régionale de la Santé et des Services Sociaux de Montréal Centre, April 1994. Within each postal code, numbers were randomly selected in 10, 5 and 1% sampling ratios and listed on “calling sheets” for the interviewers. After 10% of the first postal code was selected (H3P) it was decided, based on a projected number of subjects from each strata, that a 5% sampling ratio could be used for the rest of the postal codes. By the time the last postal code was being sampled (H2V), a 1% sampling ratio was sufficient to reach our target number of interviews from this phase, especially given the fact that this strata in general has a much higher level of economic status. Secondly, once a household was contacted in the postal code strata, random sampling within the household was carried out to select an adult for interview by asking to speak to the person with the most recent birthday.

In the second phase (“Ethnic Sampling”), telephone numbers were once again generated within strata using the CD-ROM (eliminating duplicates from the first phase) in seven census tracts in the CLSC Côte-des-Neiges catchment area. These census tracts were chosen based on having a high concentration of Vietnamese and/or Blacks, according to the 1991 census (Statistics Canada) (see Table 2-1). Calling sheets containing 100% of the telephone numbers in each census tract were used by the interviewers. Eligible households were selected by asking about the country of birth of each adult in the household. If a household contained any eligible adults (belonging to the five cultural groups), random sampling was carried out to select an adult for interview among those eligible by asking to speak to the person with the most recent birthday.

**Figure 1. Pathways and Barriers
Telephone Survey - Sampling Procedure**



¹ Régie Régionale de la Santé et des Services Sociaux de Montréal Centre, Avril 1994

² Statistics Canada, 1991

Figure 2-1: sampling strategy

Table 2-1.
Proportion of Vietnamese and Blacks in CLSC Côte-des-Neiges Catchment Area
by Census tract (1991 Census)

Ethnic Group	Census tract	Proportion (%)	N
Vietnamese	122	13.57	870
	119	10.42	570
	118	10.21	390
	117	6.17	230
	112.02	5.03	195
	403	3.96	195
	112.01	3.51	160
	127	3.51	190
	113	3.12	140
	124	2.64	140
Blacks	119	9.51	520
	112.01	8.11	370
	117	7.25	270
	122	6.63	425
	112.02	5.29	205
	113	3.90	175
	118	3.80	145
	124	3.11	165
	127.01	1.01	55
403	0.71	35	

The results of the two phases of the sampling for the Stage 1 interview are summarized in Tables 2-2 (according to postal code) and 2-3 (according to census tract). In the postal code sample, a total of 1927 numbers were telephoned, of which 1409 located eligible subjects (73%). A telephone number/household was not eligible if there was no number in service, if it was a business number, if there was no answer after seven calls at different dates and times, if the person contacted did not speak English, French or Vietnamese, or if the person contacted was too ill to answer any questions. A total of 780 people in the postal code sample completed the Stage 1 interview for an overall success rate of 55%, where the success rate was equal to the number of people who completed the interview divided by the number of eligible subjects.

In the census tract sample (100% sampling of each tract), a total of 9140 numbers were called, of which 2397 were eligible (26%). In addition to the reasons for non-eligibility described above, a household was not eligible in the census tract sample if there were no adults in the household from any of the five cultural groups. Overall, 1417 of the eligible subjects completed the Stage 1 interview, for a success rate of 59%. See Appendix 1 for a detailed summary of the outcomes of the Stage 1 and II telephone calls.

Table 2-2. Summary of Stage 1 Interviews According to Postal Code

Postal Code	Total Population	Sampling ratio (%)	Sample Size	Eligible Subjects	Completed Interview	Success Rate (%)
H3P	3,309	10	349	265	139	52
H3T	3,860	5	192	147	82	56
H3V	2,394	5	127	93	54	58
H3R	3,229	5	159	133	62	47
H3S	11,232	5	520	366	227	62
H3W	8,515	5	435	313	176	56
H4P	1,005	5	58	39	20	51
H2V	8,560	1	87	71	36	51
Total	42,104	-	1,927	1,427	796	56

Table 2-3. Summary of Stage 1 Interviews According to Census Tract

Census Tract	Total Population	Sample Size	Eligible Subjects	Completed Interview	Success Rate (%)
#112	2,137	2,137	807	472	58
#113	869	869	60	27	45
#117	1,118	1,118	444	278	63
#118	1,076	1,076	377	221	59
#119	630	630	225	147	65
#122	1,916	1,916	448	264	59
#124	1,394	1,394	71	34	48
Total	9,140	9,140	2,432	1,443	59

For the Stage 2 interview, persons in the five cultural groups who completed the Stage 1 interview after May 31, 1995 and who indicated that they could be contacted for a follow-up interview were re-called three months after their Stage 1 interview, plus or minus 2 weeks. Table 2-4 shows the results of the Stage 2 interviews by strata: 1815 subjects completed the Stage 1 interview, of whom 1113 (61%) were eligible and agreed to do the follow-up interview. We contacted 790 of them (71%) to do the follow-up interview; 576 of those contacted completed the Stage 2 interview for a success rate of 74% (ranging from 50 to 100%).

Table 2-4. Summary of Stage 2 Interviews According to Strata

Strata	Completed Stage 1 Interview	Eligible & Agreed to Stage 2 Interview	Contacted for Stage 2 Interview	Completed Stage 2 Interview	Success Rate for Stage 2 (%)
H3S	223	23	17	11	65
H3W	176	2	2	1	50
#112	464	350	280	207	74
#113	26	25	8	6	75
#117	265	206	150	112	75
#118	214	178	117	96	82
#119	142	106	69	48	70
#122	272	192	138	96	70
#124	33	31	9	9	100
Total	1,815	1,113	790	586	74

Table 2-5 summarizes the results of the Stage 2 interviews for each of the five cultural groups. Of the 1815 subjects who completed the Stage 1 interview, 1800 (99%) were correctly screened for eligibility and could be assigned to one of the five cultural groups. A total of 1116 of these subjects (62%) agreed to be contacted for Stage 2. The number of persons contacted was 790 and at least 110 Stage 2 interviews were completed for each cultural group, for a total of 576 interviews for an overall success rate of 73%, (ranging from 64% for the Filipinos to 80% for the Franco-Canadians).

Table 2-5. Summary of Stage 2 Interviews According to Ethnic Group

Ethnic Group	Completed Stage 1 Interview	Eligible & Agreed to Stage 2 Interview	Contacted for Stage 2 Interview	Completed Stage 2 Interview	Success Rate for Stage 2 (%)
Anglo-Canadian	384	230	162	123	76
Franco-Canadian	541	222	150	120	80
Caribbean	285	227	148	112	76
Vietnamese	281	219	159	111	70
Filipino	285	218	171	110	64
Total	1,776	1,116	790	576	73

MEASURES

All measures and instruments are reproduced in Part 2 of this report.

Stage 1 Interview

Three screening instruments were used in the telephone survey to tap life events, psychological distress and somatic symptoms.

Somatic Symptoms. Somatic distress that may prompt help-seeking was measured with a list of somatic symptoms based on the Diagnostic Interview Schedule Somatization Disorder section (Swartz, Hughes, George & al., 1986) supplemented with items found to be common in previous studies of similar immigrant groups (Westermeyer et al., 1989). Similar indices have been advocated as screening measures for mental disorder among South Asian and ethnically diverse primary care populations (Escobar & Canino, 1989; Escobar, Rubio-Stipec, Canino & Karno, 1989; Mumford et al., 1991c; Othmer & DeSouza, 1985; Srinivasan & Suresh, 1991).

GHQ. The screening instrument for psychiatric distress was the 12-item version of the General Health Questionnaire (GHQ) (Goldberg, 1972; Goldberg & Hillier, 1979). The GHQ is the most widely used screening instrument for cross-cultural research (McDowell & Newell, 1987). It is available in over 20 languages and is designed to detect subjects who are “probable cases” of psychiatric disorder (primarily depression, anxiety and somatization) in clinical and community studies (Cleary, Goldberg, Kessler & Nyes, 1982; Goldberg, 1982; Goldberg & Huxley, 1992; Hooper, Nycz, Cleary, Regier & Goldberg, 1979; Vazquez-Barquero, Williams, Diez-Manrique, Lequerica & Arenal, 1988). A 25-item version is available with a simple yes/no format, designed specifically to screen for mental disorders in developing countries. A similar format was adopted for the 12-item version to facilitate administration over the telephone. Each item was asked first for the past 12 months and if the symptom was present, the item was asked again for the last few weeks. Thus, the scale yielded two scores, for the past year and for the past few weeks. The former was of particular interest as a reason that may have prompted help-seeking.

Recent Life Events. Life events were ascertained with a list of 14 questions addressing categories based on those included in the Québec Health Survey, identified by Paykel et al. in studies of illness and depression (Paykel et al., 1969; Paykel, Prusoff & Uhlenhuth, 1971), and events specifically relevant to ethnic minorities. Domains covered include: family, work or school, neighbourhood, health and discrimination. This measure is intended not primarily to produce a score of severity of life events but rather to canvas for the presence of specific events which can be included in the study as potential problems that could motivate help-seeking.

Health Care Utilization . Service utilization in the last 12 months (and lifetime for hospitalization) was measured with items based on a questionnaire developed for use in community surveys of psychiatric disorders in Edmonton (Bland, Orn & Newman, 1988). A validation study of this questionnaire on a sample of 865 adult household residents of Edmonton showed that over 80% of individuals reporting contacts with a general practitioner or a psychiatrist did indeed have such contacts (Newman, Bland & Orn, 1989). This questionnaire was translated into French and used in a telephone survey in a prior study by one of the PI's (GGD). It was modified to include community sources of primary and mental health care as well as alternative care, use of traditional medicine, and religious counselling.

Help-Seeking. For each of the three types of problems (somatic symptoms, GHQ-12 symptom list, and life events, subjects were asked whether and where they had sought help. If they had symptoms or problems but had not sought help, subjects were asked why they had not sought help. These open-ended questions were subsequently coded and analyzed.

Self-perceived Barriers to Mental Health Care. Potential barriers to mental health care were ascertained with a list drawn from the Ontario Health Survey (Lin & Goering, 1992), supplemented by items used in the study by Takeuchi and Leaf (Takeuchi et al., 1988) as well as by items developed to specifically address potential concerns of Vietnamese and Afro-Caribbean immigrant groups based on focus groups held during the instrument design phase of the project. The list of barriers was preceded by an open ended question about reasons for not seeking help, followed by a checklist of possible reasons. Although this question was originally placed as a separate section late in the questionnaire, we found very low rates of response on the first 392 questionnaires. Accordingly, on April 12, 1995, the list of barriers to care was moved to follow immediately after the GHQ and any subject reporting at least one item on the GHQ in the last year was asked the open-ended question about reasons for not seeking help followed by the list of potential barriers. The questionnaire items were given new variable names during data entry so that where we report results on barriers to care these represent only the results from the revised placement of this section.

Additional items assessed sociodemographic information, migration history, parents' countries of birth and ethnicity, language use and self-described ethnic identity.

Stage 2 Interview

Sociodemographics and Ethnic Identity. Questions on basic sociodemographics and ethnic identity were adapted from scales and indices used in the landmark study by Breton and colleagues in Ontario (Breton, Isajiw, Kalbach & Reitz, 1990).

Acculturation. Four scales of acculturation were used in this study addressing: (1) Ethnic Identity; (2) Ethnic Loyalty; (3) Ethnic Behaviour; and (4) Situational Ethnic Identity. Each scale asks subjects about the feelings vis-à-vis their own ethnic group and that of the host society. Ethnic group membership of the respondent will be based on self-reported ethnic group label (Barth, 1969). For the host society label, we will use the procedure of Clement and colleagues (1991; 1992): alternative majority group labels (Canadian, Québécois) were presented to determine the individual's preferred label.

Ethnic Identity consists of 4 items addressing identification with a self-defined ethnic group of origin and 4 items addressing identification with the preferred majority group. Each item is rated on a 6 point-Likert scale from *** to ***. A mean score >3 allows classification of individuals according to Berry's four categories of Integration, Assimilation, Separation and Marginalization.

Ethnic Loyalty consists of 14 items adapted from Zak's 20-item scale designed to measure Jewish-American identity (Zak, 1973). We selected 7 items that can be used to assess ethnic loyalty both to the host and home cultures. The used a 6-point Likert scale. In an earlier study of Lebanese immigrants in Montreal, a factor analysis revealed two separate factors (Canadian and Lebanese) with good internal reliabilites (Cronbach's $\alpha = .84$ and $.78$, respectively), which accounted for 55% of the total variance (Sayegh & Lasry, 1992). The lack of correlation between the two loyalty scales ($r = .06$) supports the validity of the bidimensional model of acculturation.

Ethnic Behaviour consists of 10 items addressing 5 common behaviours (general behaviour, way of life, grocery shopping, type of food eaten, and use of ethnospecific newspapers, radio or TV. For each behaviour the subject is asked to rate on a 6-point Likert scale (from *never* to *always*) how often they act like a member of their ethnic group and as a member of the majority group.

Situational Identity consists of 24 items following those developed by Clement et al. (1991; 1992; 1993). Twelve social situations are evoked, e.g. "When I am at work, I feel ..." "When I ride the subway, I feel ..." "When dealing with medical personnel, I feel ..." The 12 situations are preceded by instructions emphasizing that identity is subjected to situational variation and that, in some cases, the respondent might well choose to identify with one group, with both groups or with none. Each situation is followed by two 6-point Likert scales, one assessing the degree of identification with the host culture, the other with the culture of origin. In Clement' studies, the scales had excellent internal consistency ($\alpha > .85$).

Social Support. In this study we conceptualize social support as an indicator of potential help-seeking and coping resources with the family and social network. We use a single item based on the Social Support Questionnaire (SSQ) developed by Sarason (Sarason, 1983a; Sarason, 1983b; Sarason, Sarason, Potter & Antoni, 1985; Sarason, Sarason & Shearin, 1986). The SSQ is among the most widely used

measures of social support and has good reliability and validity (McDowell & Newell, 1987). It measures both the availability of (number of persons and who are these persons), and the satisfaction with social support. The initial version of the SSQ was a 27-item questionnaire, but Sarason subsequently reduced it to a 6 item version (Sarason, Sarason, Shearin & Pierce, 1987). The SSQ has been translated and validated in French (DeMan, Balkou & Iglesias, 1986).

Psychiatric Diagnoses. Psychiatric disorders were diagnosed with modules of the Composite International Diagnostic Interview (CIDI) (Wittchen et al., 1991; World Health Organization, 1990). The CIDI is a comprehensive, fully standardized interview that can be used by trained lay interviewers to produce psychiatric diagnoses according to both ICD-10 and DSM-III-R criteria. The CIDI was developed for international use and is available in 14 languages and has been tested in WHO field trials in 21 sites and in a national sample of 20,000 community residents in the United States. It permits comparison of alternative diagnostic criteria developed in different national psychiatric traditions and cross-cultural contexts. The CIDI is based directly on the widely used DIS, which has shown acceptable reliability and validity. We selected three modules (C, D & E) from the CIDI to diagnose somatoform (somatization disorder, hypochondriasis, somatoform pain disorder, conversion disorder, neurasthenia), anxiety (panic disorder, generalized anxiety disorder, agoraphobia, social phobia, simple phobia) and depressive disorders (major depression, dysthymic disorder, melancholia) respectively. Together these modules take about 30 minutes for subjects to complete. Interviewers were trained and supervised by Consuelo Quesney, M.A., a member of the *Equipe* who was trained as an instructor at the Washington University CIDI center. All CIDI protocols underwent a medical audit to evaluate subjects' explanations for possible medically unexplained symptoms.

PROCEDURE

All instruments were translated into French and Vietnamese by fluently bilingual speakers (Suzanne Taillefer and Dr. Thi Hong Trang Dao). They were then back-translated to English by a second bilingual translator blind to the original English version (Tran The Nghi). Discrepancies were resolved by consultations among the investigators, the translators and francophone and Vietnamese clinicians (J-C. Lasry, Dr. Thi Hong Trang Dao).

In September 1994, focus groups were held with a cross-section of members of the Caribbean (n=8) and Vietnamese (n=5) communities to present drafts of the questionnaires and discuss potential misunderstandings or culture-specific notions that should be introduced. These focus groups were tape-recorded and notes made of the salient themes and suggestions to be incorporated into the questionnaires.

Community organizations and leaders were contacted to obtain endorsements for the study (Jamaican Association of Montreal, SIARI—Service d'interprete et

d'aide aux réfugiés indochinois). Local media published notices about the study (Journal Côte des Neiges, May 11, 1995, p. 8; Nang Moi thoi bao, May 1, 1995, p. 50; Community Contact, March 1995, p. 5). On May 18 and 19, 50 posters were put in storefronts and other settings around the neighbourhood (Victoria Ave., Côtes des Neiges Rd. and Van Horne Ave.) informing residents about the study and the possibility that they would receive a telephone call to discuss their health care experiences.

Training and Supervision of Interviewers

A total of 22 interviewers were trained on all instruments by the project coordinator. Interviewers received two group-training sessions of 1.5 hours duration and individual coaching while making telephone calls from the research office. In the first session they were given general information about the research project and the goals of the study, copies of the questionnaire in both English and French, as well as other documents (calling sheet, payroll sheet, screening sheet, interviewers manual). The second session was devoted to practice using mock interviews. The goal of this training session was to achieve consistency across the group of interviewers. Additional training was conducted to familiarize interviewers with the F/U interview and the CIDI modules.

Interviewers were observed conducting interviews from the research unit and, in some cases, they taperecorded interviews conducted from their homes. They received ongoing supervision based on audits of their interviews and overall statistics on number of telephone numbers and calls necessary to complete an interview, rates of refusal and average length of completed interviews.

The interviewers work was validated by telephone calls to a random selection of subjects conducted by the project coordinator or another experienced interviewer. Weekly meetings were scheduled for each interviewer with the project coordinator to review errors discovered while editing the questionnaire, to discuss additional instructions and clarifications and to receive additional calling sheets. These meetings contributed to quality control, sustained the interviewers' interest and minimized their sense of isolation in working alone.

Data Collection and Modification of Instruments and Procedures

A pilot study was conducted in December 1994 and 15 questionnaires were completed. The instrument was found to be easy to administer and no sections were found to be objectionable to respondents.

After completing 128 questionnaires, on February 14, 1995, the health section was placed at the start of the questionnaire and the ethnicity section moved to the end to improve acceptability of the questionnaire.

On April 12, 1995, after 392 questionnaires had been completed, the barriers to care section was placed after the GHQ-12, to improve the response rate to this section.

Data Checking

The Stage 1 and 2 data were checked prior to and after data entry in order to correct any inconsistencies and prevent invalid missing values.

Data checking prior to data entry

Due to the large number of Stage 1 questionnaires, the research coordinator spot checked questionnaires before the data were entered in the computer. The research coordinator checked all the Stage 2 questionnaires prior to data entry. The data entry personnel brought any questions or inconsistencies to the attention of the research coordinator. Any discrepancies or missing information were identified and the necessary corrections were made to the questionnaires with the help of the interviewers if needed. In a few cases (usually for the Stage 2 interview), the subject was called back if an important question was missed and if the time since the interview was less than two weeks.

Data checking after data entry

First, 5% of the Stage 1 data were randomly selected, printed and checked manually. The error rate was found to be acceptable (i.e. less than 1%). In the second step to ensure the maximum accuracy in the data entry, frequencies were run on all the variables, outliers (values that did not fall within the expected range) were identified, and the questionnaires were used to make corrections. The last step consisted of checking all the "skip patterns" in both questionnaires, by running crosstabulations between related variables to ensure answers were provided in the correct sequence.

ETHICAL CONSIDERATIONS

Telephone surveys demand attention to language of interview and sensitivity to the respondent's right to privacy. These requirements may be particularly acute among respondents who are recent immigrants and suspicious of inquiries by outside agencies, and when inquiry will be into potentially disturbing, shameful, non-legal or stigmatizing experiences (Yu & Liu, 1986). All interviewers were bilingual and many were multilingual (Vietnamese, Spanish, etc.). They were trained to respond carefully to subject's questions and concerns. When invited to participate in the second stage interview, respondents gave their verbal consent in to be contacted for a follow-up interview. At the start of the study, subjects were told the follow-up interview would be face-to-face. When it became apparent that, for logistical reasons, follow-up interviews would also have to be conducted by telephone, subjects were informed that the second interview would also be

conducted by telephone. This likely improved response rates by decreasing the difficult and intrusiveness of the interviews.

A written consent form was used for ethnographic interviews to allow tape-recording, transcription and use of case material. Interviews were transcribed by an experienced medical transcriptionist working under supervision of the research office. When individuals in great distress were identified by either telephone or ethnographic interviewers, they were given information on the availability of services at the CLSC, hospital clinics or emergency room. This occurred in only a very small number of cases and is not likely to have affected findings on help-seeking rates or patterns.

Data were entered into computer with ID number only; neither the subjects name or telephone number were entered into the data file. Quotations from ethnographic interviews were altered to hide any potentially identifying information. All completed questionnaires and interview transcripts were stored in locked filing cabinets in the research office.

CHAPTER 3. SOCIODEMOGRAPHIC CHARACTERISTICS OF SAMPLE

This section of the report provides a socio-demographic overview of the three target groups of the study, and of the neighbourhood in which they live. We will also refer to relevant literature on the three groups, with reference to issues relating to immigrant adjustment as well as to mental health.

THE CÔTE DES NEIGES AREA

The samples for this study were drawn from the area of Côte des Neiges in Montreal, which provides the immediate catchment area for the Côte des Neiges CLSC, or community health centre (See Figure 2-2). The Côte des Neiges area is the most ethnically diverse area in the entire greater Montreal metropolitan area. Though it is somewhat removed from the downtown core, it has become a new area of first immigrant settlement. The original, classic area of immigrant settlement in Montreal, which is still very heterogeneous, tracks along St. Laurent (the "Main") and St. Urbain streets, beginning up from the waterfront port area and moving North. This was the area from which pre-war waves of immigrants, mainly Jews and other Europeans, disembarked from their ships, or trains, and first settled. It is also the area of Montreal's "Chinatown." It gained substantial cultural fame as the Montreal equivalent to New York's Lower East Side, an area of first settlement of eastern European Jews and other European immigrants.

The Côte des Neiges area was a second destination for the many European immigrants or their children and it has emerged to rival "the Main." As immigrants now arrive by plane, proximity to the port has become irrelevant. Côte des Neiges is located adjacent to middle class and upper middle class residential areas, specifically Hampstead, Outremont, and Town of Mont-Royal. It can be distinguished from a contiguous neighbourhood to the south, which is called "Snowdon" and has a lesser degree of ethnic diversity. Côte des Neiges is an area of mainly low rise apartment units, which cater to a working class population, and some older duplexes and more spacious homes which cater to a smaller middle class group.

For the purposes of this study, however, a broader definition of Côte des Neiges was used, to conform to the official definition of the CLSC Côte des Neiges catchment area which includes the adjacent Snowdon area, as well as parts of Town of Mont Royal and Outremont. (The latter two are separate municipalities.)

Data from the 1991 census for the CDN area are summarized in Tables 3-1a & b. Further information about the characteristics of the Côte des Neiges area can be gleaned from a recent study of the area which confirms the unique heterogeneous character of the neighbourhood (Germain, 1995).

Table 3-1a. Composition of Côte des Neiges Area: Linguistic Groups

<i>Language</i>	<i>N</i>	<i>%</i>
Mother tongue, single responses	98370	45.44 %
French	44695	23.12 %
English	22745	3.13%
Spanish	3075	3.08%
Arabic	3025	3.00%
Vietnamese	2955	2.67%
Greek	2625	1.80%
Chinese	1775	1.55%
Tagalog (Pilipino)	1525	1.29%
Hungarian	1270	1.02%
Polish	1005	0.90%
Italian	885	0.76%
German	745	0.74%
Portuguese	725	0.62%
Russian	605	0.14%
Ukrainian	140	0.14%
Bulgarian	135	0.12%
Dutch	115	0.03%
Finnish	25	0.02%
Punjabi	20	0.02%
Montagnais - Naskapi	15	0.00%
Cree	5	0.00%

Table 3-1b. Composition of Côte des Neiges Area: Ten Largest Ethnic Groups

<i>Group</i>	<i>N</i>	<i>%</i>
French	35610	31.00%
Jewish	16155	14.38%
British	4600	4.09%
Vietnamese	3905	3.48%
Filipino	3290	2.93%
Greek	3075	2.74%
Lebanese	3015	2.68%
Black	2870	2.55%
Chinese	2435	2.17%
Italian	1440	1.28%

Source: Census Profile I: Montreal, 1991. Ottawa: Statistics Canada, 1993

According to data from the 1991 census for the Côte des Neiges Nord area, there was a total population of 44,065. Of that number, 70.1% claimed a single ethnic origin other than English or French. Of the many different ethnic origins found in the neighbourhood, those who claim single French origin comprised 14.5% (The area is close to the Université de Montreal and so is the home of many students and faculty.) Those who claim a single British origin comprise just 4.5%. By contrast, Jews numbered 7255 or 16.2%, Vietnamese numbered 2810 or 6.4%, and Blacks, almost all of who would be of Caribbean origin, numbered 2675 or 6.1%. There are no data in Germain's study on the number who claimed Filipino origin.

In 1991, about 52% of the entire population of the area was foreign born. When one recognizes that the population includes many families with immigrant parents and Canadian-born children, the proportion of the adult population which is immigrant would be much higher than 52%. Of the foreign-born population, the large plurality immigrated within the previous five years. Specifically, 36.5% arrived between 1986 to 1991, and 15% from 1981 to 1986. These data confirm our contention that the Cote des Neiges area has become the major de facto area of immigrant settlement in Montreal.

Of the foreign-born population in the area, 11.5% (2620) claimed a birthplace in the Caribbean, and 24.3% claimed a birth place in Southeast Asia, which would include both Vietnam and the Phillipines.

The area of Côte des Neiges contains a large number of parks, as well as commercial streets which are dotted with a veritable bazaar of stores and shops reflecting diverse cultural backgrounds. The parks are often used by various ethnic groups as scenes for large communal picnics and gatherings over the weekend.

THE SAMPLE

A total of 2246 Stage 1 interviews were conducted; 5 subjects could not be assigned an ethnic group because of missing data leaving a sample size of 2241. Tables 3-3 a-d present descriptive statistics for the target and control groups of the study. We will not review every single datum for all five key groups. Rather, we will present highlight statistics and then compare groups where there are significant differences.

Anglophone Canadian-Born

This control group numbered 384 respondents, and was comprised people born in Canada who spoke English most often when growing up. Table 3-4 summarizes the countries of origin of the parents of the Anglophone Canadian group; 170 had both parents born outside Canada, while 137 had both parents born in Canada. Thus the group includes many Canadians of diverse ethnic origin, and very few are of British origin. Of this sample, 63.3% were female, and the average age was 49.5.

