# A PROGRAM FOR RESEARCH ON

# SOCIAL AND ECONOMIC DIMENSIONS OF AN AGING POPULATION

**Ethnic Differences in Health: Does Immigration Status Matter?** 

Karen M. Kobayashi Steven Prus Zhiqiu Lin

**SEDAP Research Paper No. 230** 

For further information about SEDAP and other papers in this series, see our web site: http://socserv.mcmaster.ca/sedap

Requests for further information may be addressed to:
Secretary, SEDAP Research Program
Kenneth Taylor Hall, Room 426
McMaster University
Hamilton, Ontario, Canada
L8S 4M4
FAX: 905 521 8232

e-mail: sedap@mcmaster.ca

# **Ethnic Differences in Health: Does Immigration Status Matter?**

Karen M. Kobayashi Steven Prus Zhiqiu Lin

**SEDAP Research Paper No. 230** 

### March 2008

The Program for Research on Social and Economic Dimensions of an Aging Population (SEDAP) is an interdisciplinary research program centred at McMaster University with co-investigators at seventeen other universities in Canada and abroad. The SEDAP Research Paper series provides a vehicle for distributing the results of studies undertaken by those associated with the program. Authors take full responsibility for all expressions of opinion. SEDAP has been supported by the Social Sciences and Humanities Research Council since 1999, under the terms of its Major Collaborative Research Initiatives Program. Additional financial or other support is provided by the Canadian Institute for Health Information, the Canadian Institute of Actuaries, Citizenship and Immigration Canada, Indian and Northern Affairs Canada, ICES: Institute for Clinical Evaluative Sciences, IZA: Forschungsinstitut zur Zukunft der Arbeit GmbH (Institute for the Study of Labour), SFI: The Danish National Institute of Social Research, Social Development Canada, Statistics Canada, and participating universities in Canada (McMaster, Calgary, Carleton, Memorial, Montréal, New Brunswick, Queen's, Regina, Toronto, UBC, Victoria, Waterloo, Western, and York) and abroad (Copenhagen, New South Wales, University College London).

## **Ethnic Differences in Health: Does Immigration Status Matter?**

Karen M. Kobayashi, <sup>1</sup> Steven Prus, <sup>2</sup> and Zhiqiu Lin <sup>3</sup>

<sup>1</sup> Karen M. Kobayashi (corresponding author)
Department of Sociology
University of Victoria
PO Box 3050, Victoria, BC V8W 3P5
email: kmkobay@uvic.ca
phone: 250-721-7574

<sup>2</sup> Steven Prus
Department of Sociology
Carleton University
D795 LA, 1125 Colonel By Drive, Ottawa, Ontario, K1S 5B6 Canada email: steven\_prus@carleton.ca
phone: 613-520-2600 ext 3760

<sup>3</sup> Zhiqiu Lin (corresponding author)
Department of Sociology
Carleton University,
D792 LA, 1125 Colonel By Drive, Ottawa, Ontario, K1S 5B6 Canada
email: zhiqiu\_lin@carleton.ca
phone: 613-520-2600 ext 1099

### **Abstract:**

This study examines health differences between first-generation immigrant and Canadian-born persons who share the same the ethnocultural origin, and the extent to which such differences reflect social structural and health-related behavioural contexts. Data from the 2000/2001 Canadian Community Health Survey show that first generation immigrants of Black and French race/ethnicity tend to have better health than their Canadian-born counterparts, while the opposite is true for those of South Asian, Chinese, and south and east European and Jewish origins. West Asians and Arabs and other Asian groups are advantaged in health regardless of country of birth. Health differences between ethnic foreign- and Canadian-born persons generally converge after adjusting for socio-demographic, SES, and lifestyle factors. Implications for health care policy and program development are discussed.

**Keywords**: self-rated health; functional health; ethnicity; race; immigration.

**JEL Classification:** I18

### Résumé:

Cette étude examine les différences de l'état de santé entre les immigrés de la première génération et les personnes nées au Canada partageant les mêmes origines ethnico culturelles et à quel point ces différences reflètent les comportements sociaux structurels et relatifs à la santé. Les données 2000/2001 de l'enquête sur la santé dans les collectivités canadiennes montrent que les immigrés de la première génération de race noire ou d'origine française semblent être en meilleure santé que leurs homologues nés au Canada, alors que l'opposé est vrai pour ceux d'origines sud asiatiques, chinoises, européennes du sud et de l'est et juives. Les Asiatiques et les Arabes occidentaux ainsi que d'autres groupes d'asiatiques sont en meilleure santé indépendamment de leur pays de naissance. Les différences entre l'état de santé des personnes d'une même origine ethnique nées à l'étranger et au Canada convergent généralement une fois que sont prise en compte les facteurs sociodémographiques, l'état de santé subjective, et le style de vie. Les implications par apport à l'élaboration de politiques et programmes de promotion de la santé sont discutées.

### INTRODUCTION

Although research into the health of Canadians has grown considerably over the past few decades, the study of health differences across a wide spectrum of ethnocultural groups has received little attention (Gee *et al* 2006). A recent exception to this is Wu and Schimmele's (2005) study examining health disparities across eleven ethnic groups. Using data from the 1996-97 National Population Health Survey, their findings interestingly provide no clear evidence of a relationship between behavioural or socioeconomic differences and ethnic health disparities, nor do the authors find a definitive pattern between ethnicity and functional and self-reported health in their analysis. This, they point out, is in contrast to U.S. studies which have consistently demonstrated such health disparities between whites and non-Hispanic Blacks due, in large part, to variations in "exposure" to health risks.

Wu and his colleagues (2003), using the same data, did however observe differences in mental health by ethnicity. Of particular interest is the finding that two of the largest visible minority groups (defined as persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour), the Chinese and the South Asians, report better mental health than English Canadians, and that Jewish Canadians have comparatively poorer mental health. Such results provide counter evidence to the long-held assumption that being a member of a visible minority group inevitably translates into having poorer mental health (Neighbors & Williams 2001). A further contribution of this paper is the recognition that SES and social support are the main factors in explaining ethnocultural differences in mental health. SES is important, the authors maintain, since it influences well-known determinants of mental health such as

access/utilization of healthcare services, physical environment, and the experience of chronic stress. Some ethnic cultures, such as Asian and South Asian, also place greater emphasis on the role of family and/or "community" as key sources of social support, which may provide a buffer against mental health problems. Given the different conclusions drawn from the Wu and Schimmele (2005) and Wu *et al* (2003) studies, albeit using different measures of health, it is important to further probe the nature of the health differences between ethnocultural groups.

