ABSTRACTS

Session 1 – Population Flows and Immigration

1. **Rural-urban migration and child mortality in the developing world: a multilevel model analysis** (D. Walter Rasugu Omariba & Michael H. Boyle, McMaster University)

This paper uses Demographic and Health Survey (DHS) data to examine the relationship between migration status and under-five mortality in the less developed world using a multilevel analytic framework. The study has three main objectives: to examine the effect of migration on child mortality; to determine whether or not the effect of migration on child mortality varies cross-nationally; and identify the factors responsible for this cross-national variation should it be observed. The results show that the unadjusted effects of migration are quite substantial. There are also modest, but significant cross-national effects of migration on child mortality which were not affected by country-level variables such as Gross Domestic Product (GDP) per capita, percentage of GDP spent on health level of urbanization, and female literacy. There was large cross-national variation in child mortality and which was largely accounted for by country-level factors especially GDP and female literacy. On the other hand, most of the between families variation in child mortality was accounted for by family level factors, but child level variables including duration between births, gender, the survival status of the preceding child and maternal age at birth of the child. Child-level factors also had a larger impact than family- and country-level factors in reducing the effect of migration on child mortality. The results suggest that the characteristics of rural-urban migrants are more important in understanding the effects of migration on child survival in comparison to contextual factors. The policy implications of these findings are discussed.

2. **Estimating and Explaining Adult Mortality Levels in Colombia: The Post-War Years (1954-2001)** (Ryan M. Mazan, University of Western Ontario)

Since the end of the 1940s, Colombia has been in a continual state of political and social turmoil. While most nations have experienced declines in adult mortality during the post-war years, steady and violent conflicts between the state, leftist guerillas, paramilitaries and drug traffickers have left Colombians at a high risk of violent death. In this study, I examine the Colombian adult mortality experience between 1954 and 2001. This paper has two main objectives. First, mortality estimates are derived through a variety of methods to correct for under registration of the data and intrinsic roughness in the age pattern of mortality. Particularly, I use the general growth balance method to examine the completeness of death registration and the Heligman-Pollard model to derive a set of graduated death probabilities. The H-P model, more importantly, can be used to analyze the level, spread and location of the 'accident hump' over time. Next, multiple decrement life tables are used to examine violence as compared to other external causes and to decompose differences in their contribution to the life expectancy. The second objective

is to explore historical events that initially led to changing mortality trends over the 47 year period. Specifically, I outline social and political processes (period effects) that have led to escalated levels of violence since the 1970s.

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3. **Landing the right job: What factors lead to work in intended occupations?**
(Kelly Tran, Analyst, Statistics Canada, Tina Chui, Statistics Canada)

Data source: Longitudinal Survey of Immigrants to Canada, wave 1 and wave 2
Immigrants are an increasing source of skilled labour in Canada. Many arrive in Canada equipped with university education and work experience. Yet studies on recent immigrants tend to show that they are facing difficulties integrating into the labour market. Though many newcomers come with skills that are in demand, there is growing concern that they are not able to utilize these skills.

This paper attempts to uncover some of the underlying factors that help or hinder immigrants to find work in the same occupational field as they intended to work in. To what extent were newcomers able to find jobs in their intended field? What factors affect their success in landing this job and how long did it take to find work in their intended field?

Preliminary results from the second wave of the Longitudinal Survey of Immigrants to Canada (LSIC) found that there is a slight shift from lower skilled occupations to higher skilled occupations by the second year. That is, many who started out working in sales and service jobs eventually moved to a job that was more related to their intended occupation. As well, by the end of the second year, a higher proportion of newcomers were working in natural and applied science occupations than during the first six months, suggesting that the labour market integration process takes a bit of time, but some were able to get employment in the 'right job'.

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4. **Emigrants from Canada to the US at the Beginning of the 2000s: Demographic and Socio-Economic Profile Based on the American Community Survey** (Margaret Michalowski and Denis Morissette, Statistics Canada)

Recently, Canada and the United States have been collaborating on developing consistent methodological approaches to improve the comparability of international migration data. In this paper, we summarize the results from a joint Canadian and American effort to construct estimates of emigration from Canada to the United States. We demonstrate how the American Community Survey (ACS) can be employed to derive timely and quality data on Canadian emigration flows. Finally, using data from the 2000 to 2004 ACS we analyse levels, demographic characteristics (age, sex, marital status) and changes in the socio-economic profile (level of education, type of occupation, labour force participation) of Canadian emigrants to the US.