About 34% were married, 4.2% were cohabitating, 33.8% had never been married, and 12.3% were separated or divorced.

Table 3-3a. Description of Sample by Ethnic Group

	Anglo Cdn	Franco Cdn	Other Cdn	Carib	Viet	Filip	Other non- Cdn	Total Sample	Significance Test
N	384	541	147	268	236	281	384	2241	
Gender (% Female)	63.3	61.4	50.7	65.9	44.4	74.8	51.7	59.8	$\chi^2=71.1^\dagger$ df=6
Age									
Mean	49.5	43.5	49.9	46.3	41.4	38.4	46.5	44.9	F=15.3 [†]
(SD)	(20.1)	(18.6)	(24.0)	(14.1)	(16.0)	(10.8)	(18.7)	(18.1)	df=6
Marital Status (%)									$\chi^2=249.7^\dagger$
Married	34.3	26.4	24.4	32.6	50.9	54.3	52.9	39.4	df=30
Living with someone	4.2	11.1	4.4	5.3	2.1	1.4	3.2	5.1	
Never married	33.8	41.9	40.7	34.5	32.5	36.3	23.3	34.5	
Widowed	15.4	9.6	20.7	4.9	8.1	2.5	11.1	10.0	
Separated	2.9	3.8	2.2	5.7	2.1	2.5	1.6	3.0	
Divorced	9.4	7.1	7.4	17.0	4.3	2.9	7.9	8.1	
Of those married or cohabiting									
Currently living with partner (%)	98.5	97.5	100.0	92.5	96.6	90.3	96.1	95.6	$\chi^2=17.9^{**}$ df=6
Partner of same ethnicity (%)	77.6	76.7	86.3	84.9	97.3	91.3	78.2	82.9	$\chi^2=47.8^\dagger$ df=6
N children living at home									
Mean	0.58	0.39	0.68	0.76	1.0	0.81	0.86	0.69	F=11.2 [†]
(SD)	(1.4)	(0.78)	(2.0)	(1.0)	(1.3)	(1.0)	(1.2)	(1.2)	df=6
N adults in household									
Mean	1.8	1.8	2.1	1.7	2.5	2.4	2.0	2.0	F=28.6 [†]
(SD)	(0.94)	(0.81)	(1.1)	(0.81)	(1.3)	(1.0)	(1.0)	(1.0)	df=6
N adult males in household									
Mean	0.85	0.83	1.1	0.73	1.3	0.79	1.0	0.92	F=19.4 [†]
(SD)	(0.74)	(0.68)	(0.81)	(0.66)	(0.85)	(0.69)	(0.75)	(0.75)	df=6

* p<.05 ** p<.01 [†]p<.001

Table 3-3b. Description of Sample by Ethnic Group

	Anglo Cdn	Franco Cdn	Other Cdn	Carib	Viet	Filip	Other non Cdn	Total Sample	Significance Test
Education (years)									
Mean	13.1	14.1	12.4	11.6	12.3	13.0	13.3	13.1	F=22.3 [†]
(SD)	(3.1)	(3.0)	(3.2)	(3.0)	(3.6)	(2.0)	(3.7)	(3.2)	df=6
Education > High School (%)	67.7	80.6	62.3	53.1	60.3	79.3	68.4	69.4	$\chi^2=90.3^{\dagger}$ df=6
Still in school (%)	14.1	29.0	26.3	11.5	23.0	11.3	19.0	19.6	$\chi^2=65.0^{\dagger}$ df=6
Worked < 6 mo. in last year (%)	47.3	36.0	54.3	38.8	43.9	19.5	51.4	40.7	$\chi^2=89.7^{\dagger}$ df=6
Religion (%)									$\chi^2=2739.7^{\dagger}$ df=48
Roman Catholic	15.4	86.5	25.2	21.4	23.9	85.4	26.5	44.5	
Protestant	17.6	1.5	3.7	45.8	0	4.4	5.9	10.9	
Other Christian	6.9	1.3	14.1	20.2	2.1	8.8	11.0	8.2	
Moslem	0	0	0.7	1.9	0	0	7.5	1.6	
Jewish	51.1	1.9	51.1	0	0	0	21.9	16.5	
Buddhist	0	0	0.7	0	64.1	0	8.3	8.6	
Hindu	0.5	0	1.5	0	0	0	6.7	1.4	
Other	0.5	0.2	0	3.1	0.4	0.4	0.3	0.7	
None	8.0	8.7	3.1	7.4	9.5	1.1	12.0	7.8	
Attend religious services (%)									$\chi^2=418.6^{\dagger}$ df=24
Never	32.1	35.5	26.9	17.6	28.2	2.9	36.6	27.3	
A few times	42.7	40.9	46.3	34.9	41.5	12.7	33.9	36.0	
About monthly	6.4	5.3	7.5	10.0	5.6	17.8	8.6	8.4	
Weekly or more	16.7	16.0	16.4	37.2	24.4	65.9	19.1	26.7	
Daily	2.1	2.3	3.0	0.4	0.4	0.7	1.9	1.6	
Practice religious rituals at home (%)									$\chi^2=345.4^{\dagger}$ df=24
Never	43.4	64.3	37.9	26.7	47.6	22.6	45.4	43.8	
A few times	22.1	10.9	25.8	5.4	21.0	7.7	16.1	14.8	
About monthly	2.1	1.7	3.0	1.2	6.9	4.0	2.4	2.8	
Weekly or more	13.0	6.0	12.9	10.9	6.0	16.8	10.2	10.4	
Daily	19.4	17.2	20.5	55.8	18.5	48.9	25.8	28.3	

* p<.05 ** p<.01 [†]p<.001

Table 3-3c. Description of Sample by Ethnic Group

	Anglo Cdn	Franco Cdn	Other Cdn	Carib	Viet	Filip	Other non Cdn	Total Sample	Significance Test
Turned to religious leader for help (%)									$\chi^2=45.9^{**}$ df=24
Never	83.2	88.7	88.0	87.0	95.3	88.3	86.5	87.8	
Once	4.8	2.8	2.3	2.7	.4	1.8	2.7	2.7	
Occasionally	9.0	5.8	6.0	9.2	2.6	8.4	7.5	7.1	
Often	1.6	2.4	3.8	1.1	1.7	1.5	1.6	1.8	
Never had problem	1.3	.4	0	0	0	0	1.6	0.6	
Current status (%)									$\chi^2=81.5^\dagger$ df=9
Citizen	-	-	-	82.4	85.4	58.7	78.0	75.9	
Landed Immigrant	-	-	-	16.9	13.7	35.5	19.3	21.5	
Refugee	-	-	-	0	0.9	0	1.1	0.5	
Other	-	-	-	0.7	0	5.8	1.7	2.1	
Age arrived in Canada									
Mean	-	-	-	27.2	30.0	31.0	25.2	28.0	F=13.1 [†]
(SD)	-	-	-	(11.4)	(15.4)	(9.8)	(14.2)	(13.1)	df=3
Length of stay in Canada (years)									
Mean	-	-	-	19.2	11.2	7.4	21.4	15.5	F=103.6 [†]
(SD)	-	-	-	(9.4)	(5.7)	(4.7)	(17.1)	(12.7)	df=3
Proportion of life spent in Canada									
Mean	-	-	-	.41	.30	.19	.44	0.34	F=93.1 [†]
(SD)	-	-	-	(0.18)	(0.18)	(0.11)	(0.27)	(0.23)	df=3
Schooling in Canada (years)									
Mean	-	-	-	2.5	3.2	0.81	3.7	2.6	F=26.9 [†]
(SD)	-	-	-	(3.9)	(4.0)	(1.7)	(5.3)	(4.2)	df=3
Where lived before coming to Canada (%)									$\chi^2=126.8^\dagger$ df=6
Farm/Rural area	-	-	-	17.6	3.0	6.7	6.9	8.6	
Small town or city	-	-	-	47.8	24.8	52.5	27.9	37.5	
Big city	-	-	-	34.5	72.2	40.4	65.3	53.9	
Lived in other country after leaving country of birth (%)	-	-	-	19.5	39.1	49.8	37.2	36.5	$\chi^2=55.4^\dagger$ df=3

* p<.05 ** p<.01 † p<.001

Table 3-3d. Description of Sample by Ethnic Group

	Anglo Cdn	Franco Cdn	Other Cdn	Carib	Viet	Filip	Other non Cdn	Total Sample	Significance Test
N years lived in other country									
Mean	-	-	-	6.8	3.4	4.8	7.4	5.6	F=9.8 [†]
(SD)	-	-	-	(5.5)	(4.4)	(2.8)	(8.3)	(6.0)	df=3
Got financial help from family/friends when resettling in Canada (%)	-	-	-	75.8	72.3	58.4	45.3	62.4	$\chi^2=42.2^{\dagger}$ df=3
N family members came to Canada									
Mean	-	-	-	0.91	3.1	0.87	2.5	1.9	F=69.9 [†]
(SD)	-	-	-	(1.6)	(2.9)	(1.5)	(2.4)	(2.4)	df=3
N family members already in Canada									
Mean	-	-	-	1.5	1.8	1.2	1.4	1.5	F=2.0
(SD)	-	-	-	(2.4)	(2.6)	(2.0)	(3.0)	(2.6)	df=3

* p<.05 ** p<.01 [†]p<.001

The Anglophone Canadian group averaged 13.1 years of education. Their religious backgrounds were 51.1% Jewish, 15.4% Catholic, 17.6% Protestant, and 6.9% other Christians. Many of these groups, especially the Jews, would be children of immigrants who had moved west from the "Main."

Table 3-4. Canadian-born Sample Parents' Country of Birth

Ethnic Group	3rd generation ^a	2nd generation		Unknown	
		Both parents born outside Canada	One parent born outside Canada		
			Father		Mother
Anglo-Canadian ^b (n=384)	137	170	43	28	6
Franco-Canadian ^c (n=541)	464	39	18	13	7
Other Canadian ^d (n=147)	17	112	5	3	10

Definitions:

- a both parents born in Canada
b born in Canada and spoke English most often when growing up
c born in Canada and spoke French most often when growing up
d born in Canada and did not speak English nor French most often when growing up

Table 3-5. Language Use Among Anglo-Canadians (N=384)

	Language	%
Language used most often...		
when growing up	English	100
at home now	English	92.7
	English + other	3.1
	French	2.3
at work now	English	57.7
	English + other	16.4
	French	7.8
with doctor, nurse or social worker	English	93.2
	English + French	4.2
	French	2.1
with friends	English	89.8
	English + other	7.0
	French	2.6

Francophone Canadian-born

This control group numbered 541 respondents. It includes all those born in Canada who spoke French most often when growing up. In theory this group should approximate the majority group of French origin Quebecers, or Québécois, but as we shall see, it contains a non-Catholic minority. Of 541 francophone Canadian born respondents, 464 were third generation French Canadians, with both parents born in Canada (see Table 3-4).

The Francophone-Canadian group was 61.4% female, and had an average age of 43.5. Only 26.4% were married, reflecting the general pattern in French Quebec of a retreat from formal marriage in the post-war period. An additional 11.1% were cohabitating, 41.9% had never married, and 10.9% were separated or divorced. The group had 14.1 years of education on average, reflecting the significance of proximity to the Université de Montreal; 29.0% were still in school, far more than the 14.1% of the English Canadian group. The francophone Canadians were very unlikely to attend religious services or practice religious rituals in the home. The picture then is of a somewhat younger, better educated, French Catholic population with a higher rate of cohabitation than other groups in our sample. As seen in Table 3-6, the vast majority use French at home and with health care providers although only 65.1% use French exclusively at work.

Table 3-6. Language Use Among Franco-Canadians (N=541)

	Language	%
Language used most often...		
when growing up	French	100
at home now	French	90.8
	English	4.6
	English + French	3.9
at work now	French	65.1
	English	10.7
	English + French	10.7
with doctor, nurse or social worker	French	83.7
	English + French	8.7
	English	6.7
with friends	French	82.3
	English + French	10.2
	English	5.2

Other Canadians

The group we have identified as "other Canadians" are those who were born in Canada but grew up speaking a language other than English or French. Thus this group is almost all second generation, children of immigrant parents (see Table 3-7). It includes large numbers of Jews (many of whom had Yiddish as a mother tongue; see Table 3-8). The large number of Catholics may well denote the children of Catholic European immigrants. The group averages 12.4 years of education, lower than the two other control groups. Their marital status pattern is similar to that of the French Canadians.

Table 3-7. Most Frequent Countries of Birth of Second Generation*
Canadian Subjects' Parents (N=434)

Country	Father	Mother
France	18 (4.1%)	20 (4.6%)
Germany	4 (0.9%)	3 (0.7%)
Greece	27 (6.2%)	26 (6.0%)
Italy	16 (3.7%)	12 (2.8%)
Morocco	15 (3.5%)	14 (3.2%)
Poland	52 (12%)	44 (10.1%)
Romania	25 (5.8%)	27 (6.2%)
Russia	85 (19.6%)	76 (17.5%)
United Kingdom	19 (4.4%)	23 (5.3%)
USA	9 (2.1%)	12 (2.8%)

* One or both parents not born in Canada

Table 3-8. Language Use Among “Other Canadians” (N=147)

	Language	%
Language used most often...		
when growing up	Yiddish	38.1
	Greek	10.2
	English + French	8.8
at home now	English	63.9
	Geek	5.4
	French	7.5
at work now	English	46.9
	English + French	14.3
	French	15.6
with doctor, nurse or social worker	English	72.1
	French	14.3
	English + French	6.8
with friends	English	70.7
	French	11.6
	English + French	6.1

Caribbeans

The Caribbean-born group is largely Jamaican-born (Table 3-9). Of the original group, 17/285 (6.0%) of subjects born in the Caribbean were of Asian origin. These subjects were excluded from the Caribbean group and placed in the “Other Immigrant” group. The Caribbean group numbers 268 respondents, of whom 65.9% were women. This reflects in part the impact of the domestic immigration program, which has affected the sex ratios of Caribbean and Filipino immigrants to Canada. The group averages 11.6 years of education, and 11.5% are still in school.

The marital status of the Caribbean sample conforms to a general pattern found in other Caribbean communities: 32.6% are married, 5.3% live with someone; 34.5% have never been married, and over 22% are separated or divorced. Because of a large number of single mothers with children, the average number of adults in the household stands at 1.7, significantly less than for any the other immigrant groups.

The Caribbean group is comparatively devout, with 37.2% attending services weekly or more often, and 66.7% claiming to practice religious rituals at home weekly or daily.

About 82% of the Caribbean group are Canadian citizens. On average the Caribbeans arrived in Canada at age 27.2, and have been in the country, on average, over 19 years. About 18% claim to have a farm or rural background in the Caribbean, with only a third (34.5%) coming from a big city—a lower proportion than for the Vietnamese and Filipinos.

Table 3-9. Most Frequent Islands of Origin of Caribbean Sample (N=268)

Island	N	%
Jamaica	102	38.1
Trinidad & Tobago	45	16.8
St-Vincent	33	12.3
Barbados	24	9.0
Guyana	17	6.3
Granada	14	5.2
Antigua	9	3.4
St-Lucia	9	3.4
Montserrat	6	2.2
Dominica	6	2.2

Table 3-10. Language Use Among Caribbeans (N=268)

	Language	%
Language used most often...		
when growing up	English	97.4
at home now	English	97.0
at work now	English	86.2
	English + French	3.7
	French	1.5
with doctor, nurse or social worker	English	98.1
with friends	English	97.8

As seen in Table 3-10, almost all the Caribbeans spoke English when growing up and the vast majority use English predominately at home, work, in health care settings and with friends.

Vietnamese

The number of respondents born in Vietnam was 281. On the basis of their parents' countries of birth, language spoken at home while growing up, or self-defined ethnicity, 45/281 (16.0%) of subjects born in Vietnam were of Chinese origin (Sino-Vietnamese). These subjects were excluded from the Vietnamese group and put in the "Other Immigrant" group described below. Thus, we have a group of ethnic Vietnamese, born in Vietnam. Unlike the other groups, where the majority of respondents were female, only 44.4% of the Vietnamese sample was female. This is probably because, unlike the Caribbeans and Filipinos, there have been no programs or immigration networks favouring female (domestic) Vietnamese workers. In addition, the fact that many Vietnamese in Canada were refugees or fled the war situation, would bias the population sex ratio in favour of males, who may have been more likely to survive a difficult passage. The average age of the Vietnamese group is 41.4.

The marriage norm is strong among the Vietnamese, with 50.9% being married. While 32.5% have never been married, only 6.4% are either separated or divorced. This reflects a traditional value placed on the family, and the reluctance to break up any spousal union for reasons of shame and face.

Table 3-11. Language Use Among Vietnamese (N=236)

	Language	%
Language used most often...		
when growing up	Vietnamese	97.5
	French	1.3
at home now	Vietnamese	91.9
	French	3.0
	Vietnamese + other	2.1
at work now	French	36.9
	English	23.3
	Vietnamese	11.4
with doctor, nurse or social worker	Vietnamese	37.3
	French	35.2
	English	17.4
with friends	Vietnamese	61.9
	French	15.3
	English	5.9

The Vietnamese sample averaged 12.3 years of education. Two-thirds, (64.1%) claimed Buddhist religion, and 23.9% were Roman Catholic. Vietnamese respondents appeared to be the least religiously observant of the three target groups, in terms of attendance at services or practicing home religious rituals. (It should be

noted that weekly church attendance does not have the same salience within Buddhist traditions as it does within the Judeo Christian). About 84% were Canadian citizens. The average age of arrival in Canada was 30, and respondents have been in the country on average for 11.2 years. Unlike the other two target groups, the vast majority claimed to have had an urban background in their country of origin or country of residence, prior to immigration.

As shown in Table 3-11, Vietnamese was the language spoken while growing up and is still spoken at home for almost all Vietnamese respondents. French is the second most commonly used language at home, at work and in other settings, followed by English.

Filipinos

The third target group are Filipinos. Only 4/285 (1.4%) of subjects born in the Philippines had parents of non-Filipino origin. These subjects were excluded from the Filipino group and put in the “Other Immigrant” group. The 281 respondents in the sample had the most unbalanced sex ratio, with 74.8% being female. The Côte des Neiges area is home to many Filipino women working as domestics outside the area, who share apartments in the area. Another explanation for the unbalanced sex ratio is the large number of Filipino women working as nurses in Montreal, at the Jewish General Hospital and St. Mary’s Hospital which are both located in the area.

Despite the skewed sex ratio, 54.3 % of the sample is married. This is likely due to strong religious norms, as well as the fact that there is a high marriage rate involving Filipino women and non-Filipino men (Christensen & Weinfeld, 1993). About one-third of Filipino respondents (36.3%) have never been married, and only 5.4% are separated or divorced—the lowest proportion among the three target immigrant groups.

The Filipinos averaged 13 years of education, higher than the other two target groups. This reflects the proportion of nurses, as well as the fact that even Filipino domestics have relatively higher levels of education. Fully 85.2% are Catholic and the remainder other Christian denominations with only 1.1% reporting no religion. The Filipinos are the most devout of the three groups, as measured by weekly church attendance and the practice of religious rituals at home.

The Filipinos in the sample were least likely to be Canadian citizens, at 58.7%, reflecting their recency of arrival. The average length of stay in Canada was 7.4 years. In addition, many would have spent their first years in Canada as temporary contract workers. Very few of the Filipinos were from rural or farm backgrounds; most came from small towns or cities.

Table 3-12 summarizes language use in the Filipino sample. Tagalog was the most frequent language while growing up and continues to be the most frequently used language at home and with friends. Ilocano is second most frequent while

growing up but tends not to be used in Canada. The majority use English at work and in health care settings and almost 1/4 use English with friends.

Table 3-12. Language Use Among Filipinos (N=281)

	Language	%
Language used most often...		
when growing up	Tagalog	58.4
	Ilocano	24.2
	English	3.2
at home now	Tagalog	44.1
	English	21.4
	Ilocano	12.8
at work now	English	82.9
	English + French	4.3
	Tagalog + English	1.8
with doctor, nurse or social worker	English	97.2
with friends	Tagalog	44.8
	English	24.2
	Tagalog + English	17.1

Other Immigrants (Non-Canadian born)

During the initial stages of the survey, we included subjects who were non-Canadian born but did not fall into one of the three target immigrant groups. Once ethnic-selective sampling was instituted subjects from these backgrounds were no longer accumulated. As a result the sample of “other immigrants reflects the population mix in the general population of the Côte des Neigers area, except for an over-representation of Sino-Vietnamese who were eliminated from the corresponding target group only at a later stage of data analysis when a more elaborate definition of group membership could be constructed. Table 3-13 summarizes the distribution of countries of origin in the “Other non-Canadian” group, while Table 3-14 presents the pattern of language use. The three most frequent languages used while growing up were French, English and Chinese, the latter consistent with the over-representation of Sino-Vietnamese.

Table 3-13. Most Frequent of Birth of “Other Non-Canadian” group (N=384)

Country of birth	N	%
Vietnam	45	11.7
France	35	9.1
Morocco	24	6.3
Poland	19	4.9
Hungary	13	3.4
Romania	13	3.4
Russia, USSR	12	3.1
USA	12	3.1
Lebanon	11	2.9
Egypt	10	2.6
Haiti	10	2.6

Table 3-14. Language Use Among “Other Immigrants” (N=384)

	Language	%
Language used most often...		
when growing up	French	17.4
	English	12.8
	Chinese	8.1
at home now	English	26.3
	French	21.4
	Chinese	6.3
at work now	English	34.6
	French	28.9
	English + French	9.1
with doctor, nurse or social worker	English	51.3
	French	33.3
	English + French	5.7
with friends	English	33.6
	French	25.0
	English + French	5.7

CHAPTER 4. SYMPTOMS , LIFE EVENTS & HEALTH CARE UTILIZATION

In this chapter we summarize results on measures of symptomatology, life events, health care utilization and perceived barriers to care with particular attention to differences across ethnocultural groups.

Somatic Symptoms

Somatic symptoms were ascertained for the last 12 months with a 12-item scale based on the somatization disorder section of the DIS (Swartz et al., 1986). An additional item on fatigue was added to the questionnaire since this has been found to be such a common symptom in primary care and the community (Cathébras, Robbins, Kirmayer & Hayton, 1992; Wessely, 1995). Three additional items were added related to fibromyalgia (generalized aches and pains), fatigue (insomnia) and conversion or dissociation (forgetfulness). These three items were not included in the somatic symptom index.

As seen in Table 4-1a, the somatic symptom index had acceptable reliability in all groups with Cronbach's alpha ranging from .72 among Filipinos to .76 in the Anglo-Canadian group. Several symptoms were weakly related to the overall index as indicated by low item-total correlations (<.30): limb pain (Franco-Canadian); chest pain (Filipino); loose bowels (Filipino); fainting (all groups); and sickly for most of life (Franco-Canadian, Caribbean, Filipino).

Table 4-1b summarizes the mean levels on the somatic symptom index across groups and the prevalence of specific somatic symptoms. Higher levels of symptoms were found among the Vietnamese and lower levels among the Caribbeans and Filipinos. However, because of significant sociodemographic differences across groups these results must be reassessed with multivariable statistics (see Chapter 6).

The most frequent somatic symptoms overall were fatigue (32%), limb pain (24.6%), generalized aches & pains (23%), excessive gas or bloating (19.5%), dizziness (14.4%), loose bowels (13.8%), and abdominal pain (12.1%). Insomnia (20%) and forgetfulness (13%) were also common.

There were significant differences across groups for 9 symptoms: the Vietnamese group had a significantly higher rate of abdominal pain, loose bowels, dizziness, weakness, feeling sickly for most of life, and forgetfulness. The Filipino group was significantly less likely to report abdominal pain, weakness, sickly for most of life, and insomnia. The Caribbean group was more likely to report generalized aches and pains and less likely to report vomiting, loose bowels, fainting, feeling sickly for most of life, fatigue, and insomnia.

Table 4-1a. Reliability Analysis of Somatic Symptom Index by Ethnic Group

	Anglo Cdn	Franco Cdn	Carib	Viet	Filip	Total Sample
N	384	541	268	236	281	1710
Alpha coefficient	0.76	0.73	0.73	0.73	0.72	0.73
Somatic items	(item-total correlation)					
1. abdominal pain	0.46	0.37	0.38	0.38	0.36	
2. limb pain	0.38	0.29	0.33	0.36	0.31	
3. chest pain	0.39	0.30	0.44	0.32	0.29	
4. nausea	0.51	0.45	0.50	0.32	0.43	
5. vomiting	0.43	0.36	0.31	0.38	0.36	
6. loose bowels	0.48	0.49	0.40	0.35	0.24	
7. excessive gas/bloating	0.36	0.49	0.33	0.44	0.32	
8. dizziness	0.41	0.38	0.50	0.52	0.43	
9. fainting	0.20	0.22	n/a	0.16 ^f	0.20	
10. weakness	0.51	0.45	0.39	0.28	0.29	
11. sickly (for most of life)	0.33	0.26	0.12	0.46	0.28	
12. fatigue	0.46	0.43	0.45	0.42	0.41	

^f Alpha coefficient would increase slightly if item was deleted

n/a The item had zero variance in this group (mean and SD=0)

Table 4-1b. Mean Somatic Symptom Scores by Ethnic Group

	Anglo Cdn	Franco Cdn	Carib	Viet	Filip	Total Sample	Significance Test (df=4)
N	384	541	268	236	281	1710	
Somatic Symptom Scale							
Overall mean (SD)	1.5 (2.0)	1.5 (1.9)	1.4 (1.8)	1.9 (2.1)	1.4 (1.7)	1.5 (1.9)	F=3.0* ^a
Somatic items (% who reported symptom)							
1. abdominal pain	12.0	11.3	13.4	17.4	8.2	12.1	² =11.0*
2. limb pain	24.8	22.4	27.6	25.8	24.9	24.6	² =2.9
3. chest pain	9.9	7.2	10.1	8.5	7.1	8.4	² =3.7
4. nausea	7.8	9.1	9.7	8.5	7.8	8.6	² =1.1
5. vomiting	5.5	5.2	2.6	5.1	5.7	4.9	² =3.7
6. loose bowels	13.6	16.1	6.4	16.6	14.6	13.8	² =16.5**
7. excessive gas/bloating	15.9	22.1	22.5	19.5	16.4	19.5	² =8.7
8. dizziness	8.4	11.5	113.1	26.3	19.3	14.4	² =47.7 [†]
9. fainting	3.1	3.0	0	2.5	2.1	2.3	² =8.4
10. weakness	10.7	8.0	8.6	11.9	4.6	8.7	² =11.2*
11. sickly for most of life	4.2	3.3	1.9	17.8	1.4	5.0	² =98.4 [†]
12. fatigue	35.2	36.2	25.8	31.8	26.0	32.0	² =15.5**

* p<.05 ** p<.01 [†] p<.001

a LSD test with significance level 0.05: Viet>All groups

Psychological Distress: The General Health Questionnaire

As shown in Table 4-2a, the reliability of the GHQ was good in four of the five groups (English-Canadian, French-Canadian, Caribbean, Vietnamese), with Cronbach's alpha ranging from 0.75 to 0.83. In the fifth group (Filipinos), the reliability was fair with $\alpha = 0.60$, but in this group, two items (GHQ 3 & 4) showed a very low item-total correlation that decreased the overall internal consistency.