While between-group comparisons allow us to establish the existence of an association between ethnicity and health, within-group differences should also be considered. Research shows that new and recent immigrants tend to have better than average health. Chen and his colleagues (1996a) find that newer immigrants to Canada are less likely to have chronic conditions and disabilities, and that this effect is strongest for those from non-European countries. Other research using a number of different measures of health such as self-rated health, heart disease, diabetes, cancer, depression and substance abuse, and life expectancy have found similar results (Parakulam et al 1992; Chen et al 1995; Chen et al 1996b; Dunn & Dyck 2000; Hyman 2001; Meadows et al 2001; Ali 2002; Perez 2002; Newbold & Danforth 2003; McDonald & Kennedy 2004). This "healthy immigrant effect" may help to explain some of the ethnic-based differences in health since the vast majority of new/recent immigrants are visible minorities with China (including Hong Kong), India, Pakistan, the Philippines, Korea, Iran, Romania, and Sri Lanka being the leading source countries (Citizenship and Immigration Canada 2002).

Two explanations for the health advantages of immigrants have been proposed and supported in the literature (Marmot & Syme 1976; Marmot et al 1984). First, the selectivity hypothesis maintains that migration is selective of healthier individuals. Healthier, younger, and better educated individuals self-select into the immigration process and health requirements in the Immigration Act for entrance into Canada tend to disqualify people with serious medical conditions (Trovato 1998; Oxman-Martinez et al 2000). Second, the acculturation hypothesis states that immigrants tend to have more positive health-related beliefs, attitudes, lifestyle behaviours, as well as stronger social support networks; however over time, as length of residence increases, they experience a deterioration in health due to the adoption (i.e., acculturation) of mainstream Canadian beliefs and lifestyle behaviours (Hull 1979; Chen et al. 1996a; Dunn & Dyck 2000; Ali 2002; Perez 2002). More recently, McDonald and Kennedy (2004) have speculated that the increased likelihood that immigrants will be diagnosed with a chronic condition may be related to processes of acculturation and familiarization with the health care system: as immigrants become more experienced and comfortable negotiating the system, they are more likely to interact with health care practitioners and thus the likelihood of illness diagnoses increases.

Comparisons of immigrant health according to country of origin have also been studied in the Canadian context. Wang and his colleagues (2000) found that the risk of arthritis is significantly lower for Asian immigrants compared to North American-born Canadians, even after adjusting for age, gender, SES, and body mass index. Further, Acharya (1998) found differences in the mental health status of immigrants and in its predictors by country of birth.

### RESEARCH OBJECTIVES

These findings suggest that studies of ethnicity and health should consider immigration status. The goal of this paper is to go beyond examining the main effects of immigration status and ethnicity on health; specifically, the current study looks at both the differences in health between first generation immigrants and Canadian-born persons who share the same the ethnocultural descent, and the extent to which social structural and behavioural contexts explain any disparities.

### DATA AND METHODS

**Data** Data come from the master file of the 2000/2001 Canadian Community Health Survey (CCHS). The CCHS is on-going, cross-sectional survey that collects information on the health status, health care utilization, and health determinants of a representative sample of Canadians aged 12 years or older living in private households. Sample weights are used in all analyses.

**Measures** Studies on ethnicity and health tend to use aggregate groupings, in part because of restrictions placed on public-use microdata and/or because of sample size. The CCHS master data allow the construction of a single comprehensive measure of culture, race, and ethnicity. It is based on two questions.

The first question asks, "People living in Canada come from many different cultural and racial backgrounds. Are you: ...white, Black, Korean, Filipino, Japanese, Chinese, Aboriginal, South Asian (e.g., East Indian, Pakistani, Sri Lankan), Southeast

Asian (e.g., Cambodian, Indonesian, Laotian, Vietnamese), Arab, West Asian (e.g., Afghan, Iranian), Latin American, other or multiple visible-minority origin?" A substantial majority of respondents are classified as "white," thus this group is further divided based on ethnic origin (i.e., the ethnic group which the respondent's ancestors belonged to such as Canadian, French, English). These data are combined into thirteen categories arranged under the two headings: white (Canadian, French, English, south and east European and Jewish, other west European, and multiple -- two or more of the above -- white) and non-white (Aboriginal, Black, Chinese, South Asian, other Asian -- Korean, Filipino, Japanese, and South East Asian -- West Asian and Arab, and other including non-white and white). Those of multiple white origin are selected as the reference in the analysis as it is the largest group with no single origin designated.

Health is measured on a multi-dimensional level. Self-rated health (SRH) is based on the question "In general, would you say your health is: excellent, very good, good, fair, or poor?" It is collapsed into two groups: "positive" health perception (good, very good, or excellent) and "negative" health perception (poor or fair). Functional limitations (Health Utilities Index or HUI) and disabilities (activity restriction or AR) provide a more objective measure of health. The HUI is a weighted index of an individual's overall functional health based on eight self-reported attributes: vision, hearing, speech, mobility, dexterity, cognition, emotion, and pain/discomfort. Values range from about 0 (completely unfunctional) to 1 (perfect functional health) in increments of 0.001. Activity restriction/disability refers to the need for help -- as a result of any health problem/condition, including a disability or handicap, that has lasted 6+ months -- with instrumental activities of daily living such as preparing meals, shopping for groceries or

other necessities, doing everyday housework, doing heavy household chores, and personal care.

A full range of social structural and behavioural control variables are considered. Social structural factors consist of both socio-demographic and SES variables. The socio-demographic controls are gender, age (and age-square to control for an accelerated decline in health with age), marital status (married or other), mother tongue/language (English/French or other), and length of time in Canada since immigration (1 year or less, 2-5 years, 6-9 years, 10-19 years, 20+ years). SES is measured with income and education. Income has five discrete categories, developed by Statistics Canada, where respondents are classified as having either low, low-middle, middle, upper-middle, or high income depending on the dollar-distance between their annual household income (before taxes) and the Canadian low-income cutoff lines. Education is collapsed as follows: < high school graduate, high school graduate, and postsecondary graduate.

Health behaviours include: type of alcohol drinker (regular, occasional, former, never); type of cigarette smoker (daily, former daily-now occasional, always occasional, former daily, former occasional, never); average number of times per day fruits and vegetables are consumed (<5 servings per/day, 5-10 servings per/day, 11+ servings per/day); Body Mass Index (BMI) (underweight: BMI <18.5, normal weight: BMI 18.5-24.9, overweight: BMI 25-29.9, obese: BMI 30+); and level of physical activity (inactive, moderately active, active).

Table 1 provides a description of the study variables. Dummy variables were created for variables with missing cases to keep a more robust sample that contained 102,221 Canadian-born (CB) and 26,516 foreign-born (FB) individuals.