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5.   **What Happens to the 'Healthy Immigrant Effect': The Mental Health of Immigrants to Canada** (Yimin Lou (Gloria), Affiliation: RAND Graduate School)

This study examines the mental health of Canada's immigrants, relative to that of the native-born population, and makes a comparison between the longer term (ten or more years of residence) and more recent immigrants. The pattern of mental health may be explained by selectivity, structural strain theory from a macro perspective, or stress theory with a micro approach. Given available data (Cycle 1.2 of the Canadian Community Health Survey in 2002), the study focuses on stress theory which suggests that persons with better mental health are either exposed to fewer stressors, or they cope better with their adversity and stress. The results confirm a "healthy immigrant effect" and its decline for longer-term immigrants. The various demographic, socio-economic, stress and coping factors are found to be significantly related to mental health, but controls for these factors fail to account for the differences across immigration status, especially the advantage of recent immigrants.

Session 2 –Ethnic Demography

1.   **Ethnic Ancestry, Ethnic connectedness and socio-economic achievement of Immigrants to Canada** (T.R.Balakrishnan , Paul Maxim and Eric Tenkorang, University of Western Ontario)

Ethnic ancestry can be seen as an ascribed characteristic of an immigrant. While some strongly identify with their ethnic ancestry others do not. Situational factors, personal experience and social networks may decide how one feels about their ethnic ancestry. Ethnic connectedness refers to the extent to which a person is connected to his/her ethnic background. An ethnically connected person is likely to speak the heritage language at home, have most of the friends of the same ethnic background, practise their religious rituals, follow customs and traditions of their ethnic culture. The objective of this paper is to see how one's socio-economic achievement is affected by ethnic ancestry in the presence of ethnic connectedness. Does higher ethnic connectedness increase or hamper one's socio-economic achievement when other factors such as age, education are controlled? The relationships between ethnic ancestry, ethnic connectedness and socio-economic achievement are complex. Using the data from the Ethnic Diversity Survey, the paper will try to find answers to the above research questions. The EDS involved telephone interviews of 42,000 adults of age 15 and over selected from Canadians who completed the 2001 Census Long Form in May 2001. EDS collected a large amount of data on ethnic ancestry, language, social networks, civic participation, interaction with society, attitudes and socio economic activities. All the information necessary for this project are in EDS. The data are available at the University of Western Ontario and the researchers are already analyzing the data.

2.   **Fertility differentials by visible minority and religious groups in Canada**
(Alain Bélanger and Éric Caron Malenfant)

This paper intends to examine the relation between fertility and ethnocultural groups in Canada. More specifically, authors are using census data (mainly 2001) to see whether fertility differs between visible minority groups and religious denominations.

Using the own-children method as a starting point, authors are first using descriptive methods to compute age-specific and total fertility rates for selected religious and visible minority groups in Canada. They then use logistic regressions to see whether the differentials in TFR observed between the groups remain when controlling simultaneously for relevant variables such as age, marital status, income, education, school attendance, period of immigration, place of residence and parity. The multivariate analysis show that fertility differences between ethnocultural groups remain even after controlling for socioeconomic characteristics.

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3.   **Intergenerational Perspectives on Education and Timing of Marriage**
(Stephen Obeng Gyimah,Queen's University Kingston, Joshua Maynard Queen's University Kingston)

This paper examines the effects of educational attainment on the timing of marriage across successive generations of women in Ghana. Given the more enhanced career opportunities in recent years, we argue that the opportunity cost of marriage may be higher for contemporary educated women than their counterparts in the past. Using recent data from Ghana, a series of theories on the effect of education and the timing of marriage will be tested.

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4.   **Variations in Ethnic Intermarriage: unpacking the reasons** (Monica Boyd and Diana Worts, University of Toronto)

Because marriage involves intimate and long-term ties between individuals and their families, social scientists view ethnic intermarriage as indicating inter-group acceptance and diminished social distance between groups. Ethnic intermarriage also is thought to reflect the growing integration of immigrant origin groups in a society along with the weakening of social relations that embed individuals in groups defined by common ancestry and culture. Using data from Statistics Canada's 2002 Ethnic Diversity Survey for the legally married and common law population age 25 and over, we study variations in ethnic intermarriage for a large number of ethnic groups. Our analysis simultaneously models the odds of marriage to a spouse whose ethnic ancestry is partly the same as the respondent's and marriage to a spouse whose ancestry is completely different from the respondent's, versus marriage to a spouse whose ancestry is identical to the respondent's. We find that distance from the migration experience, defined by generational status, and diminished involvement with ethnic-based activities and markers such as language are major factors associated with differences among ethnic groups in the propensity to out-marry.

Session 3 - Demolinguistics

1.   **Overview on the new Survey on the Vitality of Official-Language Minorities (2006)** (Louise Marmen)

In the spring of 2003, the Canadian government unveiled its Action Plan for Official Languages. Included in the five-year plan were a number of specific objectives in high-priority areas: education, community development and an exemplary public service. The Action Plan's objectives are intended to enhance the vitality of the English and French minority communities and to support and assist their development.

The Action Plan will be reviewed in 2007. To obtain an overview of the current situation of francophone and anglophone minorities in areas such as family life, education, health, early childhood and language use in the public sphere, Action Plan partners approached Statistics Canada about conducting a post-censal survey on the vitality of official-language minorities. The presentation will provide an overview of the content of this survey. Some preliminary results of the pilot test will also be discussed.