Table 4-2a. Reliability Analysis of GHQ by Ethnic Group

	Anglo Cdn	Franc o Cdn	Carib	Viet	Filip	Total Sample
N	384	541	268	236	281	1710
Alpha coefficient	0.83	0.81	0.78	0.75	0.60	0.80
GHQ items	(item-total correlation)					
1. not able to concentrate	0.33	0.49	0.35	0.19 ^f	0.17	
2. loss of sleep over worry	0.47	0.40	0.53	0.39	0.43	
3. not playing a useful part	0.43	0.47	0.27	0.32	0.03 ^f	
4. couldn't make decisions	0.46	0.39	0.12 ^f	0.42	0.03 ^f	
5. under strain	0.52	0.45	0.41	0.39	0.36	
6. couldn't overcome difficulties	0.60	0.57	0.46	0.55	0.34	
7. didn't enjoy activities	0.59	0.46	0.45	0.26	0.30	
8. didn't face problems	0.47	0.49	0.25	0.32	0.14	
9. felt unhappy, depressed	0.66	0.53	0.61	0.50	0.54	
10. loss of self-confidence	0.50	0.59	0.62	0.59	0.32	
11. felt worthless	0.48	0.51	0.38	0.38	0.16	
12. not reasonably happy	0.56	0.51	0.50	0.29	0.14	

* $p < .05$ ** $p < .01$ † $p < .001$

^f Alpha coefficient would increase slightly if item was deleted

Table 4-2b presents the mean GHQ score and frequency of individual items for each ethnic group. With the exception of GHQ item 2 "loss of sleep over worry," the Filipinos always have the lowest prevalence of symptoms among the five groups. For GHQ item 2, it is the Caribbeans who have the lowest prevalence. For the other GHQ items, the Caribbeans generally have the lowest prevalence when excluding the Filipinos, with the exception of item 10 "loss of self-confidence" and item 12 "not reasonably happy."

Regarding the comparison of the three other groups (English Canadian, French Canadian, Vietnamese), different patterns are observed: (a) for 5 of the 12 symptoms (items 4, 6, 8, 10, 11) the Vietnamese have a higher prevalence than the two other groups; (b) for two symptoms (1,2), the Vietnamese and the French Canadians have a higher prevalence than the English Canadians; (c) for one symptom (12), the English Canadian and the Vietnamese have a higher prevalence than the French Canadians, and for one other symptom (item 7), the English Canadians are first alone; (d) finally, for the three remaining symptoms (items 3, 5, 9), the three groups have roughly similar prevalences.

To summarize, the immigrant groups show very different patterns regarding psychological distress; whereas the Filipinos and the Caribbean have lower scores than the non-immigrant groups, the Vietnamese exhibit prevalences of symptoms that are roughly similar to and somewhat higher than the non-immigrant groups.

Table 4-2b. Mean GHQ by Ethnic Group

	Anglo Cdn	Franc o Cdn	Carib	Viet	Filip	Total Sample	Significance Test (df=4)
N	384	541	268	236	281	1710	
GHQ							
Overall mean (SD)	1.3 (2.2)	1.5 (2.2)	0.95 (1.7)	1.7 (2.0)	0.70 (1.4)	1.3 (2.0)	F=12.5 ^{†a}
GHQ items	(% who reported symptom)						
1. not able to concentrate	5.0	9.8	4.5	9.4	1.8	6.5	² =26.5 [†]
2. loss of sleep over worry	18.1	28.2	13.9	28.9	14.9	21.6	² =40.8 [†]
3. not playing a useful part	10.5	10.2	3.8	12.1	1.0	8.3	² =30.4
4. couldn't make decisions	2.3	3.3	1.9	6.4	1.1	32.9	² =14.9**
5. under strain	24.6	23.6	12.8	23.0	10.0	19.8	² =36.8 [†]
6. couldn't overcome difficulties	12.0	13.5	7.1	19.1	3.9	11.4	² =37.0 [†]
7. didn't enjoy activities	9.9	6.8	5.2	4.3	3.9	6.4	² =13.4**
8. didn't face problems	3.1	3.3	2.6	6.0	1.1	3.2	² =10.3*
9. felt unhappy, depressed	25.8	30.9	23.6	29.5	20.3	26.7	² =13.2**
10. loss of self-confidence	9.9	11.9	10.5	19.2	6.1	11.3	² =23.3 [†]
11. felt worthless	4.2	5.2	1.9	7.7	0.70	4.1	² =21.1 [†]
12. not reasonably happy	7.9	4.5	6.8	7.7	2.8	5.8	² =11.3*

* $p < .05$ ** $p < .01$ † $p < .001$

a LSD test with significance level 0.05: Anglo-Cdn, Franco-Cdn & Viet>Filip; Anglo-Cdn, Franco-Cdn & Viet>Carib & Viet>Anglo-Cdn.

Life Events in Last 12 Months

Table 4-3 summarizes the frequency of each of 14 common life events in the past year for each study group. Respondents who did not answer an item, or to whom it did not apply, were given a score of 0 for that item. There was no significant difference across groups in mean number of life events, which averaged one per year, except for the Filipino group. The most frequent events overall (>7%) were: illness or death in the family (22.4%), difficulties at work or school (12%), serious troubles because of lack of money (12%), troubles with spouse or other adults in the family (9.4%), and major concerns with children (7.1%).

Although the overall rate of life events did not differ across groups, there was a non-significant trend for Filipinos to report fewer events. There were group differences for 8 specific events: Franco-Canadians were more likely to report troubles with lack of money and with their spouse or other adults in their family as well as illness or death in their family; Caribbeans were more likely to report major concerns with their children, troubles with housing, and troubles with prejudice or discrimination; Vietnamese more often reported difficulties at work or school, troubles with housing, and troubles because people did not understand their language.

In general then, the pattern of life events reflects both the sociodemographics of the respective groups and their specific social situation. Anglo- and Franco-Canadians have little or no trouble with language or discrimination. Anglo-Canadians, who include more elderly retired individuals, are less likely to have trouble with lack of money. Franco-Canadians, who include many students, more often report difficulties at work or school and less often have concerns with children. Caribbeans are more likely to report events that may reflect consequences of racial discrimination: major concerns with their children and trouble with housing. Vietnamese, who include many refugees, face linguistic problems and difficulties at work or school.

Table 4-3. Recent Events by Ethnic Group

	Anglo Cdn	Franco Cdn	Carib	Viet	Filip	Total Sample	Significance Test (df=4)
N	384	541	268	236	281	1710	
Recent Events							
Overall mean (SD)	1.0 (1.4)	1.1 (1.4)	1.0 (1.4)	1.0 (1.4)	0.79 (1.1)	1.0 (1.3)	F=2.0
Recent Events	(% who reported event)						
1. Difficulties at work or school	11.5	14.0	6.8	16.7	10.2	12.0	$\chi^2=14.2^{**}$
2. Major concerns with your children	10.0	4.4	10.6	3.5	7.4	7.1	$\chi^2=18.8^{**}$
3. Troubles with housing	5.5	1.9	10.1	7.2	5.7	5.5	$\chi^2=24.3^\dagger$
4. Troubles because people did not understand your language	2.1	1.7	4.1	20.9	8.9	6.2	$\chi^2=121.4^\dagger$
5. Troubles because of the neighborhood you live in	4.2	6.1	3.8	5.1	2.9	4.6	$\chi^2=5.1$
6. Troubles with the police	0.3	1.5	2.3	2.1	0.70	1.3	$\chi^2=7.3$
7. Troubles with prejudice or discrimination	3.7	4.0	15.1	6.8	6.1	6.5	$\chi^2=42.2^\dagger$
8. Serious troubles because you did not have enough money	7.6	14.9	10.5	13.6	13.2	12.0	$\chi^2=12.3^*$
9. Troubles with your spouse or other adults in your family	11.3	13.7	6.8	8.1	3.2	9.4	$\chi^2=27.2^\dagger$
10. Physical fights in your family	1.0	1.5	2.3	1.3	0.40	1.3	$\chi^2=4.2$
11. Serious arguments with friends	4.7	4.4	1.9	2.6	3.9	3.7	$\chi^2=5.1$
12. Illness or death in the family	26.0	30.7	24.2	13.2	12.1	22.9	$\chi^2=49.8^\dagger$
13. Problems with government agencies	5.2	5.0	5.3	2.6	2.9	4.4	$\chi^2=5.0$
14. Been the victim of a crime or assault	3.2	2.7	3.0	0.90	0.70	2.3	$\chi^2=7.6$

* p<.05 ** p<.01 † p<.001

Health Care Service Utilization

This section summarizes findings on rates of health care utilization at different sites and sectors in the community for the study groups. As shown in Table 4-4a, more than three quarters of respondents sought help from a medical service in the 12 months prior to interview. While there was no overall difference between immigrants and non-immigrants, immigrants were less likely to visit the emergency room or see a specialist. Immigrants were less likely to use medical services for a mental health problem (especially emergency room and medical specialist) and much less likely to use any specialty mental health services. When general medical and specialty mental health services are combined, immigrants are 1/3 as likely to receive mental health care from either source. When immigrants do see a mental health professional there is a tendency for them to be seen less often (fewer visits) although this did not reach significance (Table 4-4b).

The rates of seeking help from services are broken down by ethnocultural group in Tables 4-5a-f. Regarding the use of any type of medical services in the last year, we can delineate three clusters: the high users include the Anglophone Canadians and the Caribbeans, the low users are the Francophone Canadians and the Filipinos (Table 4-5a). The same gradient across the different ethnic groups is observed for the use of a family doctor in the past year. Regarding the use of emergency room, the two non-immigrant groups and the Caribbeans are very similar, with about 1/5 of the population having used the emergency room in the past year, compared to 1/10 for the two other immigrant groups (Vietnamese, Filipinos). Only for consultation with a medical specialist do we find consistent differences between the immigrant and non-immigrant groups; among the non-immigrants, Anglophones are higher users than Francophones, among the immigrants, Vietnamese are the higher users.

The picture is somewhat different for use of services for mental health. As shown in Table 4-5a, for the use of medical services for mental health reasons, the Anglophones are the higher users, the Vietnamese and the Filipinos are the low-users, and the Francophones and the Caribbeans are in an intermediate position.

For the use of specialty mental health services, we can note a clear dichotomy between immigrant and non-immigrant groups, the prevalence of use of this type of services being about four times higher in the latter group. Among the non-immigrants, Anglophones are higher users of psychiatrists and of social workers, but Francophones are higher users of other mental health practitioners (i.e., psychologist, counsellor, etc.). Among the immigrant groups, the Caribbeans are the higher users, the Filipinos the lower users, the Vietnamese being in the middle.

To summarize, there is no pattern specific to the immigrants regarding the use of medical services. In contrast, there is a clear cut difference between immigrants and non-immigrants regarding the use of mental health specialty services. We can conclude that the immigrants experience specific barriers to care uniquely for the use of specialty mental health services.

Table 4-4a. Service Utilization in the Last Year, Immigrants vs Non-immigrants (%)

	Immigrants (n=785)	Non-immigrants (n=925)	Significance Test (χ^2 , df=1)
Sought any medical services	78.5	76.5	0.90
Emergency room	14.6	23.7	21.7 [†]
Family doctor	69.4	66.4	1.6
Medical specialist	36.6	50.5	31.8 [†]
Sought any medical services for mental health	3.6	5.8	4.8*
Emergency room	0.5	1.5	4.0*
Family doctor	2.8	4.5	3.0
Medical specialist	0.5	2.1	8.0**
Sought social worker	3.2	4.2	1.1
Sought any specialty mental health services	2.5	11.7	51.1 [†]
Psychiatrist	1.2	5.0	19.8 [†]
Other mental health practitioner	0.6	6.8	41.4 [†]
Social worker for mental health	1.2	1.8	1.0
Other professional/ agency for mental health	0.3	1.7	8.9*
Sought any service for mental health	5.5	14.7	37.3 [†]

* p<.05 ** p<.01 [†] p<.001

Table 4-4b. Service Utilization in Last Year Among Immigrants vs Non-immigrants

	Immigrants	Non-immigrants	Significance Test
N visits to psychiatrist			
n	9	42	
Mean (SD)	5.6 (4.8)	10.1 (10.5)	t=1.3 df=49
N visits to psychologist			
n	4	58	
Mean (SD)	3.8 (4.3)	14.7 (23.3)	t=0.93 df=60
N visits to other professionals			
n	1	11	
Mean (SD)	24.0 -	5.5 (5.3)	-

Table 4-5a. Service Utilization in Last Year by Ethnic Group (%)

	Anglo Cdn (n=384)	Franco Cdn (n=541)	Carib (n=268)	Vietnam (n=236)	Filip (n=281)	Significance Test (χ^2 , df=4)
Sought any medical services	84.6	70.8	85.1	78.8	71.9	39.2 [†]
Emergency room	23.6	23.8	22.8	9.0	11.4	39.9 [†]
Family doctor	72.3	61.7	78.7	69.2	60.6	32.9 [†]
Medical specialist	53.5	48.0	37.1	40.6	32.9	37.6 [†]
Sought any medical services for mental health	7.3	4.8	5.6	3.0	2.1	11.7*
Emergency room	1.3	1.7	1.1	0	0.4	5.9
Family doctor	6.1	3.2	4.2	2.6	1.8	10.1*
Medical specialist	2.4	1.9	1.1	0.4	0	9.7
Sought social worker	4.7	3.8	4.1	3.0	2.5	2.7
Sought any specialty mental health services	12.5	11.1	3.4	3.0	1.4	52.6 [†]
Psychiatrist	6.0	4.2	1.9	1.3	0.4	23.2 [†]
Other mental health practitioner	5.0	8.2	0.70	0.9	0.4	47.5 [†]
Social worker for mental health	2.9	0.8	1.9	0.9	0.7	8.6
Other professional/ agency for mental health	1.8	1.7	0	0.9	0	10.1*
Sought any service for mental health	16.7	13.3	7.8	5.5	3.6	42.7 [†]

* p<.05 ** p<.01 [†] p<.001

Table 4-5b. Service Utilization in Last Year by Ethnic Group

	Anglo Cdn (n=384)	Franco Cdn (n=541)	Carib (n=268)	Vietnam (n=236)	Filip (n=281)	Significance Test
Sought help from... (%)						
CLSC	8.3	6.8	4.5	5.1	2.8	2=10.9* df=4
General hospital clinic	25.5	22.2	20.1	16.1	13.2	2=19.1 [†] df=4
Mental health clinic/ Psychiatric outpt. clinic	2.9	1.7	0.40	0	0	2=17.4** df=4
Emergency room	23.4	20.9	22.8	8.9	11.4	2=35.3 ^t df=4
Private office	68.0	49.2	64.2	66.9	50.5	2=51.4 ^t df=4

* p<.05 ** p<.01 [†]p<.001

Table 4-5b presents the prevalence of use by site (CLSC, general hospital clinic, mental health clinic, emergency room, private office). The Anglophones are always the highest users, and the Filipinos are generally lowest users, with the exception of the use of emergency room, where the Vietnamese are lower but close to the Filipinos. For the three other groups, we can distinguish two patterns: (1) for the use of general hospital clinic and emergency room, Francophones and Caribbeans are close to the Anglophones (high users), whereas the Vietnamese are low users like the Filipinos; (2) for the use of private office, there are two clusters, with high users including Anglophones, Caribbeans and Vietnamese (about 2/3 having used private office consultation), and low users being Francophones and Filipinos (about 1/2 having used private office).

Table 4-5c compares the amount of use of different medical services between the users in the five groups. Significant differences are observed only for: (a) the number of visits to family doctor, where Vietnamese have the highest average in number of visits, Francophones and Filipinos have the lowest, with Anglophones and Caribbeans being in the middle; (b) the average number of visits to a medical specialist, where Anglophones are in the first position and Caribbeans in the last position, the three other groups being intermediate.

Table 4-5c. Service Utilization in the Last Year by Ethnic Group

	Anglo Cdn	Franco Cdn	Carib	Vietnam	Filip	Significance Test
N visits to emergency room						
n	89	111	60	20	31	
Mean (SD)	1.6 (1.5)	1.6 (1.3)	1.3 (0.68)	1.7 (2.4)	1.3 (0.7)	F=0.76 df=4
N visits to emergency room for mental health reason						
n	4	8	3	0	0	
Mean (SD)	1.3 (0.5)	1.5 (0.76)	2.0 (1.0)	- -	- -	F=0.87 df=2
N visits to family doctor						
n	274	290	206	159	167	
Mean (SD)	3.06 (3.5)	2.6 (2.7)	3.0 (3.3)	3.9 (3.9)	2.5 (2.7)	F=5.7 [†] df=4
N visits to family doctor for mental health reason						
n	19	10	10	4	3	
Mean (SD)	2.6 (2.8)	2.6 (2.4)	3.2 (1.4)	3.5 (2.4)	1.0 (0)	F=0.65 df=4
N visits to medical specialist						
n	200	226	97	94	91	
Mean (SD)	3.9 (4.9)	3.0 (3.6)	2.0 (2.3)	3.1 (3.0)	3.0 (3.5)	F=4.1** df=4
N visits to medical specialist for mental health reason						
n	7	8	3	1	0	
Mean (SD)	5.3 (5.9)	7.1 (7.6)	1.7 (0.58)	1.0 -	- -	F=0.69 df=3
N visits to social worker						
n	18	17	11	7	7	
Mean (SD)	10.2 (19.6)	4.3 (11.8)	4.3 (4.7)	5.1 (5.6)	1.6 (0.79)	F=0.8 df=4
N visits to social worker for mental health reason						
n	7	4	4	1	2	
Mean (SD)	14.0 (30.9)	13.8 (24.2)	4.5 (5.1)	4.0 -	2.0 1.4	F=0.19 df=4

* p<.05 ** p<.01 † p<.001

Table 4-5d describes the amount of use of specialty mental health services in users from the five ethnic groups. The amount of use of psychiatrist and psychologist services appears lower in the immigrant groups, although the difference is not statistically significant due to the small number of users in the immigrant groups. Nevertheless, we can see the dichotomy between immigrant and non-immigrant groups that was already described for the prevalence of use of specialty mental health services. Compared to the non-immigrants, immigrants rarely use specialty mental health services and, when they do use it, tend to make fewer visits.

Table 4-5d. Specialty Mental Health Service Utilization in Last Year by Ethnic Group

	Anglo Cdn	Franco Cdn	Carib	Vietnam	Filip	Significance Test
N visits to psychiatrist						
n	23	19	5	3	1	
Mean (SD)	8.7 (10.4)	11.8 (10.5)	6.9 (5.6)	5.0 (4.0)	1.0 -	F=0.72 df=4
N visits to psychologist						
n	19	39	2	1	1	
Mean (SD)	12.8 (14.6)	15.6 (26.6)	2.0 (1.4)	10.0 -	1.0 -	F=0.28 df=4
N visits to other professionals						
n	5	6	0	1	0	
Mean (SD)	6.6 (6.9)	4.7 (4.0)	- -	24.0 -	- -	F=5.4* df=2

* p<.05 ** p<.01 † p<.001

Tables 4-6a & b describe the use of non-medical resources. Regarding the question about seeking help in the community, the Vietnamese have the higher prevalence; they also seek help more often from a religious leader, the Filipinos being second for this item. Regarding the consultation of any kind of traditional medicine practitioner, the Caribbeans are the highest users and the Filipinos the lowest users; for the use of any kind of traditional medicine at home, the high users include the Caribbeans, the Francophones and the Vietnamese. Regarding consultation of any kind of alternative medicine practitioner, the immigrant groups have a lower rate of use than the non-immigrants and, in the latter group, Francophones are higher users than Anglophones. For the use of any kind of alternative medicine at home, Francophones clearly have a higher rate of use than the four other groups, with one fifth of the Francophones being users, compared to 1/10 to 1/20 in the other groups.

Table 4-6a. Utilization of Non-Medical Sources of Help in Last Year by Ethnic Group

	Anglo Cdn	Franco Cdn	Carib	Vietnam	Filip	Significance Test
Sought help from anyone in community (%)	2.1	3.4	.8	6.0	1.8	2=15.5** df=4
N visits to anyone in community						
n	6	10	1	13	1	
Mean	35.7	8.8	2.0	24.3	2.0	F=0.56 df=4
(SD)	(51.0)	(12.3)	-	(47.6)	-	
Sought help from religious leader (%)	1.3	1.5	0.70	3.8	2.9	2=9.2 df=4
N visits to religious leader						
n	4	7	1	9	4	
Mean	2.0	11.7	2.0	31.8	11.3	F=0.91 df=4
(SD)	(1.4)	(18.2)	-	(46.2)	(11.7)	
Used any kind of traditional medicine at home (%)	15.4	19.6	22.2	20.5	13.6	2=10.2* df=4
N use traditional medicine at home						
n	39	52	38	40	28	
Mean	141.9	91.4	74.1	61.1	30.9	F=2.2 df=4
(SD)	(258.6)	(138.5)	(134.6)	(153.7)	(78.4)	
Saw any kind of traditional medicine practitioner (%)	4.2	5.0	10.9	4.7	.4	2=33.3 [†] df=4
N visits to traditional medicine practitioner						
n	14	19	28	10	1	
Mean	3.6	4.9	2.7	8.8	2.0	F=1.6 df=4
(SD)	(3.8)	(5.9)	(2.2)	(15.5)	-	
Used any kind of alternative medicine at home (%)	7.9	19.7	10.9	6.0	6.8	2=50.4 [†] df=4
N use alternative medicine at home						
n	22	75	23	8	12	
Mean	156.8	95.2	168.2	146.0	126.3	F=1.1 df=4
(SD)	(209.9)	(171.1)	(165.8)	(181.6)	(176.4)	

* p<.05 ** p<.01 [†] p<.001

Table 4-6b. Utilization of Non-Medical Sources of Help in Last Year by Ethnic Group

	Anglo Cdn	Franco Cdn	Carib	Vietnam	Filip	Significance Test
Saw any kind of alternative medicine practitioner (%)	4.2	7.0	0.8	1.3	0.40	$\chi^2=36.1^\dagger$ df=4
N visits to alternative medicine practitioner						
n	13	30	2	3	1	
Mean (SD)	4.1 (3.3)	10.4 (16.0)	3.0 (1.4)	9.3 (9.4)	41.0 -	F=2.1 df=4
Used any kind of traditional or alternative medicine at home (%)	21.9	29.2	27.2	25.0	18.1	$\chi^2=14.9^{**}$ df=4
Saw any kind of traditional or alternative medicine practitioner (%)	7.6	9.8	10.8	5.9	0.70	$\chi^2=28.1^\dagger$ df=4

* p<.05 ** p<.01 [†]p<.001

If the analysis of use of medical services is restricted to subjects with four somatic symptoms or more, the results generally parallel the results on the overall sample, with some interesting differences (See Table 4-7).

For the use of any medical services, the Anglophones and the Caribbeans are still the highest users and the Francophones the lowest users, but the Filipinos are now in an intermediate position, close to the Vietnamese. For the use of emergency room, we observe the same dichotomy as for the overall sample, with the Vietnamese and the Filipinos having a low rate of use, whereas the Caribbeans are similar to the non-immigrant groups. For the use of a family doctor, the Caribbeans are the highest users, the four other groups being roughly similar. Finally, for the use of a medical specialist, of any medical services, and of any specialty mental health services, we find the dichotomy between immigrants and non-immigrants that was observed on the overall sample.

**Table 4-7. Service Utilization in the Last Year by Ethnic Group
for Subjects with Four or More Somatic Symptoms (%)**

	Anglo Cdn	Franco Cdn	Carib	Vietnam	Filip	Significance Test (χ^2 , df=4)
N	51	74	36	49	36	
Sought any medical services	96.1	75.7	94.4	89.8	86.1	14.2**
Emergency room	39.2	52.4	48.6	14.3	22.2	22.9 [†]
Family doctor	82.4	78.1	88.6	77.6	75.0	2.7
Medical specialist	76.5	59.4	51.4	53.1	44.4	11.0*
Sought any medical services for mental health	15.7	10.8	2.8	6.1	8.3	5.1
Emergency room	2.0	7.8	0	0	2.9	8.0
Family doctor	12.2	6.3	2.9	4.3	5.6	3.8
Medical specialist	4.0	3.2	0	2.0	0	2.7
Sought social worker	11.8	12.5	8.6	2.1	2.8	6.3
Sought any specialty mental health services	35.3	18.9	8.3	4.1	2.8	26.7 [†]
Psychiatrist	22.0	10.9	2.9	2.0	0	19.5 [†]
Other mental health practitioner	9.8	10.9	5.7	0	0	9.6*
Social worker for mental health	11.8	3.1	2.9	2.1	2.8	7.3
Other professional/ agency for mental health	7.8	6.3	0	0	0	8.9
Sought any service for mental health	41.2	24.3	11.1	10.2	11.1	20.6 [†]

* p<.05 ** p<.01 [†]p<.001

As shown in Table 4-8, the results are very similar to those for subjects with multiple somatic symptoms when the analysis of use of medical services is restricted to subjects with a score of three or more on the GHQ. The only noteworthy difference relates to the use of any medical services for mental health: while the Anglophones are still the highest users, the Caribbeans are now in an intermediate position with the Francophones, and the Vietnamese and Filipinos are the lowest users.

Table 4-8. Service Utilization in Last Year by Ethnic Group
for Subjects with GHQ-12 3 (%)

	Anglo Cdn	Franco Cdn	Carib	Viet	Filip	Significance Test (χ^2 , df=4)
N	77	126	47	64	27	
Sought any medical services	92.2	75.4	93.6	84.4	88.9	14.8**
Emergency room	42.9	36.4	43.5	15.9	25.9	14.8**
Family doctor	72.7	67.6	82.6	79.4	77.8	5.4
Medical specialist	63.6	54.1	45.7	42.9	44.4	7.8
Sought any medical services for mental health	18.2	15.1	12.8	6.3	7.4	5.6
Emergency room	2.6	5.5	4.3	0	0	5.0
Family doctor	15.6	9.9	8.7	4.8	7.4	4.9
Medical specialist	5.2	6.4	2.2	1.6	0	4.4
Sought social worker	16.9	9.0	6.5	6.3	7.4	6.0
Sought any specialty mental health services	36.4	24.6	6.4	4.7	3.7	34.6 [†]
Psychiatrist	20.8	11.7	2.2	1.6	0	22.2 [†]
Other mental health practitioner	10.4	17.1	2.2	0	0	21.3 [†]
Social worker for mental health	13.3	3.7	4.3	3.2	3.8	9.6
Other professional/ agency for mental health	6.5	4.5	0	1.6	0	5.9
Sought any service for mental health	45.5	31.0	19.1	9.4	11.1	29.3 [†]

* p<.05 ** p<.01 [†]p<.001

Table 4-9 summarizes the use of inpatient services by immigrants and non-immigrants. We find the dichotomy between immigrants as low users and non-immigrants as high users that was observed for use of medical specialist, of medical services for mental health, and of specialty mental health services. The difference is highly significant for hospitalization for a mental health problem, and moderately significant (p<.05) for hospitalization for a physical problem. Table 4-10 summarizes the same variables for each ethnic group separately.