### (Table 1 about here)

Analysis Linear and logistic regression models estimate ethnocultural differences in mean HUI and in the odds of SRH/AR before and after adjusting for the combined effects of structural and lifestyle factors. Statistical significance was assessed within and between Canadian- and foreign-born populations. Two issues are noted. First, significance tests may be influenced by factors external to the size of the observed difference, namely estimated variance, chosen reference group, and sample size. Second, preliminary analysis revealed that some predicted HUI scores fell beyond its range of 0-1. Out-of range scores were relatively few in number and thus excluded from the final models.

### RESULTS

Unadjusted Results Tables 2-4 show that Blacks and those of other non-white ethnic origin, especially those who are foreign born, report significantly higher HUI scores and are less likely to have an activity restriction compared to those of multiple white ethnocultural origin (the reference group). By contrast, South Asians who are Canadian-born are more likely to report positive health and to be free of disability (activity restriction) than their first-generation counterparts. Canadian-born Chinese are also more likely to be disability free than the foreign-born.

Other Asians are advantaged on all three measures of health compared to those of multiple white origin regardless of immigration status. West Asians and Arabs who are either Canadian- or foreign-born also have a much higher incidence of positive SRH and a lower likelihood of having an activity restriction. Aboriginal persons are less likely to report positive SRH and have a lower average HUI score.

French immigrants have better health compared with Canadian-born French persons. In fact they have one of the highest average functional health (HUI) scores, as well as higher odds of reporting positive SRH and of being free of disability compared to their Canadian-born counterparts. Conversely, foreign-born persons of south and east European and Jewish origin have a lower average HUI score and are less likely to report positive SRH, while the Canadian-born report similar levels of health to those of the reference group. Interestingly foreign-born persons who define themselves as Canadian, and to a less extent the native-born, report on average higher HUI scores and have higher odds of being disability free. It is persons of English descent that are most like those of multiple white ethnocultural origin in health regardless of immigration status.

### (Tables 2-4 about here)

Adjusted Results These patterns are mediated to some extent by social structural and lifestyle factors. First-generation (immigrant) Blacks and those of other non-white ethnic origin continue to report better health than those of multiple white ethnocultural origin, however those who are Canadian-born are no longer advantaged in health. The advantages reported by persons of Chinese, South Asian, and West Asian and Arab origin, regardless of immigration status, also tend to be explained by differences in social structural and lifestyle environments. They also help to account for some of the better health of persons of other Asian ethnic origins; however, both the foreign- and Canadian-born populations continue to have a higher average HUI score and odds of being disability free compared to the reference group.

Social structural and lifestyle factors also account for a considerable amount of the health inequalities of Aboriginals. The gap in overall functional health (HUI) between persons of Aboriginal and multiple white ethnocultural origin is reduced from 0.043 reporting positive self-rated health increase from 0.562 (p<0.001) to 0.762 (p<0.01).

The combined influence of structural and behavioural factors explain some of the health advantages of foreign-born persons of French origin, as odds of positive SRH are reduced and odds of being disability free become statistically similar to those of multiple white origin; for those who are Canadian-born, on the other hand, average HUI score increases, the odds of being disability free become statistically significant, and the disadvantage in SRH disappears. Health differences between foreign and Canadian-born persons of French descent are therefore reduced after structural/behavioural adjustment. This pattern is also generally observed for those of south and east European and Jewish origin.

In contrast, the previously suppressed differences in health between foreign- and Canadian-born persons of English descent become statistically significant, with the former reporting higher odds of positive SRH and being disability free relative to the reference group. A similar pattern is observed for those of other west European descent, where differences in average HUI score and the odds of being free of disability are significantly larger for immigrants than their Canadian-born counterparts.

### DISCUSSION AND CONCLUSIONS

It has long been known that Canadian society is structured along ethnic and racial lines. The ethnic dimension of inequality in Canada was first systemically studied and highlighted by John Porter (1965) in The Vertical Mosaic. Based on national data for the period 1931-1961, he found evidence of an ethnically-ranked system in terms of occupations, income, "ethnic prestige," and entry into the Canadian elite with those of British origins coming out on top; French Canadians were second; persons of other European origins followed - with western and northern European origins ranking higher than southern and eastern European origins; and Blacks and Aboriginals - very small groups numerically – were at the bottom of the hierarchy.

Many significant events and policy changes have occurred since the publication of Porter's research. Important among these include: continued non-racist improvements in Canadian immigration policy; the establishment of the Canadian Charter of Rights and Freedoms; the institutionalization of Multiculturalism as a federal policy; the Employment Equity Act (which targets women, visible minorities, Aboriginals, and persons with disabilities); increasing awareness and acknowledgement of the injustices wrought on Aboriginal Canadians and nascent developments aimed at meeting their needs (Frideres 2000); and, last but not least, research revealing that biologically-based race (and racial difference) is not scientifically valid (e.g., Smaje 1996; Stolley 1999). These changes bode well for a Canadian society in which race and ethnicity are less significant as a principle of social organization and as a determinant of an individual's

life chances. Research, although not consistent across all studies, does continue to show that ethnocultural differences exist in and across social domains.

Studies that provide health comparisons between aggregate groups of race, ethnicity, and culture such as Aboriginal and visible minority versus non-visibility minority, foreign-born versus Canadian-born, and Anglophone and Francophone versus Allophone (e.g., Young *et al* 1999; Dunn & Dyck 2000; Trovato 2001; McDonald & Kennedy 2004; Gee *et al* 2006; Newbold and Filice 2006;) indicate that disparities do exist across groups. This study, which moves beyond the individual identity markers of ethnicity and immigrant status to their intersection, further reveals health disparities within ethnocultural groups.

Visible minority persons (e.g., Blacks, other Asians), with the exception of Aboriginals, are advantaged in health, results that support Wu *et al*'s (2003) finding that visible minority status does not automatically translate into poorer health status in all domains. And, while the within-group examinations show that some visible minority immigrants as well as the foreign-born French are more likely to have better health than their Canadian-born counterparts, for the two largest ethnocultural minorities, the Chinese and South Asians, the Canadian-born actually have better health. This finding is interesting in that it stands in contrast to results from previous studies on the "healthy immigrant effect" that show foreign-born are healthier than their Canadian-born counterparts. The fact that first generation South Asians and Chinese are more likely to report a disability may, in part, be the result of changes to health screening procedures for immigrants in the recent past and/or deteriorations in health due to difficulties in transitioning to new cultural and/or physical environments.

Interestingly, the health advantages of the Chinese and South Asians, regardless of immigrant status, are explained away by differences in social structural and lifestyle environments. Although Aboriginal Canadians are under-represented in the CCHS due to the inclusion of only non-reserve-dwelling Aboriginals, it is important to highlight the finding that structural and behavioural factors account for a significant amount of the disparities in health in this population. This is, of course, not surprising given that off-reserve Aboriginals are more likely to live in poverty, to have low educational attainment, to smoke and drink, and to have poor nutritional habits (Young *et al* 1999).