Table 4-9. Utilization of Inpatient Services, Immigrants vs Non-immigrants

	Immigrants	Non-immigrants	Significance Test
Hospitalized overnight for physical problem in last 12 months (%)	6.0	9.0	$\chi^2=5.0^*$ df=1
N times in hospital			
Mean	1.2	1.3	t=0.56
(SD)	(0.77)	(0.85)	df=121
n	46	77	
N days in hospital			
Mean	7.7	16.0	t=1.44
(SD)	(13.8)	(46.6)	df=91.78
n	47	74	
Hospitalized overnight for mental health problem in lifetime (%)	1.8	6.1	$\chi^2=19.1^\dagger$ df=1
N times in hospital			
Mean	3.2	3.0	t=0.16
(SD)	(2.9)	(4.2)	df=60
n	10	52	
N nights in hospital of most recent hospitalization			
Mean	21.7	27.0	t=0.39
(SD)	(27.6)	(39.1)	df=59
n	9	52	
Reasons for hospitalization (%)			
emotional problem	70.0	79.6	$\chi^2=0.44$ df=1
alcohol problem	-	16.3	$\chi^2=1.7$ df=1
drug problem	10.0	7.3	$\chi^2=0.08$ df=1

* p<.05 ** p<.01 † p<.001

Table 4-10. Utilization of Inpatient Services by Ethnic Group

	Anglo Cdn	Franco Cdn	Carib	Vietnam	Filip	Significance Test
Hospitalized overnight for physical problem in last 12 months (%)	8.9	9.0	5.7	6.8	5.7	2=5.3 df=4
N times in hospital						
Mean	1.5	1.2	1.4	1.4	1.0	F=1.1
(SD)	(1.0)	(0.64)	(0.84)	(1.0)	(0)	df=4
n	34	43	14	16	16	
N days in hospital						
Mean	23.6	9.9	10.5	6.9	5.8	F=1.0
(SD)	(66.9)	(17.1)	(15.5)	(14.4)	(11.7)	df=4
n	33	41	15	16	16	
Hospitalized overnight for mental health problem in lifetime (%)	6.3	5.9	1.9	2.1	1.4	2=19.3 [†] df=4
N times in hospital						
Mean	3.0	3.0	2.8	3.6	-	F=0.04
(SD)	(3.1)	(4.9)	(1.9)	(3.8)	-	df=3
n	24	28	5	5	0	
N nights in hospital of most recent hospitalization						
Mean	37.2	18.3	8.8	32.0	-	F=1.5
(SD)	(41.4)	(35.4)	(4.3)	(34.8)	-	df=3
n	24	28	4	5	0	
Reasons for hospitalization (%)						
emotional problem	91.3	69.2	40.0	100.0	-	2=9.1* df=3
alcohol problem	10.5	20.8	0	0	-	2=2.7 df=3
drug problem	5.6	8.7	20.0	0	-	2=1.6 df=3

* p<.05 ** p<.01 † p<.001

Multivariable Analysis of Health Care Utilization

Given that the groups in the present study differ substantially on many sociodemographic variables, it is necessary to control for these factors in order to examine the contribution of ethnocultural group status on rates of health care utilization. Table 4-11 presents the results from a logistic regression analysis of rates of health care utilization for stress, mental health or emotional problems.

Table 4-11a. Logistic Regression of Correlates of Utilization of Health Care Services for an Emotional Problem (N=1710)

	Odds Ratio	95% Confidence Interval
Age	1.00	
Gender (female)	1.24	
Marital Status (not married)	1.04	
Education (> high school)	2.22	1.32, 3.72
Employment (>6 months/12)	.81	
GHQ-12	1.40	1.27, 1.53
Somatic Symptom Index	1.11	1.01, 1.22
Life Events	1.26	1.10, 1.44
Caribbean	.61	.33, 1.10
Vietnamese	.24	.12, .49
Filipino	.27	.13, .58

* p<05, ** p<01, † p<001

Although the results in Table 11a can be interpreted as evidence for under-utilization of mental health services, it remains possible that people from specific ethnocultural groups receive help from alternative sources. If so their lower rates of utilization would not truly represent under-utilization. To examine this possibility we included alternative sources of help in a second regression model displayed in Table 4-11b.

Table 4-11b. Logistic Regression of Correlates of Utilization of Health Care Services for an Emotional Problem with Control for Alternative Sources of Help (N=1710)

	Odds Ratio	95% Confidence Interval
Age	1.00	
Gender (female)	1.15	
Marital Status (not married)	1.06	
Education (> high school)	2.00	1.18, 3.41
Employment (>6 months/12)	.80	
GHQ-12	1.41	.67, 2.96
Somatic Symptom Index	1.11	1.01, 1.22
Life Events	1.24	1.08, 1.42
Caribbean	.61	
Vietnamese	.24	.12, .50
Filipino	.30	.14, .65
Went for help to:		
Community Helper	.76	
Religious group	1.76	
Used Traditional Medicine at home	.99	
Used Traditional Medicine practitioner	1.84	
Used Alternative Medicine at home	1.11	
Used Alternative Medicine practitioner	2.31	1.05, 5.10

* p<. 05, ** p<. 01, † p<. 001

Even when alternative sources of help are included (i.e., traditional or alternative medicine, however defined by respondent, at home or from a formal practitioner) ethnicity is associated with lower rates of utilization. This suggests that the low rates of utilization of mental health care are not fully compensated for by use of alternative sources of help. Interestingly, the use of an alternative medicine practitioner is actually associated with an increase likelihood of consulting mental health services for an emotional problem.

It might also be thought that the effect of ethnicity on under-utilization really reflects relatively familiarity with the health care system rather than any factor more directly associated with cultural background. Both the Vietnamese and Filipino groups are, on average, more recent immigrants than the Carribeans and so might be less familiar about when and where to go for help for emotional distress. Medical systems in their home countries do not provide much psychiatric care. To test this hypothesis, we examined the effect of recency of migration on utilization. Since this variable is only defined for immigrants, we restricted the analysis to the three immigrant groups. Table 4-11c shows the results.

Table 4-11c. Logistic Regression of Correlates of Utilization of Health Care Services for an Emotional Problem Among Immigrants with Control for Recency of Migration (N=185)

	Odds Ratio	95% Confidence Interval
Age	.98	
Gender (female)	1.36	
Marital Status (not married)	1.37	
Education (> high school)	1.53	
Employment (>6 months/12)	.76	
GHQ-12	1.23	1.05, 1.44
Somatic Symptom Index	1.16	
Life Events	1.35	1.08, 1.67
Length of Stay in Canada	1.03	

* p<05, ** p<01, † p<001

Barriers to Care

During the pilot phase of the project the section on barriers to care was placed at the end of the questionnaire and there were very low rates of response. When the barriers section was moved to a place immediately following the GHQ and keyed to any positive items on the GHQ, rates of response were much higher. Accordingly, the results on perceived barriers to care are all from respondents with at least one item positive on the GHQ in the last 12 months.

As seen in Table 12, all three immigrant groups reported significantly more barriers to care than the Canadian-born groups (LSD test, $p < .05$); the Vietnamese group reported significantly more barriers than the Caribbean group as well. Table 13 presents the prevalence of each of 23 specific barriers for each ethnic group along with a rank ordering of the top ten reasons for not seeking help within each group. Overall, the most frequent reasons were: wanting to solve problem on own (44.7%); thought problem would get better on its own (33.2%) and problem went away by itself (30.1%). The rankings were different for each group, however, with immigrants more concerned about ethnic match and stigma and Vietnamese and Filipinos endorsing a language problem.

A factor analysis (principal components followed by varimax rotation) identified 6 factors with eigenvalues > 1 , which accounted for 56.1% of the variance in response to the barriers to care list. As shown in Table 4-14, Factor 1, *Ethnic Mismatch*, (25.7% of variance) consisted of three items involving prejudice or racism, unavailability of professionals from a similar ethnic background and feeling that one's cultural background would not be understood. Factor 2, *Stigma/Obstacles*, (7.3% of variance) brought together 5 items on social stigma and embarrassment, uncertainty about where to go and economic obstacles. Factor 3, *Minimization*, (7.0% of variance), grouped 4 items involving the expectation that the problem would go away on its own or that it could be dealt with on one's own. Factor 4, *Dissatisfaction* (6.3% of variance) consisted of 3 items tapping the belief that treatment would be unsatisfactory, of little help or not ideal; Factor 5, *Distrust*, consisted of just 2 items (5.0% of variance) involving worry that there would be a lack of confidentiality or a risk of involuntary commitment; finally, Factor 6, was a composite factor of 3 items (4.7% of variance) tapping concerns about the difficulty of transportation, timely appointment or linguistic barriers.

Table 4-12. Mean Number of Reasons for Not Consulting a Health Professional for Emotional Problems

Anglo Cdn	Franco Cdn.	Other Cdn	Carib (n=62)	Viet (n=110)	Filip (n=64)	Other Imm
-----------	-------------	-----------	--------------	--------------	--------------	-----------

	(n=106)	(n=193)	(n=44)				(n=106)
	1.8 (2.1)	2.0 (2.3)	2.3 (2.8)	3.7 (3.3)	5.3 (4.4)	4.4 (4.1)	1.9 (3.2)

* F=21.2, df=6, p .001

Table 4-13a. Reasons for Not Consulting a Health Professional for Emotional Problems by Ethnic Group*

	Anglo Cdn (n=106)		Franco Cdn (n=193)		Other Cdn (n=44)		Carib (n=62)		Viet (n=110)		Filip (n=64)		Other (n=)
	R	%	R	%	R	%	R	%	R	%	R	%	R
Problem went away by itself	3	1.7	2	0.3	3	0.5	4	0.3	2	0.6	7	3.4	3
Problem would get better by itself	2	2.5	3	2.0	2	2.0	2	4.4	3	4.4	2	4.4	2
Too expensive	8	6.6	8	7.8	8	6.6	8	2.9	1	4.5	7	3.4	9
Unclear about where to go to for help	5	1.6	6	1.4	6	1.4	3	1.9	5	3.6	2	4.4	5
Probably would not do any good	4	1.7	4	1.9	3	2.0	5	7.4	4	5.5	8	5.6	4
Distance or transportation problems	3	8.8	2	6.6	9	6.6	0	0	1	2.7	3	8.1	8
Concerned about what others might think	0	0.0	4	1.1	2	3.3	7	6.1	1	0.9	5	8.1	8
Feel ashamed or embarrassed	0	0.0	1	0.2	5	3.3	2	1.3	1	2.7	6	5.0	2
Have taken too much time or have been inconvenient	6	1.4	5	3.0	5	5.9	6	7.7	6	9.1	4	2.8	6
Not get time away from work or responsibilities	7	9.0	7	8.8	7	1.1	9	9.0	7	2.7	3	3.4	7

86

4

8

3.6

7

6.4

2.8

7

* Percent endorsing reason and rank order within ethnic group

Table 4-13b. Reasons for Not Consulting a Health Professional for Emotional Problems by Ethnic Group (Cont'd)

	Anglo Cdn (n=106)		Franco Cdn (n=193)		Other Cdn (n=44)		Carib (n=62)		Viet (n=110)		Filip (n=64)		Other Imr (n=)
	R	%	R	%	R	%	R	%	R	%	R	%	R
	ank		ank		ank		ank		ank		ank		ank
l to solve the problem on my	1	3	1	4	1	4	1	6	1	6	1	5	1
	6.8		1.5		0.9		1.3		2.7		7.8		
as a language problem		0		0		2.		0	5	3	1	1	
						3				3.6	0	2.5	
't get an appointment soon		0		0.		2.		0		1		6.	
				50		3				0.0		3	
ared about being put into a l against my will	9	5.		3.		4.		4.		1		6.	
		7		6		5		8		9.1		3	
orried that information about lth would be given to my ver or to the government		0.		2.		0		6.		3.		6.	
		90		6				5		6		3	
ot satisfied with services that vailable		3.		3.	8	9.		6.		7.		4.	1
		8		6		1		5		3		7	0
y would not provide the type of ent or help that is best for my n	1	4.	9	6.	4	1	6	1		1		1	6
	0	7		7		8.2		7.7		6.4		0.9	
n the past but it did not help		3.		2.	9	6.		3.		3.		6.	
		8		1		8		2		6		3	
it my culture or ethnic ound would not be understood		0		.5		2.	8	1	8	2	1	1	9
						3		4.5		5.5	0	2.5	
onals from my own cultural or group were not available		0		2.		2.		6.	9	2	9	1	
				6		3		5		0.9		4.1	
re would be prejudice or racism		0.		.5		2.		4.		1		1	

there	90			3	8	2.7	0.9	5
ive health insurance	9	5.	1.	1	4.	9	1	1
	7	0	0	5	2.9	3	4.1	4
nsurance would not cover	0.	1.	2.	3.	1	4.	3	5
f treatment	90	0	3	2	7.3	7	5	

Table 4-14. Factor Analysis of Barriers to Care (N=722)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	Ethnic match	Stigma & Obstacles	Minimization	Dissatisfaction	Distrust
would be prejudice or racism					
re	0.74				
als from my own cultural or					
vere not available	0.73				
ny culture or ethnic background					
understood	0.67				
ashamed or embarrassed		0.70			
re about where to go to for help		0.64			
expensive		0.62			
erned about what others might		0.62			
ave health insurance		0.56			
he problem would get better by			0.77		
m went away by itself			0.77		
o solve the problem on my own			0.66		
ably would not do any good			0.51		
atisfied with services that were				0.76	
ie past but it did not help				0.73	
would not provide the type of				0.59	
elp that is best for my problem					
ied that information about my					0.63
be given to my employer or to					
nt					
d about being put into a hospital					

will
 0.55
 nce or transportation problems
 get an appointment soon enough
 a language problem

Scales were constructed for all six factors by simply summing scores on the items with high loadings. Each scale had acceptable internal reliability, and variability: Ethnic Mismatch (alpha = .77, mean = .06, SD = .35); Stigma/Obstacles (alpha = .75, mean = .18, SD = .65); Minimization (alpha = .75, mean = .42, SD = .96); Dissatisfaction (alpha = .61, mean = .06, SD = .32); Distrust (alpha = .60, mean = .03, SD = .21); Transportation/Time/Language (alpha = .58, mean = .04, SD = .27).

As shown in Table 4-15a, immigrants were generally higher than non-immigrants on all 6 factors, indicating that they had a broad range of reasons for not seeking help. However, the largest difference were for the ethnic match and transportation/time/language factors. Table 4-15b shows the same factors for each of the five target groups. Filipinos showed the highest levels of concern with Stigma/Obstacles. Vietnamese showed the highest levels of problems with ethnic match, minimization distrust of the health care system, and transportation, time or language barriers. There were no significant differences across groups on the Dissatisfaction factor.

Table 4-15a. Types of Barriers in Immigrants versus Non-immigrants

	Immigrants (n=236)	Non-immigrants (n=299)	Significance Test
Ethnic Mismatch	0.44	0.03	t=7.3 [†] (df=251.5)
Stigma/Obstacles	1.02	0.30	t=7.5 [†] (df=335.6)
Minimization	1.8	1.1	t=6.2 [†] (df=533)
Dissatisfaction	0.26	0.12	t=2.9** (df=451.83)
Distrust	0.17	0.06	t=3.0** (df=376.25)
Transport/Language/Time	0.32	0.03	t=6.3 [†] (df=260.9)

* p<.05 ** p<.01 † p<.001

Table 4-15b. Types of Barriers by Ethnic Group

	Anglo Cdn (n=106)	Franco Cdn (n=193)	Caribbe an (n=61)	Vietnam ese (n=110)	Filipino (n=62)	Total (n=532)	Sig nc 1 (F,
Match							
Mean	0.01	0.04	0.26	0.59	0.39	0.21	2
SD)	(0.1)	(0.21)	(0.68)	(0.96)	(0.81)	(0.62)	
Area/Obstacles							
Mean	0.30	0.30	0.95	0.87	1.4	0.62	1
SD)	(0.66)	(0.74)	(1.3)	(1.3)	(1.5)	(1.1)	
Organization							
Mean	0.97	1.2	1.8	2.0	1.4	1.4	1
SD)	(1.2)	(1.3)	(1.2)	(1.4)	(1.1)	(1.3)	
Dissatisfaction							
Mean	0.12	0.12	0.27	0.27	0.22	0.18	
SD)	(0.43)	(0.49)	(0.55)	(0.59)	(0.58)	(0.52)	
Dist							
Mean	0.07	0.06	0.11	0.23	0.13	0.11	3
SD)	(0.25)	(0.32)	(0.41)	(0.48)	(0.49)	(0.38)	
Transportation/Language/Ti							
Mean	0.03	0.03	0	0.56	0.22	0.16	3
SD)	(0.19)	(0.17)	(0)	(0.84)	(0.55)	(0.49)	

* p .05 ** p .01 † p .001

¹ LSD test with significance level 0.05: Anglo-Cdn<all immigrant groups; Franco-Cdn<all immigrant groups; Carib&Filipino<Viet.

² LSD test with significance level 0.05: Anglo-Cdn<all immigrant groups; Franco-Cdn<all immigrant groups; Carib&Viet<Filipino.

³ LSD test with significance level 0.05: Anglo-Cdn<all immigrant groups; Franco-Cdn<Carib&Viet; Filipino<Viet.

⁴ LSD test with significance level 0.05: Anglo-Cdn, Franco-Cdn, Carib<Viet.

⁵ LSD test with significance level 0.05: Anglo-Cdn, Franco-Cdn, Carib&Filipino<Viet; Anglo-Cdn, Franco-Cdn, Carib<Filipino;

CHAPTER 5. SOMATIZATION

The notion that somatization is more common among or characteristic of patients from certain non-Western cultures, particularly Asians and Africans, has become well entrenched in the psychiatric and anthropological literatures. For example, in a recent clinical compendium (Gaw, 1993a), virtually all of the chapters that mention somatization concern Asian groups. A chapter on Indochinese Americans states “*the fundamental cultural concept necessary for understanding Southeast Asian patients with mental disorders is that most present only with somatic complaints*” ((Kinzie & Leung, 1993), p. 289 , italics in original). As examples of common somatic symptoms the authors list: pain, poor sleep, gastrointestinal complaints, and weakness without evidence of physical disease. Elsewhere we read that “Japanese tend to reveal stress through physical symptoms and problems” (Fuji, Fukushima & Yamamoto, 1993), p.324.) and that somatization is prominent among Chinese Americans for four main reasons: an organ-oriented conception of pathology that stems from traditional Chinese medicine, emphasizing close correspondences between emotions and body organs; reluctance to openly express sexual or aggressive feelings; expression of physical complaints is more socially acceptable than expression of emotional complaints; and concerns about bodily functions are reinforced through media representations of illness (Gaw, 1993b) p. 265, citing (Tseng, 1975)). Among Filipino Americans, the propensity for somatization “has been attributed to the cultural acceptance of ‘poor health’ as an adequate excuse of almost any self-indulgence, including medical attention” (Araneta, 1993), p. 392).

These authoritative statements are based on extensive clinical experience and research, but they may lead to the false assumption that somatization is uniquely present in Asian groups. In fact, recent research suggests that somatization is ubiquitous—although its prevalence and specific features vary considerably across cultures, the processes of focusing on, amplifying and clinically presenting somatic distress are universal and somatic symptoms are probably the most common clinical expression of emotional distress worldwide (Isaac, Janca & Orley, 1996; Kirmayer, 1984).

In epidemiological research, somatization has been studied through somatic symptom checklists which are presumed to be ‘nonspecific’ indicators of psychiatric illness. Epidemiological studies have used measures of somatization that are insensitive to culture-specific symptoms and modes of expressing distress. Although some efforts have been made to develop expanded inventories of somatic symptoms—for example, in Nigeria (Ebigbo, 1982) and in Pakistan, India and England (Mumford et al., 1991a)—the scales resulting from these studies have not yet been widely applied (Ebigbo, 1986; Mumford et al., 1991b). Lack of attention to culture-specific symptoms limits the sensitivity to detect cultural differences in epidemiological studies of somatization.

Epidemiological research in the U.S. has been dominated by the construct of somatization disorder and a *form fruste* termed 'subsyndromal somatization disorder' based on a lifetime count of 4 medically unexplained symptoms for men and 6 for women, denoted 'SSI4,6' (Escobar et al., 1989). In the general population, somatization disorder usually has been found to be quite rare. In the Epidemiologic Catchment Area (ECA) studies, somatization disorder was found in .01% of the population and was most prevalent among African American women (0.8%) followed by African American men (0.4%) (Robins & Regier, 1991). This difference may be accounted for by differences in educational status. Somatization disorder was no more prevalent among Hispanics but subsyndromal somatization (SSI 4,6) was higher in Mexican American women relative to white Hispanics. Levels of both somatization disorder and SSI4,6 some 10 times higher than in the U.S. population were found in the Puerto Rican ECA study (Canino, Rubio-Stipec, Canino & Escobar, 1992). Some studies with symptom checklists, however, have not found much higher rates among non-Western groups (Mumford, 1989; Mumford et al., 1991a).

Many studies of somatization have compared non-equivalent samples drawn from different settings. In most ethnographic studies there have been no formal comparison groups and cultural differences have been judged against implicit standards derived from the ethnographer's own perspective (usually based on Western folk psychology and its norms), the ideal types represented in official nosology and textbooks, or observations of psychiatric patients selected for their psychological-mindedness by various filters and barriers to specialty mental health care. All of these comparisons would tend to exaggerate the difference between Western and non-Western groups.

Where primary care samples have been studied, somatization on any of the above definitions has been found to be extremely common. For example, in a study of 700 patients attending family medicine clinics in Montreal on a self-initiated visit for a new symptom or problem, we found that more than 75% of patients with major depression, panic disorder or milder forms of mixed depression-anxiety made somatic clinical presentations; 17% of patients had a lifetime history of multiple medically unexplained symptoms (subsyndromal somatization disorder: SSI4,6: (Escobar et al., 1989)) and 8% had high levels of illness worry despite no serious medical illness (suggestive of hypochondriasis (Kirmayer & Robbins, 1991)). Across ethnocultural groups, fully 26% of patients met study criteria for one or more forms of somatization. This high prevalence challenges the notion that Asians or other 'non-Western' groups are more prone to somatize than Europeans or Americans. Similar findings have been made in primary care in Britain (Goldberg & Bridges, 1988), Spain (Lobo et al., 1996), Nigeria (Ohaeri & Odejide, 1994) and elsewhere (Ustün & Sartorius, 1995).

The tendency to reject psychological or interpersonal conflicts as explanations for somatic distress is not restricted to specific ethnic groups. In a study of somatization in primary care, we used specific questions to assay family medicine patients'

attributions for their presenting symptoms (Kirmayer et al., 1993). We interviewed patients prior to a self-initiated doctor's visit and asked them: "What do you think caused your problems?" and "Could worries or personal problems have had anything to do with causing your problem?" Patients received an independent psychiatric diagnosis with the Diagnostic Interview Schedule (DIS) (Robins, Helzer & Orvaschel, 1985). Interestingly, while about 80% of patients with DSM-III current major depression or panic disorder presented exclusively with somatic symptoms to the doctor, more than one third spontaneously offered a psychosocial cause. When prompted for worries or personal problems as a possible cause, a further 23% endorsed psychological factors. About 12% of patients persistently rejected any link between their depression or anxiety and the nonspecific somatic symptoms (e.g., abdominal pain, headache, fatigue) they presented to the doctor.

It might be held that some people fail to see the connection between their somatic distress and an underlying psychiatric disorder simply because they have not yet learned a psychosomatic model that links the two. There is evidence that a past psychiatric history increases individuals' tendency to attribute hypothetical somatic symptoms to psychological causes (Robbins & Kirmayer, 1991). However, the tendency to deny a link between somatic distress and emotional disorder may persist or recur even in individuals who have previously learned the connection. In a longitudinal study of patients who made somatic presentations of depression or anxiety in primary care, we found that patients continued to seek help for somatic symptoms and did not develop frank psychosocial presentations over a 12 month follow-up (Kirmayer & Robbins, 1996). Somatizers were less likely than psychologizers to report a past psychiatric history and more likely to report clusters of somatic symptoms associated with major depression without concomitant depressed affect.

Research by our own group and others thus documents the widespread cross-cultural prevalence of somatization on any of its definitions. Even where cultural differences among groups in the prevalence of somatization are found, socioeconomic and social structural differences in health care systems make their interpretation problematic. In many cases, somatization may simply reflect the availability of specific types of health care within a society. For example, the availability of psychiatric services only for the most severely ill—except in a few developed countries—makes people emphasize somatic symptoms in coming to the doctor to ensure they get appropriate attention (Kawanishi, 1992). Beiser and Fleming (Beiser & Fleming, 1986) suggest that because Southeast Asians are more likely to consider somatic symptoms rather than depressive feelings as legitimate reasons for consulting a physician, samples of depressed Southeast Asians in clinics may be comprised of that sub-group of depressed patients in the community who suffer concurrently from prominent somatic symptoms. By the time patients get to psychiatrists, however, their emotional complaints have often become more explicit.

Correlates of Nonspecific Somatic Symptoms

To examine cultural differences in somatization more closely, we utilized data from the present community survey in a multiethnic neighbourhood of Montreal. Through universal health insurance and readily available community clinics, the Canadian health care system attempts to provide equal access to care so that differences among ethnocultural groups can more readily be attributed to social and cultural factors other than socioeconomic status.

Table 5-1 shows the results from multiple regression models for the dependent variable of number somatic symptoms in the past year. At the bivariate level, higher counts of somatic symptoms were associated with age, female gender, never having been married, lower levels of education, and unemployment but not with immigrant status. When the level of emotional distress was entered into a second model, age and female gender remained significant contributors while immigrant status became significant as well. This suggests that there is some tendency for immigrants to report higher levels of somatic symptoms when the level of emotional distress is statistically controlled. This could be interpreted as evidence of somatization or as somatic symptoms unrelated to emotional distress that were being masked by differences in emotional distress across groups.

Table 5-1. Multiple Regression Models of Determinants of Somatic Symptoms

	r	Model 1 (N=1517)		Model 2 (N=1509)	
		B	b	B	b
Age	.07***	.00*	.02	.01***	.08
Female	.11***	.35**	.09	.40***	.10
Never Married	.05*	.12	.03	.02	.01
Education >high school	-.10***	-.25*	-.06	-.10	-.02
Worked 6 months past year	-.12***	-.35	-.09	-.11	-.03
Immigrant ^a (Carib/Viet/Filip)	.01	.07	.02	.21*	.06
GHQ-12	.40***			.39***	.40
Constant		1.21		.09	
R ²			.03***		.18***

a Dummy variable, contrasted with Non-immigrant (AC/FC)

* p <.05, ** p<.01, *** p<.001

Table 5-2 presents the same models with the addition of dummy variables for the three immigrant groups. Again a higher level of somatic symptoms in the past year was associated with greater age, female gender, never married, unemployment and Vietnamese background but not with either Caribbean or Filipino origin. The effect of age, gender and ethnicity (but not unemployment) persisted when level of emotional distress on the GHQ was added to the model. Indeed, with GHQ in the model, Filipino ethnicity was also found to be associated with higher levels of somatic symptom reporting.

Table 5-2. Multiple Regression Models of Determinants of Somatic Symptoms by Ethnic Group

	r	Model 1 (N=1517)		Model 2 (N=1509)	
		B	b	B	b
Age	.07**	.00	.03	.01**	.08
Female	.11***	.42***	.11	.41***	.10
Never Married	.05*	.15	.04	.04	.01
Education >high school	-.10***	-.24*	-.06	-.12	-.03
Worked 6 months past year	-.12***	-.31**	-.08	-.10	-.03
Immigrant ^a					
Caribbean	-.04	-.22	-.04	.03	.00
Vietnamese	.08***	.46**	.09	.36**	.07
Filipino	-.02	-.00	-.00	.25	.05
GHQ-12	.40***			.39***	.40
Constant		1.0		.03	
R ²			.04***		.19***

a Dummy variables for each ethnic group compared to non-immigrants (AC & FC)

* p<.05, ** p<.01, *** p<.001

It is possible that the differences found for specific ethnic groups simply reflect the duration of time they have spent in Canada which has made them more likely to learn to express their distress in psychological terms to fit the system. To control for this effect we examined the impact of length of stay in Canada on level of symptom reporting. Table 5-3 reports the Pearson correlation of demographic variables with length of stay in Canada among immigrants. Length of stay of immigrants was unrelated to somatic and emotional symptoms in the past year at the bivariate level.

As shown in Table 5-4, length of stay in Canada for immigrants also was unrelated to level of somatic distress when sociodemographic variables were controlled in multiple regression models.

Table 5-3. Pearson Correlations of Length of Stay in Canada with Sociodemographic Factors for Immigrants

	n	Length of Stay in Canada	Significance
Age	774	.47	p<.001
Female	774	.04	NS
Never Married	770	.13	p<.001
Education >high school	764	-.003	NS
Worked 6 months in past year	747	-.03	NS
Somatic Symptoms	767	.00	NS
GHQ-12	771	-.01	NS
Undiagnosed symptom	756	-.02	NS

Table 5-4. Multiple Regression Models of Determinants of Somatic Symptom Reporting Among Immigrants, Controlling for Length of Stay in Canada

	r	Model (N=723)		Model 2 (N=716)	
		B	b	B	b
Age	.09**	.02**	.11	.02***	.16
Female	.09**	.29*	.07	.33*	.08
Never Married	.08*	.28	.07	.19	.05
Education >high school	-.10**	-.21	-.05	.03	.01
Worked 6 months past yr	-.08**	-.17	-.04	.03	.01
Length of Stay in Canada	.00	-.02	-.06	-.02	-.07
GHQ-12	.36***			.40***	.36
Constant		1.0		-.49	
R ²			.03***		.15***

* p <.05, ** p<.01, *** p<.001

Medically Undiagnosed Symptoms

Somatic symptoms often have medical explanations and so may not be indications of somatization. A second definition of somatization depends on the absence of a medical explanation. In the Composite International Diagnostic Interview, like its predecessor, the DIS, the diagnosis of somatization disorder involves ascertaining whether somatic symptoms have caused disability or other disruption to daily activities and whether they have received a doctor's diagnosis. Somatic symptoms are counted as medically unexplained, and hence, contribute to the diagnosis of somatization, only if the respondent reports no diagnosis or the recorded doctor's diagnosis is judged to be insufficient to account for the symptom by a later medical audit of the interview protocol. In the first stage interview of the present study, we simply asked subjects, after a list of 15 common symptoms, whether they had had any symptoms which a doctor could not diagnose in the last year. The frequency of responses for this question alone and in combination with the somatic symptom count measure are shown in Table 5-5a & b. There was no evidence for a higher rate of undiagnosed problems in immigrant groups compared to non-immigrants whether aggregated or examined individually.

Table 5-5a. Prevalence of Medically Undiagnosed and Multiple Somatic Symptoms by Immigrant Status (N=1710)

	Immigrant	Non-Immigrant	Significance Test
Undiagnosed problem			
N	90	91	2=1.4
%	11.8	10.0	df=1
Somatic Symptoms 4			
N	121	125	2=1.3
%	15.7	13.7	df=1
Undiagnosed Problem +Somatic Symptoms 4			
N	32	34	2=.18
%	4.1	3.7	df=1

* p<.05 ** p<.01 † p<.001

Table 5-5b. Prevalence of Medically Undiagnosed and Multiple Somatic Symptoms by Ethnic Group (N=1710)

	Anglo Cdn	Franco Cdn	Carib	Vietnam	Filip	Significance Test
Undiagnosed problem						
N	37	54	31	31	28	2=2.3
(%)	(9.8)	(10.2)	(11.9)	(13.2)	(10.5)	df=4
Somatic Symptoms 4						
N	51	74	36	49	36	2=8.9
(%)	(13.5)	(13.9)	(13.8)	(20.9)	(12.9)	df=4
Undiagnosed Problem +Somatic Symptoms 4						
N	11	23	11	12	9	2=2.6
(%)	(2.9)	(4.3)	(4.1)	(5.1)	(3.2)	df=4

* p< .05, ** p< .01, † p< .001

Table 5-6 shows the result of a logistic regression analysis of determinants of the reporting a medically unexplained symptom in the past year for the sample, divided into immigrant and Canadian-born groups. Contrary to many other studies with the DIS or CIDI, female gender was unrelated to the reporting of medically unexplained symptoms. Consistent with the bivariate results reported above, immigrant status was unrelated to reporting a symptom or problem a doctor could not explain. The only determinant of medically unexplained symptoms was GHQ score, indicating that patients with greater emotional distress in the last year were more likely to report having a symptom or problem which a doctor could not diagnosis.

Table 5-7 reports the same analysis with the addition of somatic symptoms, life events and dummy variables for the specific ethnic groups under study. Again, GHQ is an important predictor as is level of somatic symptoms. In this model, however, female gender significantly reduces the likelihood of reporting a medically unexplained symptom. Since this effect did not appear in the earlier analysis which aggregated all immigrants into one group, it may reflect distinctive characteristics of some of the populations. To consider this possibility, we examined the prevalence of a medically unexplained symptom for each gender across ethncultural groups. The results displayed in Figure 5-1 reveal that Vietnamese men are far more likely than Vietnamese women to report a having had a symptom the doctor could not diagnose in the past year. In fact, the predominance of women among those with medically unexplained symptoms reported in many other studies is found only for Anglophone Canadians in our sample.

**Table 5-6. Logistic Regression Models of Determinants
of Medically Undiagnosed Symptom (N=1491)**

	Odds Ratio	95% Confidence Interval
Age	1.00	
Gender (female)	0.91	
Marital Status (not married)	0.99	
Education (> high school)	1.1	
Employment (>6 months/12)	0.95	
Immigrant Status	1.4	
GHQ	1.2 [†]	1.15, 1.32

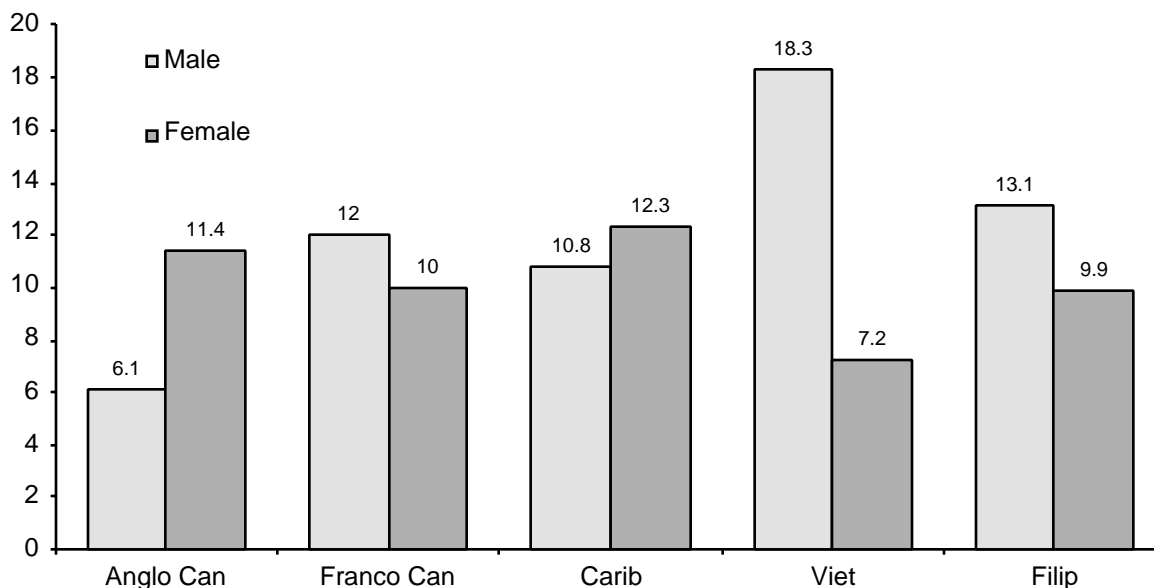
* p< .05, ** p< .01, † p< .001

**Table 5-7. Logistic Regression Model of Determinants
of Medically Undiagnosed Symptom (N=1346)**

	Odds Ratio	95% Confidence Interval
Age	1.00	
Gender (female)	0.67*	0.66, 0.69
Marital Status (not married)	0.90	
Education (> high school)	1.1	
Employment (>6 months/12)	1.0	
Caribbean	1.6	
Vietnamese	1.1	
Filipino	1.3	
GHQ-12	1.1*	1.0, 1.2
Somatic Symptom Index	1.4 [†]	1.3, 1.5
Life Events	1.0	

* p< .05, ** p< .01, † p< .001

Figure 5-1. Prevalence of Symptoms with No Medical Diagnosis by Gender and Ethnocultural Group



An approximation to the DSM-IV diagnosis of somatization disorder (or, more accurately, to undifferentiated somatoform disorder) can be achieved by requiring that respondents report 4 or more somatic symptoms and at least one medically unexplained symptom in the past year. Tables 5-8 and 5-9 display logistic regression models of predictors for these combined criteria.

As seen in Table 5-8, age and GHQ but not education, work or immigrant status were associated with increased likelihood of having 4 or more somatic symptoms and at least one medically unexplained problem. Table 5-9 shows the same analysis with dummy variables for each immigrant group with identical results.

In summary, there was no evidence for increased risk among the ethnocultural groups in this study for having a medically unexplained symptom, either alone or in combination with multiple somatic complaints. However, Vietnamese men did report higher levels of medically unexplained symptoms than did Vietnamese women and, indeed, most other ethnocultural groups.

Table 5-8. Multiple Regression Models of Determinants of Undiagnosed Symptom and 4 Somatic Symptoms (N=1523)

	Odds Ratio	95% Confidence Interval
Age	1.02*	1.00, 1.04
Gender (female)	1.3	
Marital Status (not married)	1.0	
Education (> high school)	1.3	
Employment (>6 months/12)	1.3	
Immigrant Status	1.5	
GHQ	1.4 [†]	1.3, 1.6

* p< .05, ** p< .01, † p< .001

Table 5-9. Multiple Regression Models of Determinants of Medically Undiagnosed Symptom and 4 Somatic Symptoms (N=1387)

	Odds Ratio	95% Confidence Interval
Age	1.02*	1.00, 1.04
Gender (female)	1.2	
Marital Status (not married)	0.96	
Education (> high school)	1.3	
Employment (>6 months/12)	1.3	
Caribbean	1.3	
Vietnamese	1.4	
Filipino	1.4	
GHQ-12	1.4 [†]	1.3, 1.6
Life Events	1.2	

* p< .05, ** p< .01, † p< .001

CHAPTER 6. ACCULTURATION

Concern about the potential underutilization of mental health care by immigrants is also motivated by a view of migration as a stressful life event involving radical changes in lifestyle and identity that expose the immigrant to the persisting stress of *acculturation* (Beiser, 1989; Hull, 1979; Murphy, 1973; Roskies, 1978; Westermeyer, 1989). Until recently, acculturation and assimilation were used interchangeably to describe processes by which autonomous cultural groups meet and interact. Assimilation was the irreversible process immigrants face in their new country—adopting the behaviors and values of the host society (Bordeleau, 1976; Goldlust & Richmon, 1974; Gordon, 1964).

Zak emphasized the need to assess the immigrants' "sense of belonging to the society as a whole," and showed that original and host cultural identities are not mutually exclusive, but constitute independent dimensions of identity (Zak, 1973; Zak, 1976). According to Berry, all immigrants must consider two questions: (1) "Is it of value to maintain my cultural identity?" and (2) "Is it of value to maintain relationships with the dominant society?" Four acculturation styles emerge from immigrants' answers to these two questions: *assimilation* (no, yes), *integration* (yes, yes), *separation* (yes, no) and *marginalization* (no, no) (Berry, Trimble & Olmedo, 1986).

Berry and colleagues carried out several studies associating the four acculturation modes to psychological distress (Berry & Annis, 1974; Berry, Wintrob, Sindell & Mawhinney, 1982). In a Korean sample from Toronto, Kim and Berry found Separation and Marginalization loaded positively on the same factor as stress (Kim & Berry, 1985). An exploratory study with English speaking Westerners living in Japan showed Marginalization and Separation were the main predictors of high levels of acculturative stress. Berry concluded that "lowered mental health status, feelings of marginality and alienation, higher symptomatic level [and] identity confusion" are common consequences of the stress of acculturation (Berry, 1987).

Berry's questions, however, are not truly orthogonal measures of the same type since they assess different dimensions: identity and behaviour. To address this problem, Lasry and Sayegh (1992) revised the questions to assess only cultural identity. Results with a Lebanese immigrant sample identified four modes of acculturation based exclusively on cultural identity (Sayegh & Lasry, 1992).

Contemporary anthropology emphasizes the situational nature of ethnicity and ethnic relations (Okamura, 1981; Roosens, 1989). This situational approach to ethnicity underscores the variability of ethnic identity in different social contexts (Clément, Gauthier & Noels, 1993; Clément & Noels, 1992; Clément, Sylvestre & Noels, 1991). There is a need therefore, to assess acculturation independently in the spheres of work, relationship, recreation and service utilization. For the present

study, scales were adapted or developed to tap attitudes and behaviours relevant to acculturation in these spheres as well as to measure situated ethnic identity. These scales were administered to subjects in the Stage 2 interview and will be discussed in a later report.

Although research has focused primarily on acculturation as a source of stress or an indication of adaptation, the concept has an obvious relationship to help-seeking. The present study examined the impact of style and degree of acculturation on the rate of utilization and perceive barriers to health care.

METHOD

The results in this chapter are based on responses to four questions on ethnic identity. Respondents were asked “To which ethnic or cultural group(s) do you belong?” If the question was unclear, interviewers repeated it and offered examples based on a list from the 1991 census in the region to illustrate what was meant by “ethnic or cultural group.” In some cases, respondents initially took “cultural group” to mean a community or activity group involved in cultural activities. The list of sample ethnicities served to clarify this potential misunderstanding.

The term identified in response to this question was treated as the subject’s self-defined ethnic identity and, was then inserted into a question: “In general, to what extent do you feel _____ (insert self-defined ethnic identity)? Would you say...” Respondents were then read the anchor terms of a 4-point Likert scale: not at all, a little, a lot, completely. Two further questions with identical format asked respondents to what extent they felt Canadian and to what extent they felt “a Quebecker” (Québécois).

Based on the ratings on the self-defined ethnicity (SDE) and Canadian identity scales, respondents were assigned to one of four “acculturation styles”. Responses on the 4 point Likert scales rating SDE and Canadian identity were dichotomized (not at all, a little vs. a lot, completely). Respondents low on both SDE and Canadian identity were assigned to the Marginalization acculturation style, those high on both SDE and Canadian identity were assigned to Integration; respondents low on SDE and high on Canadian identity were assigned to Assimilation, while those high on SDE and low on Canadian were assigned to Separation.

The proportion of respondents falling into the four acculturation style categories was then compared across ethnocultural groups. Acculturation style groups were also compared on measures of symptomatology, health care utilization and perceived barriers to mental health care both for the sample as a whole (comparing immigrants and non-immigrants) and within specific ethnocultural groups by ANOVA. When overall differences were found pairwise LSD tests were conducted.

RESULTS

The self-defined ethnic identity (SDE) labels most frequently reported for the total sample appear in Table 6-1. Immigrant groups reveal the highest identification with their cultural group of origin. More than 90% of the Vietnamese respondents declared they belong to the Vietnamese culture. The corresponding percentages are 85% for the Filipinos, and 69% for the Caribbeans. Fifty nine percent of the respondents who reported Judaism as their religion affirmed a Jewish cultural identity. Two thirds of the Francophone Canadians related their ethnocultural identity to their national background: 37% to being Québécois and 30% to being French-Canadian, identities with important differences to be seen later. Of the 2246 respondents, only 17% chose Canadian as their cultural group.

Table 6-1. Self-Defined Ethnic Identity (SDE) Label*

Self-defined Ethnic Label	n	Possible or Expected N	Percentage (n/N)
Vietnamese	219	236	92.8
Filipino	240	281	85.4
Caribbean	184	268	68.7
Other immigrant group	234	373	62.7
Jewish	211	357	59.1
Québécois	198	541	36.6
French Canadian	164	541	30.3
Canadian	384	2246	17.1
Other (none of above groups)	355	2246	15.8
Missing data	57	2246	2.6

* (in response to question: "To which ethnic or cultural group(s) do you belong?")

The self-defined ethnic identity (SDE) labels are presented in Table 6-2 according to the choice made by the five selected ethnocultural groups. While only 17% of the total sample chose Canadian as the cultural group they belonged to, the percentage jumped to 41% for the Anglo-Canadians. Only 3% of the Anglo-Canadians referred to the linguistic dimension of their culture in defining themselves as English-Canadians. Their most frequent self-defined ethnic identity labels comprised a mixed category including references to the UK (i.e., British, Scottish), to religion (Protestant, Catholic, Jewish) or to other ethnocultural identities (Dutch, Hindu, Italian, etc.).

Table 6-2. Percentage Choosing Self-Defined Ethnic Identity (SDE) Labels for Ethnocultural Groups

SDE Label	Anglo Cdn (N=369)	Franco Cdn (N=532)	Carib (N=261)	Vietnam (N=233)	Filip (N=274)
English Canadian	2.7				
French Canadian		28.6			
Québécois		35.2			
Caribbean			67.0		
Black			10.0		
Vietnamese				88.8	
Filipino					86.9
Hyphenated Canadian*	8.7	3.0	9.2	5.6	6.9
Canadian	41.2	21.1	8.4	1.3	1.5
Other	47.4	12.2	5.4	4.3	4.7

* Usually a compound of country of origin or some other ethnic or religious label with “-Canadian” (excluding English- and French-Canadian).

In the Francophone Canadian group, the most frequent identity label was Québécois (35%), followed by French Canadian (29%). If this last label is added to the Canadian one, half of the Francophone sample chose to refer to their identity as Canadian.

The three immigrant groups reported the highest level of “country of origin” ethnic identity, as can be seen in Table 6-2. For example, 89% of the Vietnamese respondents chose Vietnamese, 87% of the Filipinos indicated they were Filipino, and 67% of the Caribbeans referred to themselves either as Caribbean (or West Indian) or as a native of a specific island (i.e., Trinidadian, Barbadian, Jamaican, etc.). About 10% of Caribbeans referred to their race or skin color (Black, Negro) to define their ethnocultural identity. While 8% of the Caribbeans reported their identity as Canadian, less than 2% of the Vietnamese or the Filipinos chose to do so.

Table 6-3. Self-defined Ethnicity, Canadian & Quebecker Identity by Ethnic Group

	Anglo Cdn	Franco Cdn	Carib	Viet	Filip	Total Sample	Significance Test
N	384	541	268	236	281	1710	
Extent feel self- defined ethnicity							$\chi^2=51.9^\dagger$ df=12
not at all	2.0	0.7	1.5	0.40	0.40	1.0	
a little	9.9	5.7	10.0	7.3	3.6	7.3	
a lot	17.9	14.3	27.7	23.6	29.2	21.5	
completely	70.2	79.3	60.8	68.7	66.8	70.1	
Mean (SD)	2.6 (0.75)	2.7 (0.60)	2.5 (0.74)	2.6 (0.64)	2.6 (0.58)	2.6 (0.67)	$\chi^2=17.3^\dagger$ df=4
Extent feel Canadian							$\chi^2=521.2^\dagger$ df=12
not at all	0.5	10.1	6.9	12.4	6.5	7.0	
a little	2.4	19.9	38.5	43.8	42.8	26.2	
a lot	20.1	20.1	35.5	36.9	36.2	27.8	
completely	77.0	49.9	19.1	6.9	14.5	38.9	
Mean (SD)	2.7 (0.52)	2.1 (1.0)	1.7 (0.86)	1.4 (0.79)	1.6 (0.82)	2.0 (0.97)	$\chi^2=398.2^\dagger$ df=4
Extent feel Quebecker							$\chi^2=659.4^\dagger$ df=12
not at all	16.9	4.4	41.6	31.6	41.4	23.6	
a little	25.5	10.4	34.2	44.7	45.1	28.7	
a lot	26.3	19.8	18.3	20.6	10.1	19.6	
completely	31.2	65.4	5.8	3.1	3.4	28.1	
Mean (SD)	1.7 (1.1)	2.5 (0.84)	0.88 (0.91)	0.95 (0.80)	0.75 (0.77)	1.5 (1.1)	$\chi^2=540.4^\dagger$ df=4

* p<.05, ** p<.01, † p<.001

Table 6-3 summarizes findings on the extent to which members of each group “felt” their self-defined ethnicity, as a Canadian or as a Quebecker rated on 4-point Likert scales from “not at all” to “completely”. The mean ratings for felt self-defined ethnicity were similar across groups although Franco-Canadians tended to feel more strongly identified with their self-defined group and Caribbeans somewhat less so. There were marked differences across groups on the extent to which they felt Canadian with the highest levels in Anglo-Canadians followed by Franco-Canadians, then Caribbeans and Filipinos, with Vietnamese reporting the lowest levels. More than 12% of Vietnamese reported they did not feel at all Canadian. In contrast, the strongest mean endorsement of feeling a Quebecker was reported by Franco-Canadians, followed by Anglo-Canadians, Vietnamese, Caribbeans and Filipinos. All immigrant groups felt more strongly identified with being Canadian than a Quebecker.

Table 6-4. Spearman Rank Correlations of Self-Defined(SDE), Canadian (CDN) and Québécois (QUE) Ethnic Identities Among Ethnocultural Groups

Ethnic Group	SDE/CDN	SDE/QUE	CDN/QUE
Anglo Canadian	.39 [†]	.12 [*]	.31 [†]
Franco Canadian	.31 [†]	.53 [†]	.05
Caribbean	-.21 [†]	-.19 ^{**}	.54 [†]
Vietnamese	-.12	-.28 [†]	.47 [†]
Filipino	-.11	-.16 ^{**}	.43 [†]
TOTAL	.11 [†]	.10 [†]	.41 [†]

* p<.05, ** p<.01, † p<.001

Correlations between felt self-defined ethnic identity and felt Canadian or Québécois identity are presented in Table 6-4. For the total sample, the correlations were very low ($r = .11$ and $.10$, for Canadian and Québécois, respectively), albeit significant because of the large sample size. Contrary to traditional (linear) models of acculturation identity which predict that greater host country identification will be associated with decreased country-of-origin identification, self-defined ethnic identity accounted for only about 1% of the variance in Canadian or Québécois identity. Ethnic identity of origin is thus, largely independent of host country identity. For the total sample, Canadian and Québécois identity were moderately correlated at $r = .41$.

Models of acculturation were developed to study immigrant or minority groups. Given the reality of two host cultures (Canadian or Québécois), we also applied the

bidimensional model to members of the majority, host cultures. In this case, as their self-defined ethnic identity relates to Canada, the correlations SDE/CDN (.39) and SDE/QUE (.53) for Anglophone and Francophone Canadians respectively, were much higher than for the immigrant groups. They were in the range of the immigrants' CDN/QUE correlations (around .45). It is interesting to note that the Canadian/Québécois correlation was close to zero for the Franco-Canadians, while it was moderate (.32) for the Anglo-Canadians.

For Vietnamese and Filipinos, Canadian identity was not significantly correlated with their SDE ($p > .05$), confirming the orthogonality of the two dimensions. For Caribbeans there was a significant negative correlation between SDE and Canadian identities ($r = -.21, p < .001$). This means that for Vietnamese and Filipinos, one can identify with one's country of origin as well as identify with Canada; this was somewhat less true for Caribbeans. This possibility of dual identification was also diminished for the three immigrant groups when the reference host culture is Québec; that is, identification as a Quebecker was seen as more of an alternative to identification with one's own self-defined ethnicity.

Acculturation Style Across Ethnocultural Groups

The distribution across ethnocultural groups of acculturation styles (as defined by Berry), based on Canadian identification as the reference host, is presented in Table 6-5 and in Figure 6-1.