These findings demonstrate that when the combined effects of key factors like SES and lifestyle are taken into account, the health of Aboriginal and visible minority Canadians converges to resemble that of non-visible minorities. These results lend support to the argument that health disparities between ethnocultural groups are at least partly attributable to structural and behavioural environments. The extent to which this is true, however, varies across and within groups; that is, the mediating effects of these control variables varies according to ethnicity and immigrant status.

A number of policy implications can be drawn from of these findings. The first, given that health disparities between ethnic and immigrant groups are tied to structural inequities and lifestyles, it is important that health care policies and programs address these issues as key determinants of health in these groups. Second, since the identity markers of ethnicity and immigrant status have been recognized alone and in intersection as salient factors affecting the health and well-being of Canadians, these markers should be included in any and all policy discussions on the restructuring of the health care system in Canada. Finally, armed with the knowledge that 18.5 percent of the current

Canadian population (Statistics Canada 2004) is foreign-born (and on the rise), and that this population is incredibly ethnoculturally diverse, it is imperative that health care policymakers at all levels of government acknowledge and address this diversity through culturally- and linguistically-relevant policies and programs, particularly in large urban centres where the vast majority of immigrants choose to settle. In addition, related to the second point, recognition of the health care needs – high versus low – of different ethnocultural and immigrant groups by gender, marital status, time since immigration and/or and place of residence, for example, is necessary if we are to create an equitable and just society for all Canadians.

While this study provides much-needed insights into the relationship between ethnicity, immigrant status, and health in Canada, the research objectives are limited by the variables that were available from the dataset, including ethnic identity, self-control/mastery, religion, and social support (Noh *et al* 1999; Wu *et al* 2003). No data were available to examine ethnocultural patterns in health by generational status of persons (first, second, third, or later generation immigrants) or by reason for immigration (those who came to Canada voluntarily, as refugees, etc.). Cultural adherence to traditional values and beliefs may also influence an individual's willingness to report health problems (Kopec *et al* 2001; Ali 2002; Kobayashi 2003;), as there may be fundamental differences in his/her understanding of health and illness (Saldov 1991). The CCHS did not ask questions that probe levels of cultural adherence that would help to determine the extent to which cultural and linguistic (both language and dialect) differences influence the interpretation and reporting of health problems.

Future research examining dimensions of inequality in the health domain should consider the collection of primary data with a random, representative sample of Canadians from various ethnic groups, both foreign- and native-born. Questions probing such key factors as reasons for immigration, religion, and cultural beliefs and value systems are important to include as both close- and open-ended items in a semi-structured interview schedule/survey instrument. Such data collection would require knowledge of and an appreciation for both quantitative and qualitative research strategies, approaches that, given the complex nature of the relationship between ethnicity, immigrant status, and health, would work best in combination to further research in this emergent area of study.

### REFERENCES

Acharya M. (1998) 'Chronic Social Stress and Emotional Well-Being: An Analysis of Mental Health of Immigrants in Alberta', *Canadian Studies in Population*, vol. 25, pp. 1-27.

Ali J. (2002) 'Mental Health of Canada's Immigrants', *Health Reports*, vol. 13, Statistics Canada.

Chen J, Ng E & Wilkins R. (1995) 'Life Expectancy and Health Expectancy of Canadian Immigrants from 1986 to 1991'. Pp. 9-22 In *Immigration and Life expectancy in Canada*. Statistics Canada, Catalogue 89F0084XPE.

Chen J., Ng E. & Wilkins R. (1996a) 'The Health of Canada's Immigrants in 1994-95'. *Health Reports*, vol. 7, pp. 33-45.

Chen J., Ng E. & Wilkins R. (1996b) 'Health Expectancy by Immigrant Status, 1986 and 1991'. *Health Reports*, vol. 8, pp. 29-38.

Citizenship and Immigration Canada. (2002) *News Release: More Than 250,000 New Permanent Residents in 2001*. Ottawa: Citizenship and Immigration Canada, February.

Drummond M. (2001) 'Introducing Economic and Quality of Life Measurements into Clinical Studies'. *Annals of Medicine*, vol. 33, pp. 344-349.

Dunn J.R. & Dyck I. (2000) 'Social Determinants of Health in Canada's Immigrant Population: Results from the National Population Health Survey', *Social Science & Medicine*, vol. 51, pp. 1573-1593.

Feeny D., Furlong W., Torrance G., Goldsmith S., Zhu Z., DePauw S., Denton M. & Boyle M. (2002) 'Multiattribute and Single-attribute Utility Functions for the Health Utilities Index Mark 3 System'. *Medical Care*, vol. 40, pp. 113-128.

Frideres J.S. (2000) 'Revelation and Revolution: Fault Lines in Aboriginal-white Relations'. In M.A. and W. E. Kalbach (Eds.), *Perspectives on Ethnicity in Canada* (pp. 207-237). Toronto: Harcourt.

Furlong W., Feeny D., Torrance G. & Barr R. (2001) 'The Health Utilities Index (HUI) system for Assessing Health-related Quality of Life in Clinical Studies'. *Annals of Medicine*, vol. 33, pp. 375–384.

Gee E.M., Kobayashi K.M. & Prus S.G. (2006) 'Ethnic inequality in Canada: Economic and health dimensions'. In D.A. Green and J.R. Kesselman (Eds.), *Dimensions of Inequality in Canada* (pp. 249-271). Vancouver: UBC Press.

Grootendorst P., Feeny D. & Furlong, W. (2000) 'Health Utilities Index Mark 3: Evidence of Construct Validity for Stroke and Arthritis in a Population Health Survey'. *Medical Care*, vol. 38, pp. 290-299

Hull D. (1979) 'Migration, Adaptation and Illness: A Review'. *Social Science & Medicine*, vol. 13, pp. 25-36.

Hyman I. (2001) *Immigration and Health*. Ottawa: Health Canada. Available at http://dsp-psd.communication.gc.ca/Collection/H13-5-01-5E.pdf.

Kobayashi K.M. (2003) 'Do intersections of diversity matter? An exploration of the relationship between identity markers and health for mid- to later life Canadians'. *Canadian Ethnic Studies*, vol. XXXV, pp. 85-98.

Kopec J.A., Williams J.I., To T. & Austin, P.C. (2001) Cross-Cultural Comparisons of Health Status in Canada Using the Health Utilities Index. *Ethnicity & Health*, vol. 6, pp. 41-50.

McDonald J.T. & Kennedy S. (2004) 'Insights into the 'healthy immigrant effect': Health status and health service use of immigrants to Canada'. *Social Science and Medicine*, vol. 59, pp. 1613-1627.

Marmot M.G., Adelstein A.M. & Bulusu L. (1984) 'Lessons from the study of immigrant mortality', *Lancet*, vol. 112, pp. 1455–1457.