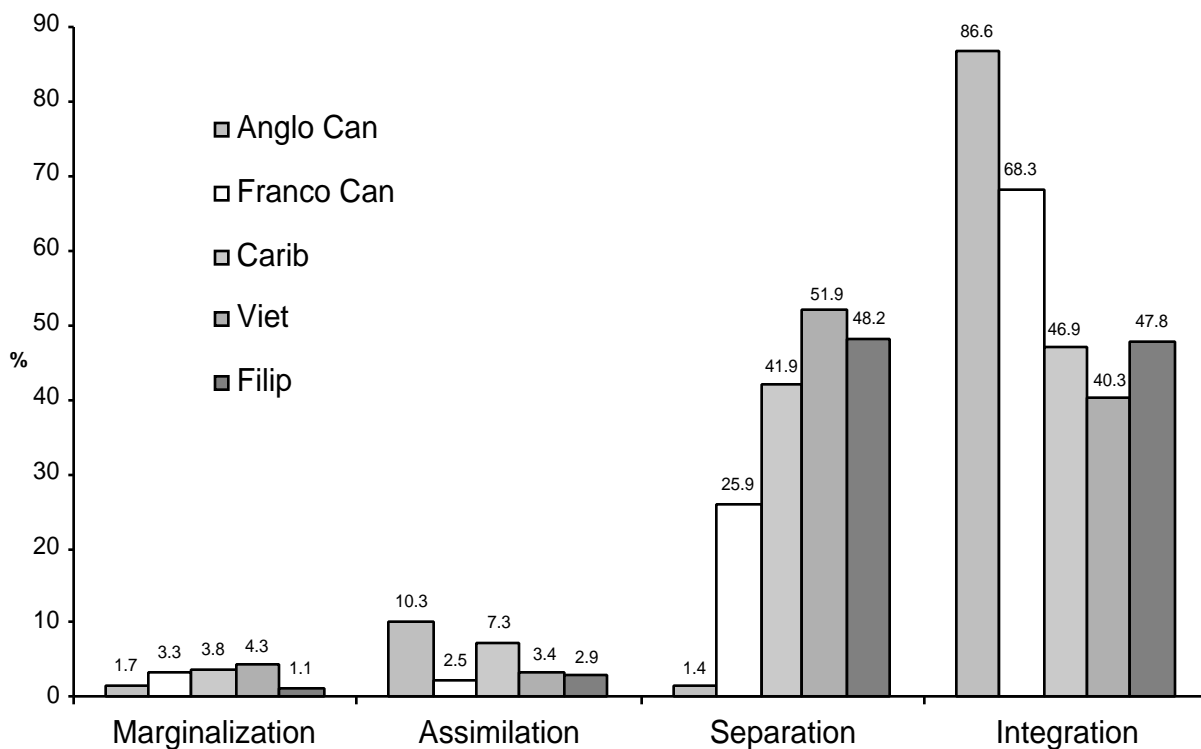
Table 6-5. Distribution of Acculturation Styles for Ethnocultural Groups
(based on Canadian as Host Culture Identity)

Ethnic Group	Marginalization	Assimilation	Separation	Integration
Anglo Cdn % (N=350)	1.7 (6)	10.3 (36)	1.4 (5)	86.6 (303)
Franco Cdn % (N=398)	3.3 (13)	2.5 (10)	25.9 (103)	68.3 (272)
Carib % (N=260)	3.8 (10)	7.3 (19)	41.9 (109)	46.9 (122)
Vietnam % (N=233)	4.3 (10)	3.4 (8)	51.9 (121)	40.3 (94)
Filip % (N=276)	1.1 (3)	2.9 (8)	48.2 (133)	47.8 (132)
TOTAL % (N=1517)	2.8 (42)	5.3 (81)	31.0 (471)	60.8 (923)

Marginalization and Assimilation styles were not frequently adopted. Less than 5% of any group selected Marginalization as a mode of acculturation, rejecting identification both with Canada and their SDE. Previous studies with the same questions have also found that Marginalization is infrequently adopted by

immigrants; for example, it was adopted by 12% of Lebanese immigrants (Sayegh & Lasry, 1992) and 4% of second generation North Africans (Brami, 1996).

Figure 6-1. Acculturation Style of Ethnocultural Groups
(Based on Canadian Identification)



Anglophone Canadians reported the highest rate of the Assimilation style (10.3%) and Francophone Canadians, the lowest (2.5%). While Assimilation was also around 3% for Vietnamese and Filipinos, it was twice as frequent for Caribbeans (7.3%). As noted earlier, on average Caribbeans have resided in Canada longer than Vietnamese and Filipinos and, coming from other Commonwealth countries, may find it somewhat easier to identify with Canadian culture.

Separation involves stronger identification with one's SDE and less acceptance of Canadian identity. As expected, only five Anglophone Canadians (1.4%) adopted this style; however, 26% of the Franco-Canadians felt more strongly identified with their SDE than with being Canadian. More than 40% of the three immigrant groups favoured Separation, figures similar to those of the Lebanese (34%) or the North African immigrants (38%) in the studies referred to above. Integration reflects the style whereby the respondent identifies both with Canada and with the country of origin culture. More than 4 out of 5 Anglophone Canadians and two-thirds of the Francophone Canadians adopted this style. For immigrants, rates were 40% for Vietnamese, 47% for Caribbeans and 48% for Filipinos. In the earlier studies cited

above, the rates for Separation were 47% for Lebanese immigrants and 35% for second-generation North Africans.

Symptomatology, Health Care Utilization & Barriers to Mental Health Care

The effects of acculturation style on symptomatology, health care utilization and barriers to care are examined in the next series of tables. In Table 6-6, of the three main indices of symptoms or problems (GHQ, somatic symptoms and life events) only life events showed a significant difference across acculturation styles for the total sample, although there is a tendency for respondents who opted for Marginalization to report a higher level of symptoms on the GHQ. Stressful life events were reported less frequently by those who selected Integration as their style of acculturation than by respondents with the other three styles ($p < .001$). In an ANOVA by specific ethnocultural group (not shown), while there was a trend in this same direction for Francophone Canadians ($p = .08$), the differences did not reach significance for any individual ethnocultural group.

Table 6-6. Symptomatology, Health Care Utilization and Barriers to Care by Acculturation Style (N=2019)

	Marginalization n=60	Assimilation n=127	Separation n=587	Integration n=1245	Significance Test (F or χ^2 , df=3)
GHQ-12	1.8	1.4	1.4	1.3	1.2
Somatic Symptoms	1.7	1.6	1.7	1.5	1.6
Life Events	1.4	1.2	1.1	.90	5.3 [†]
Visits to GP/Special	3.0	3.4	3.1	3.6	1.5
Sought any Service for Mental Health (%)	15.0	11.0	8.9	11.6	4.3
Barriers to Care (n)	2.9 (28)	1.4 (59)	2.9 (273)	1.5 (551)	14.7 [†]

* $p < .05$, ** $p < .01$, † $p < .001$

There were no differences across acculturation groups in the number of visits to a GP or specialist, nor in the percentage who have sought help from any service for a mental health problem (including emergency room, GP, specialist, social worker, psychiatrist, psychologist, or any other professional agency).

Fewer barriers to care for a symptom of psychological distress were reported by respondents who expressed a greater identification with Canada, whether or not they identified with their SDE. Thus, those who adopted either Integration or Assimilation reported about half as many barriers to care than the other two groups ($p < .001$).

The impact of the acculturation styles on the health indices for each of the ethnocultural groups in the study is presented in Tables 6-7 to 6-9. No tables are presented for somatic symptoms, life events, nor for seeking help from any service for mental health as there were no significant differences. Significant overall effects were examined with pairwise tests. As can be seen in Table 6-7, Anglophone Canadians who adopted Marginalization as their style of acculturation reported a much higher rate of symptoms on the GHQ-12 than did the Assimilation and Integration groups ($p < .05$). Vietnamese who chose the same style reported a rate of symptoms twice as high as that of the Vietnamese respondents who opted for Integration as their mode of acculturation ($p < .05$). This effect was not found to be significant for the other ethnocultural groups, suggesting that Marginalization does not have the same social meaning or psychological consequences for these groups.

Table 6-7. Mean GHQ scores for Acculturation Style by Ethnocultural Group

Ethnic Group	Marginalization	Assimilation	Separation	Integration	Significance Test (F, df=3)
Anglo Canadian (n)	3.7 (6)	1.4 (36)	1.4 (5)	1.2 (302)	2.6*
Franco Canadian (n)	.54 (13)	1.1 (10)	1.7 (102)	1.5 (271)	1.2
Caribbean (n)	1.8 (10)	.68 (19)	.85 (108)	1.0 (122)	1.3
Vietnamese (n)	2.8 (10)	2.2 (8)	1.8 (118)	1.4 (93)	2.0
Filipino (n)	.33 (3)	.25 (8)	.77 (132)	.68 (130)	.48

* $p < .05$, ** $p < .01$, † $p < .001$

The index of visits to a physician (generalist or specialist) presented in Table 6-8 is a simple addition of the number of visits to either. The only significant difference appears for the Caribbeans: those who adopted a Marginalization style reported a much higher mean number of visits to a physician than those with the other three styles ($p < .05$).

Table 6-8. Average Number of Visits to a Physician (Generalist or Specialist) During Last Year for Acculturation Style by Ethnocultural Group

Ethnic Group	Marginalization	Assimilation	Separation	Integration	Significance Test (F, df=3)
Anglo Canadian (n)	1.3 (6)	4.9 (36)	2.0 (5)	4.3 (303)	.92
Franco Canadian (n)	2.4 (13)	2.7 (10)	3.3 (103)	3.0 (272)	.21
Caribbean (n)	5.9 (10)	1.3 (19)	2.8 (109)	3.3 (122)	3.0*
Vietnamese (n)	2.2 (10)	2.5 (8)	3.8 (121)	4.4 (94)	.98
Filipino (n)	1.7 (3)	1.3 (8)	2.4 (133)	2.6 (132)	.47

* p< .05, ** p< .01, † p< .001

Table 6-9. Average Number of Barriers to Care for Acculturation Styles by Ethnocultural Group (N=911)

Ethnic Group	Marginalization	Assimilation	Separation	Integration	Significance Test (F, df=3)
Anglo Canadian (n)	1.8 4	.74 19	.75 4	1.1 123	.45
Franco Canadian (n)	.75 4	2.4 5	1.4 55	1.0 142	1.0
Caribbean (n)	2.6 5	1.4 5	2.7 36	2.9 40	.31
Vietnamese (n)	4.4 7	3.6 5	4.7 72	2.6 49	2.3
Filipino (n)	10.0 1	0 1	3.5 44	2.9 40	1.3

As was shown in Table 6-6, respondents who selected either Marginalization or Separation perceived greater barriers to care for a mental health symptom than those

with the other two styles ($p < .05$). In Table 6-9, this trend is seen for the Vietnamese immigrants; however, only the difference between the Separation and Integration groups is statistically significant ($p < .05$). Respondents who expressed a high level of identification with Canada (Assimilation or Integration) were less likely to perceive obstacles in their search for care for a mental health symptom.

CHAPTER 7. ILLNESS NARRATIVE INTERVIEWS

Culture and ethnicity have often been treated as beliefs and values shared equally by all individuals within a group. In epidemiological studies, ethnicity becomes a simple categorical variable and differences between groups are examined on measures that usually have not been standardized or validated for minority groups. Recent medical anthropology emphasizes the diversity, context dependence, creation and contestation of cultural beliefs and practices. This view requires new methods to address the complexity of individual and social embodiments of cultural knowledge. Ethnographic case studies can provide an essential corrective to the limitations of epidemiological research and guide the interpretation and improve the validity of findings (Kirmayer, 1989; Kirmayer, 1993; Kleinman, 1987; Kleinman, 1988b; Rogler, 1989; Rogler, 1992).

The use of ethnographic interviewing as a technique for collecting data relating to medical beliefs, behavior, and outcomes is rooted in four research traditions: sociolinguistics, cognitive science, medical sociology and medical anthropology. Sociolinguistic and cognitive science traditions have focused on three issues: (1) how substantive knowledge is stored in the mind; (2) how this knowledge is retrieved from memory; and (3) how, in the course of conversations, cognitive content interacts with grammatical and lexical knowledge and pragmatics (Gumperz, 1982; Levinson, 1983; Stubbs, 1982). Recent research points to the singular importance of knowledge stored and retrieved in the form of narrative structures (Mishler, 1985; Mishler, 1986; Oatley, 1992).

Multidimensional techniques in medical anthropology begin with Good's "semantic illness network" approach (Good & Good, 1980; Good, 1977). The most popular approach in current medical anthropology and primary care medical research stems from Kleinman's Explanatory Model (EM) approach (Delvecchio Good, Brodwin, Good & Kleinman, 1992; Kleinman, 1981; Kleinman, 1988a; Kleinman, 1980; Weiss et al., 1992). Young has provided a systematic critique of the EM approach (Young, 1981; Young, 1982a; Young, 1982b). Subsequent research with ethnographic methods has emphasized (a) the use of *illness narratives* (Delvecchio Good et al., 1992; Kleinman, 1988a; Kleinman, 1992; Kleinman & Kleinman, 1991) and (b) efforts to locate illness beliefs and behavior within "cognitive maps" and in relation to strategies and *patterns of resort*—i.e., the logic by which individuals and families navigate their way through their medical traditions and available resources. The present study will develop and apply new protocols for interviews about illness episodes and help-seeking that distinguish among different types of cultural knowledge.

Help-Seeking and the Social Meaning of Symptoms

Symptoms can be understood as encoding cultural models of sickness and as vehicles for expressing cultural idioms of distress. These cultural models supply individuals with a “vocabulary” of symptoms; more than this, they also provide explanations for these symptoms and the associated suffering. As an idiom of distress, somatic symptoms express discomfort and distress in ways that are intelligible within the individual’s social milieu but may have different meanings to outsiders.

Like many of the culture-related syndromes described above, somatic idioms of distress commonly embody combinations of somatic, emotional, and social meanings. Complaints that seem (to the medical practitioner) to be evidence of a syndrome of somatic symptoms may, in reality, encode an ethnomedical theory. Consequently, a patient’s narrative of his or her illness may include a significant subtext, linking his or her physical distress to social predicaments, moral sentiments, and otherwise unexpressed emotions.

In a seminal paper, Good (1977) showed how the idiom of ‘heart distress’ among Iranians can be understood as a culturally prescribed way of talking about a host of personal and social concerns primarily related to loss and grief. Throughout the Middle-East, references to the heart are commonly understood not just as potential signs of illness but as natural metaphors for a range of emotions. Similar metaphors grounded in bodily sensations and ethnophysiological notions are found in the complaints of chest tightness among Turkish women (Mirdal, 1985) and the corresponding Greek symptom of *stenohoria*.

Certain common ethnophysiological ideas serve to link diverse bodily symptoms and behaviors within a system that has both hygienic and moral dimensions. For example, *nervios* (Mexican-American), *nevra* (Greek) and other syndromes of ‘nerves’ are common as somatized forms of anxiety and depression (Davis & Whitten, 1988; Guarnaccia, 1993; Lock & Wakewich-Dunk, 1990). Similarly, notions of blood as central to health are found among many peoples and may tie together diverse symptoms in networks of meaning that map both hygienic and sociomoral notions (Laguerre, 1987; Sobo, 1993).

The notion of ‘idiom of distress’ may be misleading, to the extent that such “idioms” are assumed to be highly structured and entirely conventional ways of expressing distress. In reality, the meanings expressed through these idioms are often fragmentary, tentative, and even contradictory. Further, most somatic symptoms, including those that are incorporated into cultural idioms, are not consciously used by patients to communicate information or claims.

Many clinicians and researchers have misinterpreted the explanatory model approach as implying that each patient carries in his or her mind a systematic and worked-out theory of sickness and its various manifestations. This

misunderstanding has led some observers to view idioms of distress as expressions of theories and general principles (Good & Good, 1980; Kleinman, 1980). This, in turn, has produced a situation in which clinicians and researchers have occasionally attempted to elicit formal accounts of indigenous medical beliefs from patients who do not, in reality, systematize their knowledge of sickness and distress in this way. Further, some writers have jumped to the erroneous conclusion that in those cases where explanatory accounts can be elicited, they operate to the exclusion of other ways of understanding sickness. A close analysis of patients' illness narratives indicates that they are formed through more than one style of reasoning, and that, in addition to formal models, patients interpret their current conditions through memories of salient experiences or "prototypes" (which become the source of analogies, images, and metaphors) and "chain complexes" (giving rise to procedural knowledge) (Young, 1982b).

Prototypes are based on salient personal experiences or cultural exemplars. They make idiosyncratic features of events central to the definition of a problem or behavior. Other events are then related by family resemblance through metaphors or analogies based on sensory, affective or more abstract similarities. Chain complexes are accounts consisting of sequences of events that the informant believes are possibly significant but for which he or she can provide no underlying explanation or theory. Chain complexes are learned like skills, through body practices. Like the steps to a familiar recipe, they can be shown but not readily described. They link events through contiguity in space or time, rather than by causal implication.

As a result of these complex origins, multiple strategies are necessary to unpack the meanings of distress that are integrated into illness narratives (Kirmayer, Young & Robbins, 1994). Prototypes can be elicited by asking patients whether they or anyone else they know have ever experienced anything like the present symptom or illness episode and then carefully exploring the idiosyncratic particulars of the recollected case. Chain complexes can be elicited by asking patients to move step-wise through the events and experiences that end with his or her current symptom. Each of these methods of eliciting illness meanings may obtain information that patients may ignore or suppress when they are asked directly to provide an explanatory model.

An extension of the notion of idioms of distress considers the sense in which somatic symptoms provide metaphors for experience (Kirmayer, 1992). Metaphors may be dead, fixed or simply figures of speech, quite empty of content. Used to express strong emotion, however, metaphors can come alive again, and engender some of the same bodily sensations or experiences from which they were originally derived. When a patient speaks of heart distress he may simultaneously be speaking of physical sensations attributed to the heart and employing an evocative metaphor which conveys specific affective meaning. Similarly, sensations of tightness in the chest among Turkish immigrant women in Europe provide a means of pointing to social and interpersonal dilemmas faced by disadvantaged migrants (Devisch, 1985; Mirdal, 1985). This metaphoric use of bodily symptoms can occur whether or not the

symptoms are actually experienced, and whether or not they are, in fact, signs of cardiovascular disease, costochondritis or simply muscle tension.

Metaphors allow the generation of new meaning which can contain, or create, anxiety (Kirmayer, 1994). Metaphor serves to propose new meanings to others, some of which may be unintended by the patient. As a result of this social embedding, we can understand the meaning of symptoms in terms of presentation rather than representation; that is, symptoms come to have meaning when they are used in a specific social context (Kirmayer, 1992).

Symptoms function as a medium of communication whether or not they are so intended. The social origins of distress are apparent to most people and so the simple declaration of ill health raises questions about the adequacy and legitimacy of existing social structures and arrangements. Whether used consciously and strategically or inadvertently, somatic symptoms then may present a commentary on social circumstances. At times, they may serve as a form of protest, challenge or contestation of social conditions (Comaroff & Comaroff, 1985; Lock, 1993). Compared to frank complaints about one's psychological state or social situation, however, somatic symptoms are oblique or indirect and hence, may protect the powerless from the counter-attack that might be elicited by more direct criticism.

The processes of help-seeking, adaptation and disablement initiated in response to symptoms can serve to reconfigure family relationships and other social roles. The extent to which this is intentional will vary with the individual's own awareness of their social position and the degree to which it is acceptable (and safe) for them to talk about social problems. In a larger sense then, symptoms can be understood as having meaning as moves within a local system of power. Symptoms that are attributed to oppressive circumstances can be interpreted as a means of protest or contestation and can be employed as a means of acquiring desiderata (as is recognized in a limited fashion in the notion of secondary gain). However, even when this attribution is acknowledged by sufferers themselves, this does not imply that symptoms are factitious, willful or intentional.

Symptoms may function as social moves or 'positioning' whether or not the individual is aware of this process. The clearest examples of this are reported among oppressed minorities: the victims of exploitation and humiliation, based on gender, race, ethnicity and economic disadvantage (Lewis, 1971; Lock, 1993). In this case certain symptoms have been interpreted as being forms of 'resistance' or "weapons of the weak," used to evade or attenuate injustices or to undermine otherwise unassailable power holders.

METHOD

Ethnographic data were collected from Vietnamese, Caribbean and Filipino informants to provide a context for interpreting complementary data collected by close-ended interviewing. They allowed us to delineate (a) the “cognitive maps” on which our informants' responses can be located relative to their overall systems of identifying and understanding problems and solutions and (b) the strategies and patterns of resort within which the informants' responses and clinical encounters must be interpreted.

Measures

The ethnographic interviews were organized around a newly developed set of protocols based on techniques described in earlier work by Young and others (Farmer & Good, 1990; Good & Good, 1980; Good, 1977; Kleinman, 1985; Kleinman, Eisenberg & Good, 1978; Kleinman, 1980; Kleinman, 1982; Weiss et al., 1992; Young, 1976; Young, 1981; Young, 1982b). These protocols are aimed at eliciting illness narratives based on three types of underlying illness representation: (1) explanatory models; (2) prototypes; and (3) chain complexes.

(1) *Explanatory Model (EM)* protocols are intended to collect information concerning the informants' conceptions of (a) symptomatology and diagnosis, (b) etiology and pathophysiology, (c) prognosis and illness-caused impairment, (d) vulnerability and risk factors, and (e) treatment options and therapeutic mechanisms.

(2) A *Prototype Narrative* protocol asks informants to (a) nominate analogous illness episodes that have been experienced by themselves or others in the past and (b) articulate cognitively and/or emotionally salient connections (positive, negative, neutral) between source and target episodes.

(3) A *Chain Complex Narrative* protocol asks informants to provide sequences of events leading up to the onset of their current problems. Chain complexes are held together by behavioral, affective, and experiential linkages that respondents may not be able describe explicitly.

Because EM protocols encourage patients to formalize their accounts of illness, it is necessary to insulate the Prototype and Chain Complex narratives from any cognitive structuring that may originate in this source. (Prototype and Chain Complex narratives are typically loosely structured and held together by acausal connections.) Items from the various protocols are intercalated in the composite protocols that will be used for interviewing. The sequence of questions and probes

within these composite protocols has been designed to protect prototype and chain complex data from this structuring effect.

Sample and Procedure

Ethnographic interview subjects were selected from respondents in Stage 1 of the present study who agreed to a follow-up interview. Eligible subjects from each of 5 study groups (Anglophone Canadian-born, Francophone Canadian-born, Caribbean, Vietnamese and Filipino) met at least one of the following criteria: (1) a history of a medically unexplained symptom in the past year (i.e. listed a symptom in response to question H26); (2) a somatic symptom index score > 3 in the last year; or (3) a GHQ score > 3 in the last year. Thus, potential respondents had evidence of significant levels of symptomatology in the last year.

Ethnographic interviewers were given lists generated for a specific ethnocultural group (ordered by reason for inclusion from criterion 1 to 3); thus, first priority was given to subjects with medically unexplained symptoms. Subjects were contacted by telephone to arrange face-to-face interviews at a mutually convenient time and place. The purpose of the study was explained and all subjects gave informed consent to have the interviewed audiotaped and transcribed. For Caribbean subjects, a Caribbean research assistant helped to arrange appointments. For Vietnamese subjects a translator was available and took part in 17/22 interviews.

Transcribed interviews were analyzed both in terms of dominant themes and narrative structures using computer assisted content analysis with NuDist software.

RESULTS

A total of 117 interviews were conducted. Table 7-1 presents, by ethnic group, the outcome of the telephone calls and the response rates (number completed interview divided by number completed plus incomplete plus refusals). Table 7-2 breaks down the number of respondents interviewed in each ethnic group into gender and criteria categories.

Table 7-1. Summary of Telephone Call for Ethnographic Interviews
According to Ethnic Group

Outcome of calls	Anglo-Canadian	Franco-Canadian	Caribbean	Vietnamese	Filipino
No service or business number	5	5	5	5	4
No answer	4	2	4	1	3
Not eligible	0	3	0	0	2
Refused	17	14	15	16	23
Incomplete interview	0	0	0	1	0
Completed interview	22	27	25	22	21
Success rate (%)	56.4	65.8	62.5	56.4	47.7

Table 7-2. Summary of Usable Ethnographic Interviews*
According to Ethnic Group

Outcome of calls	Anglo-Canadian	Franco-Canadian	Caribbean	Vietnamese	Filipino
Male	13	14	5	15	5
Female	9	13	20	7	14
Medically unexplained symptom	7	13	11	5	5
Somatic symptoms > 3	21	25	24	22	19
GHQ > 3	16	22	17	20	11
Total usable interviews	22	27	25	22	19

*two interviews were lost due to faulty equipment

INTERIM CONCLUSIONS

There has been a steady accumulation and refinement of knowledge relating to illness-representation and help-seeking within diverse cultural communities over the last three decades. The particular merit of our research program is that it has addressed significant methodological and conceptual issues that are invariably ignored in quantitative research and are often marginalized in qualitative (open-ended) research.

Researchers commonly fail to distinguish between respondents' normative accounts of medical/emotional problems and their psychologically and cognitively salient understandings of their situations. While normative accounts are obtained by means of structured interviews directed at the respondent's "attributions," the elicitation of psychologically and cognitively salient accounts requires a different and innovative methodology, focused on people's experiential rather than didactic knowledge of illness.

Researchers commonly treat "somatization" simply as the way in which many non-Western populations experience and express the forms of distress that Westerners articulate and understand in psychological and emotional terms. Our research has been oriented to two other possibilities: somatization and psychologization are not mutually exclusive ways of either representing or experiencing distress and illness; although there may be important differences among cultural groups, they are unlikely to have a dichotomous character (i.e., to be either somatization or psychologization); and somatization can have an important instrumental dimension, providing individuals and groups with the means of positioning themselves within larger collectivities.

It is common for researchers to overlook intra-group differences, or to limit them to differences in educational level. Our research indicates that there is significant cultural variation within some ethnic groups, highest among immigrants from the Philippines. The danger of homogenizing these differences is greatest where researchers rely entirely on quantitative methodologies. On the other hand, it is clear to us that awareness of intra-group variation will depend on the accumulation of quantitative demographic data relating to the immigrant group in question. In this way the combination of quantitative and qualitative approaches has played a complementary role in our research and sets off the work of most previous cross-ethnic research.

Until now, most research has tended to treat medical knowledge in terms of a dichotomy that differentiates and segregates indigenous/folk beliefs and practices from biomedical beliefs and practices. Our research indicates the existence of a more complex and interesting pattern. On the one hand, the "biomedical category" is often nuanced along national lines, that differentiates biomedical practices and patients' expectations in Vietnam or the Philippines, for instance, from the culture of

biomedicine practiced in Canada. On the other hand, it has become increasingly clear to us that there are certain general ways in which people explain the etiology of illness and distress that are widely employed, across cultures. At this point, we have identified three widely recognized idioms of distress centered on: (1) “stress”; (2) “pollution”; and (3) “traumatic memories.”

The most important consists of notions analogous to the biomedical conception of “stress,” that is, the idea that health consists of bodily/emotional equilibrium, that experiences and exposures that disturb this equilibrium can produce a variety of syndromal effects, and that certain categories of individuals are at risk for these disturbances, partly or even mainly because of their positions within their social networks. Our preliminary findings suggest that different groups set the pathogenic threshold of stress at different levels: Filipinos set the threshold relatively high (so that stressful circumstances are regarded as normal), while Vietnamese set the threshold lower (so that stress is a common element in illness etiologies).