Marmot M.G. & Syme S. (1976) 'Acculturation and coronary heart disease in Japanese-Americans'. *American Journal of Epidemiology*, vol. 104, pp. 225-247.

Meadows L.M., Thurston W.E. & Melton, C. (2001) 'Immigrant Women's Health'. *Social Science & Medicine*, vol. 52, pp. 1451-1458.

Neighbors H.W. & Williams, D.R. (2001) 'The epidemiology of mental health disorder'. In R.L Braithwaite and S.E. Taylor (Eds), *Health Issues in the Black Community* (pp. 99-128). San Francisco: Jossey-Bass Publishers.

Newbold K.B. & Danforth, J. (2003) 'Health Status and Canada's Immigrant Population'. *Social Science & Medicine*, vol. 57, pp. 1981-1995.

Newbold K.B. & Filice, J.K. (2006) 'Health status of older immigrants to Canada'. *Canadian Journal on Aging*, 25, 305-319.

Noh S., Beiser M., & Kaspar, V. (1999) 'Perceived Racial Discrimination, Depression, and Coping: A Study of Southeast Asian Refugees in Canada'. *Journal of Health and Social Behavior*, vol. 40, pp. 193-207.

O'Loughlin J. (1999) 'Understanding the Role of Ethnicity in Chronic Disease: A Challenge for the New Millennium'. *Canadian Medical Association Journal*, vol. 161, pp. 152-153.

Oxman-Martinez J., Abdool S. & Loiselle-Léonard, M. (2000) 'Immigration, Women and Health in Canada'. *Canadian Journal of Public Health*, Nov/Dec, pp. 394-395.

Parakulam G, Krishnan V, Odynak, D. (1992) 'Health status of Canadian-born and foreign-born residents'. *Canadian Journal of Public Health*, vol. 83, pp. 311-314.

Perez C.E. (2002) 'Health Status and Health Behaviour Among Immigrants'. *Health Reports*, vol. 13, pp. 1-12.

Porter J. (1965) The Vertical Mosaic. Toronto: University of Toronto Press.

Saldov M. (1991) 'The Ethnic Elderly: Communication Barriers to Health Care'. *Canadian Social Work Review*, vol. 8, pp. 269-277.

Schultz S. & Kopec J. (2003) 'Estimating the Relative Impact of Chronic Conditions using a Multi-attribute Measure of Health Status'. *Health Reports*, vol. 14, pp. 41–53.

Sheth T., Nair C., Nargundkar M., Anand S. & Yusuf S. (1999) 'Cardiovascular and Cancer Mortality Among Canadians of European, South Asian and Chinese Origin from 1979 to 1993: An Analysis of 1.2 Million Deaths'. *Canadian Medical Association Journal*, vol. 161, pp. 132-138.

Smaje C. (1996) 'The ethnic patterning of health: New directions for theory and research'. *Sociology of Health and Illness*, vol. 18, pp. 139-171.

Stolley P. (1999) 'Race in epidemiology'. *International Journal of Health Services*, vol. 29, pp. 905-909.

Trovato F. (1998) 'Nativity, Marital Status and Mortality in Canada'. *Canadian Review of Sociology and Anthropology*, vol. 35, pp. 65-91.

Trovato F. (2001) 'Aboriginal Mortality in Canada, the United States and New Zealand'. *Journal of Biosocial Science*, vol. 33, pp. 67-86.

Wang P.P., Elsbett-Koeppen R., Geng G. & Badley, E.M. (2000) 'Arthritis Prevalence and Place of Birth: Findings from the 1994 Canadian National Population Health Survey'. *American Journal of Epidemiology*, vol. 152, pp. 442-445.

Wu Z., Noh S., Kaspar V. & Schimmele C.M. (2003) 'Race, Ethnicity, and Depression in Canadian Society'. *Journal of Health and Social Behavior*, vol. 44, pp. 426-41.

Wu Z. & Schimmele C.M. (2005) 'Racial/ethnic variation in functional and self-reported health'. *American Journal of Public Health*, vol. 95, pp. 710-716.

Young T., O'Neill, J. & Elias, B. (1999) *Chronic Diseases*. First Nations and Inuit Regional Health Survey. Ottawa: First Nations and Inuit Regional Health Survey National Steering Committee.

Table 1: Percentage Distribution (or Mean) of Study Variables for Canadian-born (CB) and Foreign-born (FB)

(CB) and Foreign-bo	CB	FB	CB-		СВ	FB	CB-
			FB				FB
HUI (mean)	.879	.869	***	Education			***
AR			***	< High School †	30.3	24.3	
No	87.2	85.5		High School	18.3	19.5	
Yes †	12.8	14.5		Postsecondary	50.6	55.3	
SRH			***	Missing	.7	.9	
Positive	88.8	86.1		Income			***
Negative †	11.2	13.9		Low †	3.2	4.5	
<b>Ethnoculture</b>			***	Low middle	6.4	8.7	
White				Middle	19.1	23.6	
Canadian	16.1	.4		Upper middle	32.6	29.6	
French	8.3	1.2		High	29.0	23.0	
S/E Euro & Jewish	4.8	13.4		Missing	9.6	10.6	
English	7.9	6.4		Type of Smoker			***
Oth. West European	10.7	9.5		Daily †			
Multiple †	38.5	4.6		Fm. Daily/Now occ.	23.8	12.8	
Non-white				Always occasional	2.7	1.9	
Aboriginal	1.3			Former daily	1.9	1.9	
Black	.5	6.2		Former occasional	23.1	18.5	
Chinese	.6	13.4		Never	15.1	12.8	
Other	10.0	22.4		Type of Drinker	33.4	52.0	
South Asian	.5	11.1		Regular †			***
Other Asian	.6	7.8		Occasional	60.2	46.2	
West Asian/Arab	.1	3.6		Former	19.4	20.1	
<b>Gender</b>				Never	11.5	12.8	
Male	49.1	49.4		Fruit/Veg consum.	8.8	20.9	
Female †	50.9	50.6		<5 servings †			***
<b>Marital Status</b>			***	5-10 servings	62.3	60.0	
Married	55.7	67.1		11+ servings	33.1	35.2	
Other †	44.3	32.9		Missing	3.7	3.9	
				<b>Physical Activity</b>	.9	.9	
Age (mean)	41.0	46.2	***	Inactive †			***
				Moderate	47.9	54.0	
Years Since Immig.				Active	22.6	18.5	
1 year or less		5.0		Missing	22.4	16.2	
2-5 years		11.9		<u>BMI</u>	7.0	11.3	
6-9 years		11.4		Underweight			***
10-19 years		21.9		Normal weight	1.6	3.0	
20+ years <i>†</i>		50.0		Overweight	34.0	39.3	
<b>Language</b>				Obese †	23.8	23.1	
English/French	99.5	89.7		Missing	11.6	8.1	
Other †	.5	10.3	***		29.0	26.5	

CB-FB column shows statistically significant differences between corresponding CB and FB groups at: \*p<0.05, \*\*p<0.01; \*\*\*p<0.001.