A second notion revolves around ideas of pollution, and often focuses on foods that are not available in Canada. Although these ideas are often employed to provide etiological accounts to explain chronic and recurrent illnesses, they also constitute an idiom for contrasting and explaining differences in the respondents’ state of health before and after immigration. These accounts are “environmental” in the broadest sense of the word, since they allow respondents to articulate a constellation of social, medical, and personal meanings in a narrative context.

The third notion corresponds to “traumatic events,” and is a recurrent idiom among Vietnamese immigrants. In this case memories of an event in the past (as well as the physical traumas possibly associated with the event) is employed to account for symptoms and distress in the present. While the notions of “stress” and “pollution” are probably instances of what Kirmayer has described as “organizing metaphors,” the traumatic event corresponds to the “chain complex” account. A brief vignette may make this concept clearer:

A middle-aged Vietnamese woman attributed her depression and physical distress to her husband’s infidelity, to her position within her household, to her inability to express her anger and resentment, to her imprisonment under the communists, and to her concern for the relatives she left behind. In giving her account, she moves back and forth among these seemingly disparate elements. Eventually she provides the missing element, which is that her mother-in-law is a member of the household and she is constrained, both by cultural convention and self-interest, from expressing her anger and frustration which she associates with her husband. Her traumatic confinement in Vietnam and the continued persecution of her relatives have become a medium for articulating dysphoric emotions (which she

consciously recognizes as emotions) and her oppressive life circumstances.

An interesting and unexpected finding concerns the occasionally therapeutic effect of the interviews, as perceived by certain respondents. The research protocol leads each respondent through a systematic review of his or her experiences, impressions, conjectures, perceived options, and motivated actions converging on his or her current illness and distress. Following the interviews, several respondents have commented on what they have described as a therapeutic effect, in the sense of putting their problems into a context, defining its boundaries, exploring its possible meanings and implications, forging new connections, and giving them an opportunity to express themselves to someone at length about their current situation.

This finding is important because it runs counter to assumptions commonly made by cross-cultural researchers that: (1) most individuals carry in their minds coherent accounts or self-narratives of their illnesses, and (2) the researcher's task is to help the respondent to "download" this information. Our findings to date suggest that while there are individuals who fit this description, they represent only a segment of all respondents. We are currently seeking to identify the circumstances or conditions that explain why individuals are or are not systematizers. This represents an important departure from the research paradigm that presumes precisely what must be established: namely, that individuals possess serviceable accounts for their problems.

CHAPTER 8. CONCLUSION

This report presents only preliminary results from the first stage interview and ethnographic interviews. Much more intensive analysis remains to be done both with these data sets and the Stage 2 interview. In this conclusion we will summarize the main findings and sketch our plans for further analysis. With this initial data analysis we have been able to address four sets of questions concerning: (1) rates and determinants of mental health care utilization; (2) somatization; (3) acculturation; (4) illness narratives. First, however, we briefly discuss some of the important limitations of the present study.

LIMITATIONS

The study has several important limitations that should be borne in mind when considering the findings:

(1) Telephone sampling will have missed residents who lack telephones; the directory we used may have been out of date by the time we neared the end of our sampling and so new residents were missed. Individuals in which household members are rarely home may have been missed as well.

(2) We encountered lower response rates due to the sensitive position of immigrants in society and general trends to less participation in surveys. The length of the interview also caused some respondents to fail to complete the interview. Due to low response rates and the expense of conducting the study we were not able to follow our original two stage stratified design. We had to include all Stage 1 interviewees willing to be re-interviewed as potential subjects in Stage 2. As a result, the rates of distress in Stage 2 will be lower than originally planned, limiting our ability to test hypotheses about specific psychopathology.

(3) We were not able to include immigrants other than those who spoke English, French or Vietnamese. This would have mainly affected Filipino immigrants. As well, the instruments were not translated into Tagalog or Ilocano, since the decision to over-sample Filipino respondents was made only after the study had begun and we discovered that the ethnic composition of the neighborhood had changed since the 1991 census.

We chose three ethnic groups for focus in the study. Other ethnic and immigrant groups merit equal attention but the budget did not allow us to include them. Our research team and students, however, are conducting ethnographic studies with a range of other groups with parallel methods. Inclusion of these additional immigrant groups in our qualitative analysis will allow us to distinguish among help-seeking behaviors that are (a) distinctive to particular indigenous medical cultures, (b) attributable to different traditions of biomedicine, (c) attributable to

cultural conventions governing social relations, problem solving, disclosure, etc., and (d) generic to the immigrant experience in Québec.

(4) Different ethnocultural groups had markedly different styles of dealing with the telephone interview. Some were extremely reluctant to divulge personal information while others gave an appearance of ready compliance but may have eluded important information. Cultural styles and experiences with politically oppressive regimes may affect the response to survey questions; for example, even answering a questionnaire can be a source of discomfort for Vietnamese, who are reluctant to express opinions outside the family (Yu & Liu, 1986). We have no way of systematically correcting for these potential effects of cultural background and past experience on response style. However, detailed analysis of the ethnographic interview protocols should eventually give clues as to these biases with considerable relevance to similar problems faced in clinical settings.

(5) Several of the questionnaire items had problems of validity or interpretation. For example, questions about traditional medicine and alternative medicine were often interpreted by respondents to mean conventional (i.e. allopathic) and second choice alternatives respectively. Fortunately, these questions also included open-ended responses to specify the type of medicine or help. Recoding of the open-ended answers will result in a more accurate measure of use of traditional and alternative medicine for subsequent analysis.

UTILIZATION OF MENTAL HEALTH SERVICES

Similar overall rates of utilization of medical services in the past year were observed in immigrant (78.1%) and non-immigrant (76.4%) groups. Rates of utilization of health care services for psychological distress, however, were significantly lower among immigrants (5.5 vs. 14.7%, $p < 0.001$). This difference was attributable both to a significantly lower rate of utilization of specialty mental health services by immigrants (2.6 vs. 11.6%, $p < 0.001$) and to differential use of medical services for psychological distress (3.5 vs. 5.8%, $p = 0.02$).

Higher rates of utilization of mental health services were associated with greater emotional distress (on the GHQ), more somatic symptoms and more life events. Individuals with more than high school education were also more likely to use services for a psychological problem.

The lower rates of utilization were found for all three ethnocultural groups but were most marked for Vietnamese and Filipino groups. Within the three immigrant groups, length of stay in Canada was not related to the tendency to use mental health services.

Multivariate analyses showed that the lower rate of utilization by immigrants could not be explained entirely by differences in sociodemographics or levels of somatic or psychological symptoms, or life events. When alternative sources of care (home or professional) were included in the logistic regression analysis, only the resort to an alternative medical practitioner influenced the use of mental health services by increasing the likelihood (this may reflect the fact that “alternative” was often taken to mean the use of any other professional as an alternative to the first one consulted and so is simply a measure of the magnitude of overall help-seeking).

For respondents with at least one symptom of psychological distress in the last year on the GHQ we explored the reasons why they did not seek help. An open ended question was followed by a list of 23 potential barriers to care. Immigrants reported more frequent and more diverse barriers to care. The most important factors were a tendency to minimize, normalize and deal with problems on one’s own (common to all groups but especially marked among the immigrant groups) and perceived ethnic mismatch among the immigrants. Ethnic mismatch involved the perception that available care providers would not understand or be prejudiced against the respondent’s culture and that professionals from their cultural background were not available. Other important barriers to care include fear of stigmatization, mistrust of the health care system and practical obstacles including getting time away from work.

Taken together, these analyses suggest substantial under-utilization of mental health services by immigrant groups that cannot be attributed to differences in gender, level of education, employment status, level of distress, or alternative sources of care. The most important factors appear to be the understanding and interpretation of psychological symptoms, the desire to deal with personal problems on one’s own or within the family and the perception that health care professionals who understand the immigrants’ cultural background are not available.

SOMATIZATION

A great deal of literature suggests that “non-Western” peoples, including Asians and Africans, are prone to express emotional distress primarily in somatic symptoms. Somatization may simply reflect peoples’ response to health care systems in which there are no specialized healers or resources for mental disorders as distinct from physical illness. In many parts of the world, the only psychiatric care available is designed for individuals with violent and disruptive behavior due to major mental disorders (schizophrenia and other psychoses). As a result, psychiatric care is associated with severe and highly stigmatized conditions and not sought (or offered) for milder and more common problems such as depression and anxiety. Immigrants to Canada may bring with them health attitudes and practices that discourage them from identifying stress-related life problems as appropriate for resort to mental health or psychiatric professionals.

The present study provided an opportunity to examine some features of somatization among ethnocultural groups in the same urban milieu with similar access to medical and psychiatric care. Somatization is usually measured by simply counting the frequency of common somatic symptoms or, more specifically, medically unexplained somatic symptoms. In the present study we considered two definitions of somatization: (1) as multiple common somatic complaints; (2) as the presence of at least one somatic symptom for which a doctor could not find an explanation.

Somatic symptoms were found to be more frequently reported by Vietnamese compared to all other groups. Feeling sickly for most of one's life and dizziness were the symptoms most elevated for Vietnamese compared to other groups, followed by abdominal pain, loose bowels and weakness. In contrast, fatigue was reported less frequently by both Filipino and Caribbean groups compared to the others. However, given large differences in the sociodemographic characteristics of these groups these differences cannot be directly attributed to cultural background.

When age, gender, educational level, and employment status were controlled in multiple regression models, age, female gender, lower level of education, unemployment and Vietnamese origin were all found to be independent contributors to increased reporting of common somatic symptoms. When level of psychological distress as measured by the GHQ-12 was added to the model, it was strongly associated with somatic symptoms and the effects of age, female gender and Vietnamese origin persisted, while the effects of education and employment were reduced to insignificance. Although not measured in this study, historically the Vietnamese were far more likely than the other groups to have suffered the effects of war and traumatic dislocation and this may, in part, account for their higher levels of somatic symptoms.

In contrast to these differences in levels of somatic symptoms, there was no difference in the presence of medically unexplained symptoms across ethnocultural groups. Having a somatic symptom that a doctor could not explain was associated with a higher score on the GHQ. Having a medically unexplained symptom was also associated with male gender. This is contrary to the strong association with female gender than has been found in the general population of the US, Canada and some other countries. When this gender difference was looked at more closely it became apparent that it was due to Vietnamese males reporting much higher rates of medically unexplained symptoms than Vietnamese females.

These results indicate that the broad generalization that Asians somatize is incorrect. Rather, specific patterns of somatic distress are found in different groups. In the present study, only the Vietnamese gave clear evidence of elevated rates of somatic symptoms. It should be noted that this same group also reported the highest levels of psychological distress on the GHQ. However, Vietnamese made little use of mental health services.

ACCULTURATION

Although the most detailed and innovative measures of acculturation in the present study were administered only with the Stage 2 questionnaire and are not reported here, the simple questions of Stage 1 allow some preliminary analyses along the lines of Berry's earlier work.

In general there were low correlations between ratings of self-defined ethnic identification and identification with the host society. Thus, the bidimensional model of ethnic identity—wherein individuals identify independently with their country of origin (or heritage ethnic group) and the culture of the host society—was borne out for the immigrant groups when the host society was Canada. Compared to Canada as the host society, there was more tendency for immigrants to consider identification with Quebec as an alternative to identification with their own ethnic group.

The three immigrant groups showed similar distributions across the four acculturation styles with the least frequent being Marginalization (1–4%), followed by Assimilation (3–7%), Integration (40–48%) and Separation (42–52%). Acculturation style was not associated with levels of somatic or psychological symptomatology overall. However, when ethnocultural groups were examined individually, Anglophone Canadians did show a tendency for higher rates of psychological distress with Marginalization. Integration was associated with a lower frequency of life events overall but this effect did not reach significance for any specific ethnocultural group.

Acculturation style was also unrelated to the rate of utilization of GP and specialist medical care overall; when ethnocultural groups were examined individually, Caribbeans with Marginalization did show a much higher rate of utilization of medical care.

Marginalization and Separation were associated with significantly higher levels of barriers to care.

ILLNESS NARRATIVES

The ethnographic component of the present study was designed (1) to develop and refine a specific method for collecting and analyzing illness narratives; (2) to clarify and validate specific questionnaire items from the epidemiological study; (3) to examine the illness experience and hierarchies of resort of individuals from different ethnocultural groups with (a) medically unexplained symptoms; (b) multiple somatic symptoms; or (c) symptoms of psychological distress on the GHQ; (4) to clarify the cognitive and interpersonal processes that contribute to the discursive production of illness narratives; and (5) to identify issues for future ethnographic and epidemiological research.

Over 110 interviews ranging in length from 1 to 3 hours were collected and transcribed. Owing to the labor intensive nature of qualitative data analysis, our work with this corpus is at a very early stage. However, preliminary results indicate the usefulness and acceptability of the illness narrative protocols. They also indicate the importance of prototypical experiences and sequences (chain complexes) in accounts of symptoms and illness.

Most striking was the observation that respondents often found the ethnographic interviews “therapeutic.” In some respects, our ethnographic research interviews resembled clinical psychotherapeutic interviews in which the patient is given the opportunity to narrate their own stories of trauma, suffering and coping. Consonant with the research of Pennebaker and others, it appears that this narrative activity has beneficial effects. Future analysis of the interviews will help to identify the interaction of personal, cultural and interactional factors in fostering this salutary effect of the research interview.

REFERENCES

- Adelman, H. (1980) *The Indochinese Refugee Movement: The Canadian Experience*. Toronto: Operation Lifeline.
- Almirol, E. (1982). Rights and obligations in Filipino American families. *Journal of Comparative Family Studies*, 13(3), 291-306.
- Araneta, E. G., Jr. (1993). Psychiatric care of Pilipino Americans. In A. C. Gaw (Ed.), *Culture, Ethnicity and Mental Illness*, (pp. 377-412). Washington: American Psychiatric Press.
- Barth, F. (1969). *Ethnic groups and boundaries*. London: Allen and Unwin.
- Beiser, M. (1988a). Influences of time, ethnicity, and attachment on depression in Southeast Asian refugees. *American Journal of Psychiatry*, 145(1).
- Beiser, M. (1988b). The mental health of immigrants and refugees in Canada. *Santé Culture Health*, 5(2), 197-213.
- Beiser, M. (1989). Migration and mental health. *Annals RCPSC*, 22(1), 21-25.
- Beiser, M., & Fleming, J. A. E. (1986). Measuring psychiatric disorder among Southeast Asian refugees. *Psychological Medicine*, 16, 627-639.
- Beiser, M., Gill, K., & Edwards, R. G. (1993). Mental health care in Canada: Is it accessible and equal? *Canada's Mental Health*, 41(2), 2-7.
- Berry, J. W. (1987). Comparative studies of acculturative stress. *International Migration Review*, 21, 491-511.
- Berry, J. W., & Annis, R. C. (1974). Acculturative stress. *Journal of Cross-Cultural Psychology*, 5, 382-406.
- Berry, J. W., Trimble, J. E., & Olmedo, E. (1986). Assessment of acculturation. In W. J. Lonner & J. W. Berry (Eds.), *Field Methods in Cross-cultural Research*, (pp. 291-324). Beverley Hills, CA: Sage.
- Berry, J. W., Wintrob, R., Sindell, P. S., & Mawhinney, T. A. (1982). Psychological adaptation to culture change among the James Bay Cree. *Naturaliste Canadien*, 109, 965-975.
- Bibeau, G., Chan-Yip, A., Lock, M., & Rousseau, C. (1992). *La santé mentale et ses visage: vers un québec plus rythmique au quotidien*. Montréal: Gaeten Morin.
- Bland, R. C., Orn, H., & Newman, S. C. (1988). Lifetime prevalence of psychiatric disorders in Edmonton. *Acta Psychiatrica Scandinavica*, 77(Suppl. 338), 24-32.
- Boman, B. M., & Edwards, M. (1984). The Indochinese refugee. *Australian and New Zealand Journal of Psychiatry*, 180, 40-52.
- Bordeleau, Y. (1976). Pour une conception plus réaliste du processus de l'intégration des immigrants. *Revue de L'Association Canadienne de langue Française*, 5, 7-12.
- Breton, R., Isajiw, W. W., Kalbach, W. E., & Reitz, J. G. (1990). *Ethnic Identity and Equality: Varieties of Experience in a Canadian City*. Toronto: University of Toronto Press.
- Brown, C. (1982). *Black and White in Britain: The Third PSI Survey*. London: Heineman.
- Canino, I. A., Rubio-Stipec, M., Canino, G., & Escobar, J. I. (1992). Functional somatic symptoms: A cross-ethnic comparison. *American Journal of Orthopsychiatry*, 62(4), 605-612.

- Carpenter, L., & Brockington, I. F. (1980). A study of mental illness in Asians, West Indians and Africans living in Manchester. British Journal of Psychiatry, *137*, 201-205.
- Cassidy, F. G. (1980). Dictionary of Jamaican English. Cambridge: Cambridge University Press.
- Cathébras, P., Robbins, J. M., Kirmayer, L. J., & Hayton, B. C. (1992). Fatigue in primary care: Prevalence, illness behavior and psychiatric comorbidity. Journal of General Internal Medicine, *7*, 276-286.
- Chan, D. W. (1985). The Chinese version of the General Health Questionnaire: Does language make a difference. Psychological Medicine, *15*, 147-155.
- Chan, K. B., & Lam, L. (1983). Resettlement of Vietnamese-Canadian refugees in Montreal: Some socio-psychological problems and dilemmas. Canadian Ethnic Studies, *15*(1), 1-17.
- Charron, D. W., & Ness, R. C. (1981). Emotional distress among Vietnamese adolescents. Journal of Refugee Settlement, *1*, 7-15.
- Cheung, F., & Dobkin de Rios, M. (1982). Recent trends in the study of mental health of Chinese immigrants to the United States. Research in Race and Ethnic Relations, *3*, 145-163.
- Cheung, F. K., & Snowden, L. R. (1990). Community mental health and ethnic minority populations. Community Mental Health Journal, *26*(3), 277-292.
- Chrisman, N. J., & Kleinman, A. (1983). Popular health care, social networks, and cultural meanings: The orientation of medical anthropology. In D. Mechanic (Ed.), Handbook of Health, Health Care, and the Health Professions, (pp. 569-590). New York: Free Press.
- Chung, R. C. (1991,). Predictors of distress among Southeast Asian refugees: Group and gender differences. Paper presented at the Asian American Psychological Association, San Francisco.
- Cleary, P. D., Goldberg, I. D., Kessler, L. G., & Nyes, G. R. (1982). Screening for mental disorder among primary care patients: usefulness of the General Health Questionnaire. Archives of General Psychiatry, *39*, 837-840.
- Clément, R., Gauthier, R., & Noels, K. (1993). Choix langagiers en milieu minoritaire: attitudes et identité concomitantes. Revue Canadienne des Sciences du Comportement, *3*(2), 149-164.
- Clément, R., & Noels, K. A. (1992). Towards a situated approach to ethnolinguistic identity: the effects of status on individuals and groups. Journal of Language and Social Psychology, *11*(4), 203-231.
- Clément, R., Sylvestre, A., & Noels, K. (1991). Modes d'acculturation et identité située: le cas des immigrants haïtiens de Montréal. Canadian Ethnic Studies, *XXXIII*(2), 81-93.
- Cohen, Y. A. (1955). Character formation and social structure in a Jamaican community. Psychiatry, *18*, 275-296.
- Cohen, Y. A. (1956). Structure and function: Family organization and socialization in a Jamaican community. American Anthropologist, *58*, 664-680.
- Comaroff, J., & Comaroff, J. (1985). Body of Power, Spirit of Resistance: The Culture and History of a South African People. Chicago: University of Chicago Press.

- D'Avanzo, C. E. (1992). Barriers to health care for Vietnamese refugees. Journal of Professional Nursing, 8(4), 244-253.
- Davis, D. L., & Whitten, R. G. (1988). Medical and popular traditions of nerves. Social Science and Medicine, 26(12), 1209-1211.
- Dechesnay, M. (1986). Jamaican family structure: The paradox of normalcy. Family Process, 25(2), 293-300.
- Delvecchio Good, M.-J., Brodwin, P. E., Good, B. J., & Kleinman, A. (Eds.). (1992). Pain as a Human Experience: An Anthropological Perspective. Berkeley: University of California Press.
- DeMan, A. F., Balkou, S., & Iglesias, R. (1986). Une version canadienne-française du questionnaire sur le soutien social. Santé Mentale au Québec, 11, 199-202.
- Devisch, R. (1985). A therapeutic self-help group among Turkish women. Dertlesmek: "The sharing of sorrow". Psichiatria e Psicoterapi Analitica, 4(2), 133-152.
- Ebigbo, P. O. (1982). Development of a culture specific (Nigeria) screening scale of somatic complaints indicating psychiatric disturbance. Culture, Medicine and Psychiatry, 6, 29-43.
- Ebigbo, P. O. (1986). A cross-sectional study of somatic complaints of Nigerian females using the Enugu somatization scale. Culture, Medicine, and Psychiatry, 10(2), 167-186.
- Eisenbruch, M. (1983). 'Wind illness' or somatic depression? A case study in psychiatric anthropology. British Journal of Psychiatry, 143, 323-26.
- Escobar, J. I., & Canino, G. (1989). Unexplained physical complaints: Psychopathology and epidemiological correlates. British Journal of Psychiatry, 154(suppl. 4), 24-27.
- Escobar, J. L., Rubio-Stipec, M., Canino, G., & Karno, M. (1989). Somatic Symptom Index (SSI): A new and abridged somatization construct. Journal of Nervous and Mental Disease, 177(3), 140-146.
- Eyton, J., & Neuwirth, G. (1984). Cross-cultural validity: Ethnocentrism in health studies with special reference to the Vietnamese. Social Science and Medicine, 18(5), 447-453.
- Farmer, P., & Good, B. J. (1990). Illness representations in medical anthropology: A critical review and a case study of the representation of AIDS in Haiti. In J. A. Skelton & Croyle (Eds.), (pp. 132-162). New York: Springer.
- Federal Task Force on Mental Health Issues Affecting Immigrants and Refugees. (1988). After the Door Has Been Opened: Mental Health Issues Affecting Immigrants and Refugees in Canada. Ottawa: Health and Welfare Canada.
- Felsman, J. K., Leong, F. T. L., Johnson, M. C., & Felsman, I. C. (1990). Estimates of psychological distress among Vietnamese adolescents, unaccompanied minors, and young adults. Social Science and Medicine, 31, 1251-1256.
- Flaskerud, J., & Soldevilla, E. (1986). Pilipino and Vietnamese clients utilizing an Asian mental health center. Journal of Psychosocial Nursing, 24(8), 32-36.
- Fuji, J. S., Fukushima, S. N., & Yamamoto, J. (1993). Psychiatric care of Japanese Americans. In A. C. Gaw (Ed.), Culture, Ethnicity and Mental Illness, (pp. 305-346). Washington: American Psychiatric Press.

- Gans, H. J. (1962). The Urban Villagers: Group and Class in the Life of Italian-Americans. New York: Free Press.
- Gaw, A. C. (Ed.). (1993a). Culture, Ethnicity and Mental Illness. Washington: American Psychiatric Press.
- Gaw, A. C. (1993b). Psychiatric care of Chinese Americans. In A. C. Gaw (Ed.), Culture, Ethnicity and Mental Illness, (pp. 245-280). Washington: American Psychiatric Press.
- Gold, S. J. (1989). Differential adjustment among new immigrant family members. Journal of Contemporary Ethnography, 17, 408-434.
- Gold, S. J. (1992). Refugee Communities: A Comparative Field Study. Newbury Park, CA: Sage.
- Goldberg, D. (1982). The concept of a psychiatric "case" in general practice. Social Psychiatry, 17, 61-65.
- Goldberg, D., & Huxley, P. (1992). Common Mental Disorders: A Bio-Social Model. London: Tavistock/Routledge.
- Goldberg, D. P. (1972). The Detection of Psychiatric Illness by Questionnaire. London: Oxford University Press.
- Goldberg, D. P., & Bridges, K. (1988). Somatic presentations of psychiatric illness in primary care setting. Journal of Psychosomatic Research, 32(2), 137-144.
- Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. Psychological Medicine, 9, 139-145.
- Goldlust, J., & Richmon, A. H. (1974). A multivariate model of immigrant adaptation. International Migration Review, 8, 193-225.
- Gong-Guy, E. (1986). California Southeast Asian Mental Health Needs Assessment : Oakland, CA: Asian Community Mental Health Services.
- Good, B., & Good, M. J. D. (1980). The meaning of symptoms: A cultural hermeneutic model for clinical practice. In L. Eisenberg & A. Kleinman (Eds.), The Relevance of Social Science for Medicine, (pp. 165-196). Dordrecht: D. Reidel.
- Good, B. J. (1977). The heart of what's the matter: The semantics of illness in Iran. Culture, Medicine and Psychiatry, 1, 25-58.
- Gordon, M. M. (1964). Assimilation in American Life. New York: Oxford University Press.
- Gozdziak, E. (1988). Older Refugees in the United States: From Dignity to Despair. Washington, D.C.: Refugee Policy Group.
- Gray, E., & Cosgrove, J. (1985). Ethnocentric perception of childrearing practices in protective services. Child Abuse and Neglect, 9, 389-396.
- Greenley, J. R., & Mullen, J. A. (1990). Help seeking and the use of mental health services. In J. R. Greenley (Ed.), Research in Community and Mental Health, (Vol. 6, pp. 325-350). Greenwich, CT: JAI Press.
- Griffith, E. E. H., English, T., & Mayfield, V. (1980). Possession, prayer, and testimony: Therapeutic aspects of the Wednesday night meeting in a black church. Psychiatry, 43(5), 120-128.
- Guarnaccia, P. J. (1993). Ataques de nervios in Puerto Rico: Culture-bound syndrome or popular illness? Medical Anthropology, 15, 157-170.
- Gumperz, J. (1982). Discourse Strategies. Cambridge: Cambridge University Press.