† Represents the reference group in the proceeding models.

Distributions may not total to 100% due to rounding.

n=102,221 for CB; n=26,516 for FB.

Table 2: Unstandardized OLS coefficients for Health Utilities Index by ethnocultural group and immigration status, before and after adjustments for social structural and behavioural factors.

	Unadjusted			Adjusted			
	СВ	FB	CB-FB	СВ	FB	CB-FB	
Ethnoculture							
White							
Canadian	.012***	.093***	***	.017***	.091***	***	
French	.009***	.053***	***	.019***	.038***	*	
South/East Euro & Jewish	004	017**	*	009**	.001		
English	002	001		.006**	.015*		
Other West European	.001	.001		.002	.025***	***	
Non-White							
Aboriginal	043***			012*			
Black	.019*	.050***	**	.007	.034***	**	
Chinese	.041***	.032***		.011	.014*		
Other	002	.025***	***	004*	.017**	***	
South Asian	.021***	.031***		005	.008		
Other Asian	.038***	.047***		.033***	.020**		
West Asian/Arab	.017	.014		.007	005		
Male				.005***	.022***	***	
Married				.022***	.020***		
Age				.003***	.006***	***	
Age-square				.00005***	.00008***	***	
Years Since Immigration							
1 year					.037***		
2-5 years					.028***		
6-9 years					.018***		
10-19 years					.014***		
English/French Language				.026**	.027***		
Education							
High School				.022***	.021***		
Postsecondary				.024***	.022***		
Missing				006	001		
Income							
Low middle				.027***	.023**		
Middle				.063***	.038***	***	
Upper middle				.079***	.066***	**	
High				.091***	.074***	***	
Missing				.078***	.055***	***	
Type of Smoker							
Former/Now occasional				.013***	.010		
Always occasional				.024***	043***	***	

Former daily			.025***	.012**	**
Former occasional			.033***	.026***	
Never			.044***	.032***	**
Type of Drinker					
Occasional			020***	022***	
Former			055***	036***	***
Never			021***	024***	
Fruit/Veg consumption					
5-10 servings			.010***	.009***	
11+ servings			.010**	003	*
Missing			015*	042***	*
Physical Activity					
Moderate			.028***	.030***	
Active			.031***	.036***	
Missing			026***	010**	***
BMI					
Underweight			005	.033***	***
Normal weight			.034***	.035***	
Overweight			.032***	.028***	
Missing			.058***	.070***	*
Constant	.877	.850	.681	.629	

Within CB (Canadian-born) and FB (Foreign-born) columns, statistically different from the reference group (as shown in Table 1) at: \*p<0.05, \*\*p<0.01; \*\*\*p<0.001.

Within CB-FB column, difference between CB and FB is statistically significant at: p<0.05, p<0.01; p<0.01.

Table 3: Odds Ratio coefficients for positive self-rated health by ethnocultural group and immigration status, before and after adjustments for social structural and behavioural factors.

		Unadjusted			Adjusted	
	СВ	FB	CB-FB	СВ	FB	CB-FB
Ethnoculture						
White						
Canadian	.996	1.466		1.111**	1.390	
French	.865***	2.331***	***	1.061	1.971**	*
South/East Euro & Jewish	.919	.537***	***	.818***	.671***	*
English	.923*	1.153		1.082	1.413**	*
Other West European	.921*	.793*		.967	1.086	
Non-White						
Aboriginal	.562***			.762**		
Black	1.067	1.408**		.721*	1.162	*
Chinese	1.202	1.340**		.539***	1.052	***
Other	1.009	1.179		.952	1.068	
South Asian	2.195***	1.191	**	.899	.969	
Other Asian	1.393*	1.531***		1.101	.992	
West Asian/Arab	3.737*	1.778***		2.536	1.458*	
Male				.903***	1.107*	***
Married				1.187***	1.113*	
Age				.958***	.939***	***
Age-square				1.000*	1.000**	*
Years Since Immigration						
1 year					2.626***	
2-5 years					1.379***	
6-9 years					1.483***	
10-19 years					1.144*	
English/French Language				.929	1.248**	
Education						
High School				1.443***	1.375***	
Postsecondary				1.570***	1.717***	*
Missing				1.157	.957	
Income						
Low middle				1.311***	1.334**	
Middle				1.927***	1.626***	**
Upper middle				2.742***	2.222***	**
High				4.011***	2.944***	***
Missing				2.162***	2.031***	
Type of Smoker						
Former/Now occasional				1.229**	1.204	
Always occasional				1.827***	1.442*	
Former daily				1.379***	1.166*	*

Former occasional			2.015***	1.565***	**
Never			2.118***	1.598***	***
Type of Drinker					
Occasional			.669***	.667***	
Former			.477***	.494***	
Never			.630***	.457***	***
Fruit/Veg consumption					
5-10 servings			1.115***	1.048	
11+ servings			1.021	.901	
Missing			.754**	.852	
Physical Activity					
Moderate			1.556***	1.346***	*
Active			2.044***	1.621***	**
Missing			.943	.903	
BMI					
Underweight			1.197*	1.922***	**
Normal weight			1.980***	2.020***	
Overweight			1.794***	1.986***	
Missing			1.618***	1.885***	*
<u>-</u>					
Constant	8.202	5.941	6.100	10.007	

Within CB (Canadian-born) and FB (Foreign-born) columns, statistically different from the reference group (as shown in Table 1) at: \*p<0.05, \*\*p<0.01; \*\*\*p<0.001.

Within CB-FB column, difference between CB and FB is statistically significant at: p<0.05, \*\*p<0.01; \*\*\*p<0.001.

Table 4: Odds ratio coefficients for absence of activity restriction by ethnocultural group and immigration status, before and after adjustments for social structural and behavioural factors.