- Haines, D. W. (1988). Kinship in Vietnamese refugee resettlement: A review of the U.S. experience. Journal of Comparative Family Studies, XIX(1), 1-16.
- Hoang, G. N., & Erickson, R. V. (1985). Cultural barriers to effective medical care among Indochinese patients. Annual Review of Medicine, 36, 229-239.
- Hooper, E., Nycz, G., Cleary, P., Regier, D., & Goldberg, I. (1979). Estimated prevalence of RDC mental disorder in primary medical care. Int J Mental Health, 8, 6-15.
- Horwitz, A. V. (1982). The Social Control of Mental Illness. Orlando, CA: Academic Press.
- Hough, R. L., Landsverk, J. A., Karno, M., Burnam, M. A., Timbers, D. M., Escobar, J. L., & Regier, D. A. (1987). Utilization of health and mental health services by Los Angeles Mexican Americans and Non-Hispanic Whites. Archives of General Psychiatry, 44, 702-709.
- Hull, D. (1979). Migration, adaptation, and illness: A review. Soc Sci Med, 13A, 25-36.
- Isaac, M., Janca, A., & Orley, J. (1996). Somatization—a culture-bound or universal syndrome? Journal of Mental Health, 5(3), 219-222.
- Jacob, A., & Blais, D. (1992). Les réfugiés, tout un monde... Recension des écrits sur les politiques, programmes et services aux réfugiés : Laboratoire de recherche en écologie humaine et sociale, Montréal.
- Kawanishi, Y. (1992). Somatization of Asians: An artifact of medicalization? Transcultural Psychiatric Research Review, 29(1), 5-36.
- Keyes, C. F. (1977). The Golden Peninsula: Culture and Adaptation in Mainland Southeast Asia. New York: MacMillan.
- Kibria, N. (1990). Power, patriarchy, and gender conflict in the Vietnamese immigrant community. Gender and Society, 4(1), 9-24.
- Kieth, R., & Narranda, E. (1969). Age independence norms in American and Filipino adolescents. Journal of Social Psychology, 78, 285-286.
- Kim, U., & Berry, J. W. (1985). Acculturation attitudes of Korean immigrants in Toronto. In I. Reyes-Laguna & Y. H. Poortinga (Eds.), From a different perspective: Studies of behaviour across cultures, . Lisse: Swets & Zeitlinger.
- Kinzie, J. D., Boehnlein, J. K., Leung, P. K., Moore, L. J., Riley, C., & Smith, D. (1990). The prevalence of posttraumatic stress disorder and its clinical significance among Southeast Asian refugees. American Journal of Psychiatry, 147(7), 913-917.
- Kinzie, J. D., & Leung, P. K. (1993). Psychiatric care of Indochinese Americans. In A. C. Gaw (Ed.), Culture, Ethnicity and Mental Illness, (pp. 281-304). Washington: American Psychiatric Press.
- Kinzie, J. D., Manson, S. M., Vinh, D. T., & al., e. (1982). Development and validation of a Vietnamese-language depression rating scale. American Journal of Psychiatry, 139, 1276-1281.
- Kirmayer, L. J. (1984). Culture, affect and somatization. Transcultural Psychiatric Research Review, 21(3 & 4), 159-188 & 237-262.
- Kirmayer, L. J. (1989). Cultural variations in the response to psychiatric disorders and emotional distress. Social Science and Medicine, 29(3), 327-339.

- Kirmayer, L. J. (1992). The body's insistence on meaning: Metaphor as presentation and representation in illness experience. Medical Anthropology Quarterly, 6(4), 323-346.
- Kirmayer, L. J. (1993). (Editorial) Culture and psychiatric epidemiology in Japanese primary care. General Hospital Psychiatry, 15, 219-223.
- Kirmayer, L. J. (1994). Improvisation and authority in illness meaning. Culture, Medicine and Psychiatry, 18(2), 183-214.
- Kirmayer, L. J., & Robbins, J. M. (1991). Three forms of somatization in primary care: Prevalence, co-occurrence and sociodemographic characteristics. Journal of Nervous and Mental Disease, 179(11), 647-655.
- Kirmayer, L. J., & Robbins, J. M. (1996). Patients who somatize in primary care: A longitudinal study of cognitive and social characteristics. Psychological Medicine, 26, 937-951.
- Kirmayer, L. J., Robbins, J. M., Dworkind, M., & Yaffe, M. (1993). Somatization and the recognition of depression and anxiety in primary care. American Journal of Psychiatry, 150(5), 734-741.
- Kirmayer, L. J., & Weiss, M. G. (1996). Cultural considerations on somatoform disorders. In T. A. Widiger, A. J. Frances, H. A. Pincus, R. Ross, M. B. First, & W. W. Davis (Eds.), DSM-IV Sourcebook, . Washington: American Psychiatric Press.
- Kirmayer, L. J., & Young, A. (in press). Culture and somatization: Clinical, epidemiological and ethnographic perspectives. Psychosomatic Medicine.
- Kirmayer, L. J., Young, A., & Robbins, J. M. (1994). Symptom attribution in cultural perspective. Canadian Journal of Psychiatry, 39(10), 584-595.
- Kitano, H. H. (1969). Japanese-American mental illness. In S. C. Plog & R. B. Edgerton (Eds.), Changing Perspectives in Mental Illness, (pp. 257-284). New York: Holt.
- Kleinman, A. (1981). On illness meanings and clinical interpretation: Not 'rational man', but a rational approach to man the sufferer/man the healer. , 5, 373-377.
- Kleinman, A., Kleinman, J. (1985). Somatization: The interconnections among culture, depressive experiences, and the meanings of pain. A study in Chinese society. In A. Kleinman & B. Good (Eds.), Culture and Depression, . Berkeley: University of California Press.
- Kleinman, A. (1987). Anthropology and psychiatry: The role of culture in cross-cultural research on illness. British Journal of Psychiatry, 151, 447-454.
- Kleinman, A. (1988a). The Illness Narratives. New York: Basic Books.
- Kleinman, A. (1988b). Rethinking Psychiatry. New York: Free Press.
- Kleinman, A. (1992). Pain and resistance: The delegitimation of local worlds. In M.-J. Good & e. al. (Eds.), Pain, Culture and Experience, . Berkeley: University of California Press.
- Kleinman, A., Eisenberg, L., & Good, B. (1978). Culture, illness, and care: Clinical lessons from anthropologic and cross-cultural research. Annals of Internal Medicine, 88, 251-258.
- Kleinman, A., & Kleinman, J. (1991). Suffering and its professional transformation: Toward an ethnography of interpersonal experience. Culture, Medicine and Psychiatry, 15, 275-301.

- Kleinman, A. M. (1980). Patients and Healers in the Context of Culture. Berkeley: University of California Press.
- Kleinman, A. M. (1982). Neurasthenia and depression: A study of somatization and culture in China. Culture, Medicine and Psychiatry, 6, 117-190.
- Kuo, W. (1984). Prevalence of depression among Asian Americans. Journal of Nervous and Mental Disease, 172(8), 449-457.
- Laguerre, M. (1987). Afro-Caribbean Folk Medicine. South Hadley, MA: Bergin & Garvey.
- Lambert, M. C., Weisz, J. R., & Knight, F. (1989). Over- and undercontrolled clinical referral problems of Jamaican and American children and adolescents: The culture general and the culture specific. Journal of Consulting and Clinical Psychology, 57, 467-472.
- Lambert, M. C., Weisz, J. R., Knight, F., Desrosiers, M.-F., Overly, K., & Thesiger, C. (1992). Jamaican and American adult perspectives on child psychopathology: Further exploration of the threshold model. Journal of Consulting and Clinical Psychology, 60(1), 146-149.
- Lasry, J.-C., & Sayegh, L. (1992). Developing an acculturation scale: A bidimensional model. In N. Grizenko, L. Sayeh, & P. Migneault (Eds.), Transcultural issues in child psychiatry, . Montreal: Editions Douglas.
- Lefley, H. (1984). Delivering mental health services across cultures. In P. B. Pedersen, N. Sartorius, & A. J. Marsella (Eds.), Mental Health Services: The Cross-Cultural Context, . Beverly Hills, CA: Sage.
- Lefley, H. P. (1979). Prevalence of potential falling-out cases among the black, latin and non-latin white populations of the city of Miami. Social Science and Medicine, 13B, 113-114.
- Lefley, H. P. (1990). Culture and chronic mental illness. Hospital and Community Psychiatry, 41, 277-286.
- Lefley, H. P. (1991). The stigmatized family. In P. J. Fink & A. Tasman (Eds.), Stigma and Mental Illness, (pp. 127-138). Washington: American Psychiatric Press.
- Levinson, S. C. (1983). Pragmatics. Cambridge: Cambridge University Press.
- Lewis, I. M. (1971). Ecstatic Religion: An Anthropological Study of Spirit Possession and Shamanism. London: Penguin Books.
- Lin, E., & Goering, P. (1992,). The Ontario health supplement: Content and method. Paper presented at the Ontario Psychiatric Association 72nd Annual Meeting, Toronto, Ontario.
- Lin, E. B. K., Ihule, J., & Tazuma, L. (1985). Depression among Vietnamese refugees in a primary care clinic. American Journal of Medicine, 78, 41-44.
- Lin, K.-M., Inui, T. S., Kleinman, A. M., & Womack, W. M. (1982). Sociocultural determinants of the help-seeking behavior of patients with mental illness. Journal of Nervous and Mental Disease, 170, 78-85.
- Lin, K.-M., Masuda, M., & Tazuma, L. (1982). Adaptational problems of Vietnamese refugees Part III. Case studies in clinic and field: Adaptive and maladaptive. Psychiatric Journal of the University of Ottawa, 7(3), 173-183.
- Lin, K.-M., Tazuma, L., & Masuda, M. (1979). Adaptational problems of Vietnamese refugees. Archives of General Psychiatry, 36, 955-961.

- Lin, T. Y., Tardiff, K., Donetz, G., & Goresky, W. (1978). Ethnicity and patterns of help-seeking. Culture, Medicine and Psychiatry, 2, 3-13.
- Lin, T. Y., Tardiff, K., & Goresky & Donnely. (1978). Ethnicity and patterns of help-seeking. , 2(3).
- Littlewood, R. (1985). An indigenous conceptualization of reactive depression in Trinidad. Psychol Med, 15(2), 275-281.
- Littlewood, R. (1991). Psychiatric diagnosis and racial bias: Empirical and interpretive approaches. Social Science and Medicine, 34(2), 141-149.
- Littlewood, R., & Lipsedge, M. (1982). Aliens and Alienists: Penguin.
- Lobo, A., Garcia-Campayo, J., Campos, R., Marcos, G., Pérez-Echeverria, M. J., & the GMPPZ. (1996). Somatisation in primary care in Spain. I. Estimates of prevalence and clinical characteristics. British Journal of Psychiatry, 168, 344-353.
- Lock, M. (1993). Cultivating the body: Anthropology and epistemologies of bodily practice and knowledge. Annual Review of Anthropology, 22, 133-135.
- Lock, M., & Wakewich-Dunk, P. (1990). Nerves and nostalgia: expression of loss among Greek immigrants in Montreal. Canadian Family Physician, 36, 253-258.
- Lopez, S., & Hernandez, P. (1986). How culture is considered in evaluations of psychopathology. , 176(10), 598-606.
- Lopez, S., & Nunez, J. A. (1987). Cultural factors considered in selected diagnostic criteria and interview schedules. J Abnorm Psychol, 96(3), 270-272.
- Lopez, S. R. (1989). Patient variable biases in clinical judgment: Overview and methodological considerations. Psychological Bulletin, 106, 184-203.
- Loring, M., & Powell, B. (1988). Gender, race, and DSM-III: A study of the objectivity of psychiatric diagnostic behavior. Journal of Health and Social Behavior, 29, 1-22.
- McDowell, I., & Newell, C. (1987). Measuring Health: A Guide to Rating Scales and Questionnaires. Oxford: Oxford University Press.
- Meinhardt, K., Tom, S., Tse, P., & al., e. (1985). Southeast Asian refugees in the Silicon Valley: The Asian Health Assessment Project. Amerasia, 12, 43-65.
- Mirdal, G. M. (1985). The condition of "tightness": the somatic complaints of Turkish migrant women. Acta Psychiatrica Scandinavica, 71, 287-296.
- Mishler, E. (1985). Research Interviewing. Cambridge: Harvard University Press.
- Mishler, E. G. (1986). The analysis of interview-narratives. In T. R. Sarbin (Ed.), Narrative Psychology: The Storied Nature of Human Conduct, (pp. 233-255). New York: Praeger.
- Mollica, R. F., Wyshak, G., & Lavelle, J. (1987). The psychosocial impact of war trauma and torture on Southeast Asia refugees. American Journal of Psychiatry, 144, 1567-72.
- Mollica, R. F., Wyshak, G., Lavelle, J., Truong, T., Tor, S., & Yang, T. (1990). Assessing symptom change in Southeast Asia refugee survivors of mass violence and torture. American Journal of Psychiatry, 147, 83-88.
- Mumford, D. B. (1989). Somatic sensations and psychological distress among students in Britain and Pakistan. Social Psychiatry and Psychiatric Epidemiology, 24, 321-326.
- Mumford, D. B., Bavington, J. T., Bhatnagar, K. S., Hussain, Y., Mirza, S., & Naeaghi, M. M. (1991a). The Bradford Somatic Inventory: A multi-ethnic inventory of

- somatic symptoms reported by anxious and depressed patients in Britain and the Indo-Pakistan subcontinent. British Journal of Psychiatry, 158, 379-386.
- Mumford, D. B., Tareen, I. A. K., Bajwa, M. A. Z., Bhatti, M. R., Pervaiz, T., & Ayub, M. (1991b). An investigation of 'functional' somatic symptoms among patients attending medical clinics in Pakistan. I. Characteristics of 'non-organic' patients. Journal of Psychosomatic Research, 35, 245-255.
- Mumford, D. B., Tareen, I. A. K., Bhatti, M. R., Bajwa, M. A. Z., Ayub, M., & Pervaiz, T. (1991c). An investigation of 'functional' somatic symptoms among patients attending medical clinics in Pakistan—II. Using somatic symptoms to identify patients with psychiatric disorders. Journal of Psychosomatic Research, 35, 257-264.
- Murphy, H. B. M. (1973). Migration and the major mental disorders: a reappraisal. In C. Zwingman & P.-A. M. (Eds.), Uprooting and after., . New York: Springer-Verlag.
- Neighbors, H. W., & al., e. (1989). The influence of racial factors on psychiatric diagnosis: A review and suggestions for research. Community Mental Health Journal, 25, 301-311.
- Newman, S. C., Bland, R. C., & Orn, H. (1989). A validation study of visits to physicians for emotional problems: A community study (Unpublished report): Edmonton, Alberta.
- Nguyen, D. M. (1985). Culture shock—A review of Vietnamese culture and its concepts of health and disease. Western Journal of Medicine, 142, 409-412.
- Nguyen, S. D. (1982). Psychiatric and psychosomatic problems among Southeast Asian refugees. Psychiatric Journal of the University of Ottawa, 7(3), 163-172.
- Nguyen, S. D. (1983). Refugee Needs Assessment : Ottawa-Carleton Southeast Asian Refugee Project.
- Oatley, K. (1992). Integrative action of narratives. In D. J. Stein & J. E. Young (Eds.), Cognitive Science and Clinical Disorder, (pp. 151-170). San Diego: Academic Press.
- Obeyesekere, G. (1985). Depression, Buddhism, and the work of culture in Sri Lanka. In A. M. Kleinman & B. Good (Eds.), Culture and Depression, (pp. 134-152). Berkeley: University of California Press.
- Ohaeri, J. U., & Odejide, O. A. (1994). Somatization symptoms among patients using primary health care facilities in a rural community in Nigeria. American Journal of Psychiatry, 151(5), 728-731.
- Okamura, J. (1981). Situational ethnicity. Ethnic and Racial Studies, 4, 542-465.
- Othmer, E., & DeSouza, C. (1985). A screening test for somatization disorder (hysteria). American Journal of Psychiatry, 142(10), 1146-1149.
- Paykel, E. S., Myers, J. K., Diendelt, M. N., Klerman, G. L., Lindenthal, J. J., & Pepper, M. P. (1969). Life events and depression: A controlled study. Archives of General Psychiatry, 25, 340-347.
- Paykel, E. S., Prusoff, B. A., & Uhlenhuth, E. H. (1971). Scaling of life events. Archives of General Psychiatry, 25, 340-347.
- Phung, T. H. (1979). The family in Vietnam and its social life. In J. K. Withmore (Ed.), An Introduction to Indo-Chinese History, Culture, Language and Life, . Ann Arbor: Center for South and Southeast Asian Studies, University of Michigan.

- Robbins, J. M., & Kirmayer, L. J. (1991). Attributions of common somatic symptoms. Psychological Medicine, 21, 1029-1045.
- Roberts, N. (1990). Bouffée délirante in Jamaican adolescent siblings. Canadian Journal of Psychiatry, 35(3), 251-253.
- Robins, L. N., Helzer, J. E., & Orvaschel, H. (1985). The Diagnostic Interview Schedule. In W. W. Eaton & L. G. Kessler (Eds.), Epidemiologic Field Methods in Psychiatry, (pp. 143-170). Orlando: Academic Press.
- Robins, L. N., & Regier, D. (1991). Psychiatric Disorders in America: The Epidemiologic Catchment Area Study. New York: Free Press.
- Rogler, L. H. (1989). The meaning of culturally sensitive research in mental health. American Journal of Psychiatry, 146, 296-303.
- Rogler, L. H. (1992). The role of culture in mental health diagnosis: The need for programmatic research. Journal of Nervous and Mental Disease, 180(12), 745-747.
- Rogler, L. H., & Cortes, D. E. (1993). Help-seeking pathways: A unifying concept in mental health care. American Journal of Psychiatry, 150(4), 554-561.
- Roosens, E. E. (1989). Creating Ethnicity: The Process of Ethnogenesis. Newbury Park: Sage Publications.
- Roskies, E. (1978). L'Immigration et la santé mentale. L'Hygiène Mentale au Canada, 26, 4-7.
- Rubinstein, H. (1983). Caribbean family and household organization: Some conceptual clarifications. Journal of Comparative Family Studies, 14(3), 283-298.
- Rumbault, R. (1985). Mental health and the refugee experience: A comparative study of Southeast Asian refugees. In T. C. Owen (Ed.), Southeast Asian Mental Health: Treatment, Prevention, Services, Training, and Research, . Washington: DHHS Publication.
- Rwegellera, G. G. C. (1980). Differential use of psychiatric services by West Indians, West Africans and English in London. British Journal of Psychiatry, 137, 428-432.
- Sarason, I. G. (1983a). Assessing social support: The Social Support Questionnaire. Journal of Personality and Social Psychology, 44, 127-139.
- Sarason, I. G. (1983b). The social support questionnaire. Social Health, 162-165.
- Sarason, I. G., Sarason, B. R., Potter, E. H., III, & Antoni, M. H. (1985). Life events, social support, and illness. Psychosomatic Medicine, 27(2), 156-163.
- Sarason, I. G., Sarason, B. R., & Shearin, E. N. (1986). Social support as an individual difference variable: Its stability, origins, and relational aspects. Journal of Personality and Social Psychology, 50(4), 845.
- Sarason, I. G., Sarason, B. R., Shearin, E. N., & Pierce, G. R. (1987). A brief measure of social support: Practical and theoretical implications. Journal of Social and Personal Relationships, 4, 497-510.
- Sayegh, L., & Lasry, J.-C. (1992). Immigrants' adaptation in Canada: Assimilation, acculturation and orthogonal cultural identification. Canadian Psychology, 34, 98-109.
- Schwartz, D. (1985). Caribbean folk beliefs and Western psychiatry. Journal of Psychosocial Nursing, 23, 26-30.
- Slote, W. H. (1986). The intrapsychic locus of power and personal determination in a Confucian society: The case of Vietnam. In W. H. Slote (Ed.), The Psycho-

- Cultural Dynamics of the Confucian Family: Past and Present, . Seoul: International Cultural Society of Korea.
- Snow, L. F. (1974). Folk medical beliefs and their implications for care of patients. Annals of Internal Medicine, 81, 82-96.
- Sobo, E. (1992). "Unclean deeds": Menstrual taboos and binding "ties" in rural Jamaica. In M. Nichter (Ed.), Anthropological Approaches to the Study of Ethnomedicine, . Langhorne, PA: Gordon & Breach.
- Sobo, E. J. (1993). One Blood: The Jamaican Body. Albany, NY: State University of New York Press.
- Srinivasan, T. N., & Suresh, T. R. (1991). The nonspecific symptom screening method: Detection of nonpsychotic morbidity based on nonspecific symptoms. General Hospital Psychiatry, 13, 106-114.
- Stubbs, M. (1982). Discourse Analysis. Chicago: University of Chicago Press.
- Sue, S. (1992). Ethnicity and mental health: Research and policy issues. Journal of Social Issues, 48(2), 187-205.
- Sue, S. (1994). Mental health. In N. W. S. Zane, D. T. Takeuchi, & K. N. J. Young (Eds.), Confronting Critical Health Issues of Asian and Pacific Islander Americans, (pp. 266-288). Thousand Oaks, CA: Sage Publications.
- Sue, S., Fujino, D. C., Hu, L., Takeuchi, D. T., & Zane, N. W. S. (1991). Community mental health services for ethnic minority groups: A test of the cultural responsiveness hypothesis. Journal of Consulting and Clinical Psychology, 59(4), 533-540.
- Sussman, L. K., Robins, L. N., & Earls, F. (1987). Treatment-seeking for depression by Black and White Americans. Social Science and Medicine, 24, 187-196.
- Swartz, M., Hughes, D., George, L., & al., e. (1986). Developing a screening index for community studies of somatization disorder. Journal of Psychiatric Research, 20, 335-343.
- Takeuchi, D. T., Leaf, P. J., & Kuo, H. S. (1988). Ethnic differences in the perception of barriers to help-seeking. Social Psychiatry & Psychiatric Epidemiology, 23(4), 273-80.
- Takeuchi, D. T., & Young, K. N. J. (1994). Overview of Asian and Pacific Islander Americans. In N. W. S. Zane, D. T. Takeuchi, & K. N. J. Young (Eds.), Confronting Critical Health Issues of Asian and Pacific Islander Americans, (pp. 3-21). Thousand Oaks, CA: Sage Publications.
- Taylor, C. (1988). The concept of flow in Rwandan popular medicine. Social Science and Medicine, 27(12), 1343-1348.
- Thompson, M. S., & Peebles-Wilkins, W. (1992). The impact of formal, informal, and societal support networks on the psychological well-being of black adolescent mothers. Social Work, 37(4), 322-328.
- Timberlake, E. M., & Cook, K. O. (1984). Social work and the Vietnamese. Social Work, 29(2), 108-113.
- Tompar-Tiu, A., & Sustento-Seneriches, J. (1995). Depression and Other Mental Health Issues: The Filipino American Experience. San Francisco: Jossey-Bass.
- Tran, M. T. (1981). Indochinese refugees as patients. Journal of Refugee Resettlement, 1, 53-60.

- Tseng, W.-H. (1975). The nature of somatic complaints among psychiatric patients: The Chinese case. Compr Psychiat, 16(3), 237-245.
- Ustün, T. B., & Sartorius, N. (Eds.). (1995). Mental Illness in General Health Health Care: An International Study. Chichester: John Wiley & Sons.
- Vazquez-Barquero, J. L., Williams, P., Diez-Manrique, J. F., Lequerica, J., & Arenal, A. (1988). The factor structure of the GHQ-60 in a community sample. Psychological Medicine, 18, 211-218.
- Vignes, A. J., & Hall, r. C. (1979). Adjustment of a group of Vietnamese people to the United States. American Journal of Psychiatry, 136(4), 442-444.
- Walls, C. T., & Zarit, S. H. (1991). Informal support from Black churches and the well-being of elderly Blacks. Gerontologist, 31(4), 490-495.
- Weidman, H. H. (1979). Falling-out: A diagnostic and treatment problem viewed from a transcultural perspective. Social Science and Medicine, 13B, 95-112.
- Weiss, M. G., Doongaji, D. R., Siddartha, S., Wypij, D., Pathare, S., Bhatawdekar, M., Bhave, A., Sheth, A., & Fernandes, R. (1992). The Explanatory Model Interview Catalogue (EMIC): Contribution to cross-cultural research methods from a study of leprosy and mental health. British Journal of Psychiatry, 160, 819-830.
- Wessely, S. (1995). The epidemiology of chronic fatigue syndrome. Epidemiologic Reviews, 17(1), 139-151.
- Westermeyer, J. (1989). Psychiatric Care of Migrants: A Clinical Guide. Washington: American Psychiatric Press.
- Westermeyer, J., Bouafuely, M., Neider, J., & Callies, A. (1989). Somatization among refugees: An epidemiologic study. Psychosomatics, 30, 34-43.
- Williams, C., & Westermeyer, J. (1983). Psychiatric problems among Southeast Asian refugees. Journal of Nervous and Mental Disease, 171, 79-85.
- Wilson, P. (1969). Reputation and respectability: A suggestion for Caribbean ethnology. Man, 4(1), 70-84.
- Wittchen, H.-U., Robins, L. N., Cottler, L. B., Sartorius, N., Burke, J. D., & Regier, D. (1991). Cross-cultural feasibility, reliability and sources of variance of the composite international diagnostic interview (CIDI). British Journal of Psychiatry, 159, 645-653.
- Wong, J. (1981). Appropriate mental health treatment and service delivery systems for Southeast Asians, Bridging Cultures: Southeast Asian Refugees in America, . Los Angeles, CA: Asian Community Mental Health Training Center.
- Woon, Y. (1986). Some adjustment aspects of Vietnamese and Sino-Vietnamese families in Victoria. Canadian Journal of Comparative Studies, 17(3), 349-370.
- World Health Organization. (1990). Composite International Diagnostic Interview (CIDI). Geneva: World Health Organization.
- Yeatman, G. W., & Dang, V. V. (1980). Cao Gio (coin rubbing): Vientamese attitude towards health care. Journal of the American Medical Association, 244, 2748-2749.
- Ying, Y. W. (1990). Explanatory models of major depression and implications for help-seeking among immigrant Chinese-American women. Culture, Medicine & Psychiatry, 14(3), 393-408.
- Young, A. (1976). Internalizing and externalizing medical belief systems: An Ethiopian example. Social Science and Medicine, 10, 147-156.

- Young, A. (1981). When rational men fall sick: An inquiry into some assumptions made by medical anthropologists. Culture, Medicine and Psychiatry, 5, 317-335.
- Young, A. (1982a). The anthropologies of illness and sickness. Annual Review of Anthropology, 11, 257-285.
- Young, A. (1982b). Rational men and the explanatory model approach. Culture, Medicine and Psychiatry, 6, 57-71.
- Yu, E., & Liu, W. (1980). Fertility and Kinship in the Phillipines. Notre Dame: University of Notre Dame Press.
- Yu, E. S., & Liu, W. T. (1986). Methodological problems and policy implications in Vietnamese refugee research. International Migration Review, 20(2), 483-501.
- Yu, E. S. H., & Liu, W. T. (1992). US national health data on Asian Americans and Pacific Islanders: A research agenda for the 1990s. American Journal of Public Health, 82(12), 1645-1652.
- Zak, I. (1973). Dimensions of Jewish-American identity. Psychological Reports., 33, 891-900.
- Zak, I. (1976). Structure of ethnic identity of Arab-Israeli students. Psychological Reports., 38, 239-246.

APPENDIX 1
SUMMARY OF STAGE I AND STAGE II PHONECALLS
ACCORDING TO STRATA