	1	Unadjusted			Adjusted	
	СВ	FB	CB-FB	СВ	FB	CB-FB
Ethnoculture						
White						
Canadian	1.211***	2.600**	*	1.339***	2.615*	
French	.998	1.576**	**	1.216***	1.311	
South/East Euro & Jewish	1.086	.944		1.056	1.128	
English	.943	1.034		1.223***	1.532***	*
Other West European	1.093**	1.041		1.208***	1.562***	**
Non-White						
Aboriginal	.937			.930		
Black	1.649**	2.233***	*	1.020	1.418**	
Chinese	4.893***	2.413***	**	2.353***	1.436**	
Other	1.118***	1.563***	***	1.030	1.273*	**
South Asian	2.654***	1.522***	**	1.095	.757*	
Other Asian	2.668***	3.074***		2.503***	1.568***	
West Asian/Arab	2.290*	1.668***		1.245	.756*	
Male				1.973***	2.400***	***
Married				1.082**	.975***	
Age				1.004	1.010***	
Age-square				.999***	.999***	
Years Since Immigration						
1 year					2.737***	
2-5 years					1.565***	
6-9 years					1.308**	
10-19 years					1.015	
English/French Language				.983	1.443***	
Education						
High School				1.149***	1.309***	*
Postsecondary				1.015	1.231***	***
Missing				.943	.753	
Income						
Low middle				1.232***	1.364**	
Middle				1.752***	1.497***	*
Upper middle				2.185***	1.884***	*
High				2.559***	2.120***	**
Missing				2.134***	1.983***	
Type of Smoker						
Former/Now occasional				1.195*	1.362	
Always occasional				1.450***	.729*	***
Former daily				1.181***	1.149*	

Former occasional			1.591***	1.200*	**
Never			1.528***	1.574***	
Type of Drinker					
Occasional			.691***	.854**	***
Former			.530***	.659***	***
Never			.617	.778***	***
Fruit/Veg consumption					
5-10 servings			.954*	1.034	
11+ servings			.954	.767**	
Missing			1.015	.642*	*
Physical Activity					
Moderate			1.566***	1.420***	
Active			1.846***	2.206***	*
Missing			.633***	.927	***
BMI					
Underweight			1.066	3.749***	***
Normal weight			1.707***	1.901***	
Overweight			1.583***	1.765***	
Missing			1.982***	2.016***	
Constant	6.382	4.038	4.103	2.386	

Within CB (Canadian-born) and FB (Foreign-born) columns, statistically different from the reference group (as shown in Table 1) at: \*p<0.05, \*\*p<0.01; \*\*\*p<0.001.

Within CB-FB column, difference between CB and FB is statistically significant at: p<0.05, \*\*p<0.01; \*\*\*p<0.001.

Number	Title	Author(s)
(2006)		
No. 147:	The Portfolio Choices of Hispanic Couples	D.A. Cobb-Clark V.A. Hildebrand
No. 148:	Inter-provincial Migration of Income among Canada's Older Population:1996-2001	K.B. Newbold
No. 149:	Joint Taxation and the Labour Supply of Married Women: Evidence from the Canadian Tax Reform of 1988	T.F. Crossley S.H. Jeon
No. 150:	What Ownership Society? Debating Housing and Social Security Reform in the United States	D. Béland
No. 151:	Home Cooking, Food Consumption and Food Production among the Unemployed and Retired Households	M. Brzozowski Y. Lu
No. 152:	The Long-Run Cost of Job Loss as Measured by Consumption Changes	M. Browning T.F. Crossley
No. 153:	Do the Rich Save More in Canada?	S. Alan K. Atalay T.F. Crossley
No. 154:	Income Inequality over the Later-life Course: A Comparative Analysis of Seven OECD Countries	R.L. Brown S.G. Prus
No. 155:	The Social Cost-of-Living: Welfare Foundations and Estimation	T.F. Crossley K. Pendakur
No. 156:	The Top Shares of Older Earners in Canada	M.R. Veall
No. 157:	Le soutien aux personnes âgées en perte d'autonomie: jusqu'où les baby-boomers pourront-ils compter sur leur famille pour répondre à leurs besoins ?	J. Légaré C. Alix Y. Carrière J. Keefe
No. 158:	Les générations X et Y du Québec, vraiment différentes des précédentes ?	J. Légaré P.O. Ménard
No. 159: French	La diversification et la privatisation des sources de revenu de retraite au Canada	L. Mo J. Légaré L. Stone
No. 159: English	The Diversification and the Privatization of the Sources of Retirement Income in Canada	L. Mo J. Légaré L. Stone
No. 160:	Evaluating Pension Portability Reforms: The Tax Reform Act of 1986 as a Natural Experiment	V. Andrietti V.A. Hildebrand

Number	Title	Author(s)
No. 161:	Estimating a Collective Household Model with Survey Data on Financial Satisfaction	R. Alessie T.F. Crossley V.A. Hildebrand
No. 162:	Physician Labour Supply in Canada: A Cohort Analysis	T.F. Crossley J. Hurley S.H. Jeon
No. 163:	Tax Incentives and Household Portfolios: A Panel Data Analysis	S. Alan S. Leth-Petersen
No. 164:	The Healthy Immigrant Effect and Immigrant Selection: Evidence from Four Countries	S. Kennedy J.T. McDonald N. Biddle
No. 165:	Well-Being Throughout the Senior Years: An Issues Paper on Key Events and Transitions in Later Life	M. Denton K. Kusch
No. 166:	Satisfied Workers, Retained Workers: Effects of Work and Work Environment on Homecare Workers' Job Satisfaction, Stress, Physical Health, and Retention	I.U. Zeytinoglu M. Denton
No. 167:	Contrasting Inequalities: Comparing Correlates of Health in Canada and the United States	H. Armstrong W. Clement Z. Lin S. Prus
(2007)		
No. 168:	Health human resources planning and the production of health: Development of an extended analytical framework for needs- based health human resources planning	S. Birch G. Kephart G. Tomblin-Murphy L. O'Brien-Pallas R. Alder A. MacKenzie
No. 169:	Gender Inequality in the Wealth of Older Canadians	M. Denton L. Boos
No. 170:	The Evolution of Elderly Poverty in Canada	K. Milligan
No. 171:	Return and Onwards Migration among Older Canadians: Findings from the 2001 Census	K.B. Newbold
No. 172:	Le système de retraite américain: entre fragmentation et logique financière	D. Béland

Number	Title	Author(s)
No. 173:	Entrepreneurship, Liquidity Constraints and Start-up Costs	R. Fonseca PC. Michaud T. Sopraseuth
No. 174:	How did the Elimination of the Earnings Test above the Normal Retirement Age affect Retirement Expectations?	PC. Michaud A. van Soest
No. 175:	The SES Health Gradient on Both Sides of the Atlantic	J. Banks M. Marmot Z. Oldfield J.P. Smith
No. 176:	Pension Provision and Retirement Saving: Lessons from the United Kingdom	R. Disney C. Emmerson M. Wakefield
No. 177:	Retirement Saving in Australia	G. Barrett YP. Tseng
No. 178:	The Health Services Use Among Older Canadians in Rural and Urban Areas	H. Conde J.T. McDonald
No. 179:	Older Workers and On-the-Job Training in Canada: Evidence from the WES data	I.U. Zeytinoglu G.B. Cooke K. Harry
No. 180:	Private Pensions and Income Security in Old Age: An Uncertain Future – Conference Report	M. Hering M. Kpessa
No. 181:	Age, SES, and Health: A Population Level Analysis of Health Inequalitites over the Life Course	S. Prus
No. 182:	Ethnic Inequality in Canada: Economic and Health Dimensions	E.M. Gee K.M. Kobayashi S.G. Prus
No. 183:	Home and Mortgage Ownership of the Dutch Elderly: Explaining Cohort, Time and Age Effects	A. van der Schors R.J.M. Alessie M. Mastrogiacomo
No. 184:	A Comparative Analysis of the Nativity Wealth Gap	T.K. Bauer D.A. Cobb-Clark V. Hildebrand M. Sinning
No. 185:	Cross-Country Variation in Obesity Patterns among Older Americans and Europeans	P.C. Michaud A. van Soest T. Andreyeva

Number	Title	Author(s)
No. 186:	Which Canadian Seniors Are Below the Low-Income Measure?	M.R. Veall
No. 187:	Policy Areas Impinging on Elderly Transportation Mobility: An Explanation with Ontario, Canada as Example	R. Mercado A. Páez K. B. Newbold
No. 188:	The Integration of Occupational Pension Regulations: Lessons for Canada	M. Hering M. Kpessa
No. 189:	Psychosocial resources and social health inequalities in France: Exploratory findings from a general population survey	F. Jusot M. Grignon P. Dourgnon
No. 190:	Health-Care Utilization in Canada: 25 Years of Evidence	L.J. Curtis W.J. MacMinn
No. 191:	Health Status of On and Off-reserve Aboriginal Peoples: Analysis of the Aboriginal Peoples Survey	L.J. Curtis
No. 192:	On the Sensitivity of Aggregate Productivity Growth Rates to Noisy Measurement	F.T. Denton
No. 193:	Initial Destination Choices of Skilled-worker Immigrants from South Asia to Canada: Assessment of the Relative Importance of Explanatory Factors	L. Xu K.L. Liaw
No. 194:	Problematic Post-Landing Interprovincial Migration of the Immigrants in Canada: From 1980-83 through 1992-95	L. Xu K.L. Liaw
No. 195:	Inter-CMA Migration of the Immigrants in Canada: 1991-1996 and 1996-2001	L. Xu
No. 196:	Characterization and Explanation of the 1996-2001 Inter- CMA Migration of the Second Generation in Canada	L. Xu
No. 197:	Transitions out of and back to employment among older men and women in the UK	D. Haardt
No. 198:	Older couples' labour market reactions to family disruptions	D. Haardt
No. 199:	The Adequacy of Retirement Savings: Subjective Survey Reports by Retired Canadians	S. Alan K. Atalay T.F. Crossley
No. 200:	Underfunding of Defined Benefit Pension Plans and Benefit Guarantee Insurance - An Overview of Theory and Empirics	M. Jametti
No. 201:	Effects of 'authorized generics' on Canadian drug prices	P. Grootendorst

Number	Title	Author(s)
No. 202:	When Bad Things Happen to Good People: The Economic Consequences of Retiring to Caregive	P.L. McDonald T. Sussman P. Donahue
No. 203:	Relatively Inaccessible Abundance: Reflections on U.S. Health Care	I.L. Bourgeault
No. 204:	Professional Work in Health Care Organizations: The Structural Influences of Patients in French, Canadian and American Hospitals	I.L. Bourgeault I. Sainsaulieu P. Khokher K. Hirschkorn
No. 205:	Who Minds the Gate? Comparing the role of non physician providers in the primary care division of labour in Canada & the U.S.	I.L. Bourgeault
No. 206:	Immigration, Ethnicity and Cancer in U.S. Women	J.T. McDonald J. Neily
No. 207:	Ordinary Least Squares Bias and Bias Corrections for <i>iid</i> Samples	L. Magee
No. 208:	The Roles of Ethnicity and Language Acculturation in Determining the Interprovincial Migration Propensities in Canada: from the Late 1970s to the Late 1990s	X. Ma K.L. Liaw
No. 209:	Aging, Gender and Neighbourhood Determinants of Distance Traveled: A Multilevel Analysis in the Hamilton CMA	R. Mercado A. Páez
No. 210:	La préparation financière à la retraite des premiers boomers : une comparaison Québec-Ontario	L. Mo J. Légaré
No. 211:	Explaining the Health Gap between Canadian- and Foreign-Born Older Adults: Findings from the 2000/2001 Canadian Community Health Survey	K.M. Kobayashi S. Prus
No. 212:	"Midlife Crises": Understanding the Changing Nature of Relationships in Middle Age Canadian Families	K.M. Kobayashi
No. 213:	A Note on Income Distribution and Growth	W. Scarth
No. 214:	Is Foreign-Owned Capital a Bad Thing to Tax?	W. Scarth
No. 215:	A review of instrumental variables estimation in the applied health sciences	P. Grootendorst
No. 216:	The Impact of Immigration on the Labour Market Outcomes of Native-born Canadians	J. Tu

Number	Title	Author(s)
No. 217:	Caregiver Employment Status and Time to Institutionalization of Persons with Dementia	M. Oremus P. Raina
No. 218:	The Use of Behaviour and Mood Medications by Carerecipients in Dementia and Caregiver Depression and Perceived Overall Health	M. Oremus H. Yazdi P. Raina
No. 219:	Looking for Private Information in Self-Assessed Health	J. Banks T. Crossley S. Goshev
No. 220:	An Evaluation of the Working Income Tax Benefit	W. Scarth L. Tang
No. 221:	The life expectancy gains from pharmaceutical drugs: a critical appraisal of the literature	P. Grootendorst E. Piérard M. Shim
No. 222:	Cognitive functioning and labour force participation among older men and women in England	D. Haardt
No. 223:	Creating the Canada/Quebec Pension Plans: An Historical and Political Analysis	K. Babich D. Béland
No. 224:	Assessing Alternative Financing Methods for the Canadian Health Care System in View of Population Aging	D. Andrews
No. 225:	The Role of Coping Humour in the Physical and Mental Health of Older Adults	E. Marziali L. McDonald P. Donahue
No. 226:	Exploring the Effects of Aggregation Error in the Estimation of Consumer Demand Elasticities	F.T. Denton D.C. Mountain
(2008)		
No. 227:	Using Statistics Canada LifePaths Microsimulation Model to Project the Health Status of Canadian Elderly	J. Légaré Y. Décarie
No. 228:	An Application of Price and Quantity Indexes in the Analysis of Changes in Expenditures on Physician Services	F.T. Denton C.H. Feaver B.G. Spencer
No. 229:	Age-specific Income Inequality and Life Expectancy: New Evidence	S. Prus R.L. Brown
No. 230:	Ethnic Differences in Health: Does Immigration Status Matter?	K.M. Kobayashi S. Prus Z. Lin