2.   **The Canadian section of the 2003 International Adult Literacy and Skills Survey: status of the situation among Official Language Minorities?** (Jean-Pierre Corbeil, Statistics Canada)

Given the importance of literacy and the skills that are required of individuals in a knowledge and information economy, it is clear that the vitality of official language minority communities is, to a large extent, dependent upon possessing the tools and information that allow them to develop and enhance that vitality. The unfavourable situation in which many Francophones find themselves regarding their reading, writing and numeracy skills requires that these communities have data helping them to better understand their members' situation and define their plan of action. It is in this spirit, therefore, following these findings, that a monograph was produced on the literacy and skills of official language minorities as measured in the 2003 International Adult Literacy and Skills Survey (IALSS). This document will help in specifically targeting various aspects of the process of literacy and language proficiency in official language minority communities. The goal of this presentation is to highlight some of the major findings of this research.

3.   **Linguistic behaviour of Children living in official-language minority communities: preliminary analysis of data from the survey on the Vitality of Official Language Minority, childhood section** (Claude Grenier, Statistics Canada)

Une toute première enquête ciblant expressément les minorités de langue officielle du Canada a vu le jour en 2005. Cette enquête pilote aborde des thèmes aussi prioritaires que l'accessibilité à des soins de santé et à l'éducation dans la langue de la minorité de même

que les trajectoires linguistiques et le développement la petite enfance en milieu minoritaire.

Cette présentation aborde le thème de la petite enfance dans les communautés de langue officielle. La petite enfance est un moment privilégié par les parents pour transmettre leur bagage culturel et linguistique à leurs jeunes enfants. Toutefois, il existe peu de données qui se rapportent au développement de la petite enfance en milieu minoritaire.

Dans un premier temps, nous présenterons les questions de l'enquête qui touchent l'univers de la petite enfance de même que les concepts qu'elles mesurent. Dans un deuxième temps, nous présenterons quelques résultats préliminaires provenant de l'enquête pilote qui a eu lieu à l'automne 2005. Notamment nous verrons la transmission des langues par les parents à leurs jeunes enfants, les habitudes de lecture qui sont développées au cours de cette période et la fréquentation de garderies dans la langue de la minorité. Pour conclure, nous ouvrirons la discussion en proposant des pistes de recherche à poursuivre lors de l'analyse de l'enquête générale prévue pour l'automne 2006.

4. **Mother tongue shift in Canadian census language data** (Xiaozhou Wang and Charles Castonguay, University of Ottawa)

Respondents to the mother tongue question in Canadian censuses are required to still understand the language they first learned. As Stanley Lieberson already noted in the 1960s, this precludes the observation of language loss. Entirely Anglicized respondents, in particular, must give English in reply to the question, even though they actually first learned another language. The census mother tongue data do not, therefore, provide a sound basis for gauging linguistic assimilation and following its trends. The present study investigates the amount of Anglicization which drops out of sight through the shifting towards English of mother tongue responses among Francophones and Allophones. This is achieved by birth-cohort analysis of census data from 1971 to 2001 for major geolinguistic settings. Difficulties in comparing mother tongue data from different censuses are taken into account, in particular those caused by changes in census questions and questionnaire design introduced in 1991. It is found that mother tongue shift to English has been quite substantial since 1971 among Canadian-born Allophones. This deepest form of Anglicization is also shown to be significant among Francophones outside Quebec and New Brunswick. Finally, an estimate is made of the overall impact of mother tongue shift on the mother tongue profile of the Canadian population as based on census data, and on the measurement and trends of language shift to English among Francophones and Allophones since 1971.

5. **The State of Aboriginal Languages in Canada: Selected Demolinguistic Indicators** (Mary Jane Norris)

There are many different Aboriginal languages in Canada, estimated to be about 50, and the states of these languages are as varied as their diversity and communities. Drawing on research from over the past several years, this presentation provides an overview and

discussion on some of the various demolinguistic indicators and their interpretations that have been developed from Census data in assessing the state of Aboriginal languages in Canada. Using data from the language variables on mother tongue, home language use, and knowledge or ability to speak a language, indicators from the individual file are presented on language continuity and second language acquisition, average age of mother tongue and home language speakers, as well as of all speakers. These indicators have been developed for each of the specific Aboriginal language classifications in the Census and at different levels of geography, including Aboriginal communities as well as urban areas, including Census metropolitan areas. In addition, another set of indicators developed from the Family file are provided on measures of linguistic intermarriage and intergenerational transmission of mother tongue from parent to child. Home use and second language acquisition are also looked at within the context of the family. Indicators are used to examine the variations in transmission and retention patterns by family type and residence within Aboriginal communities and urban areas. Indicators are used to profile the variations in the state of the different languages and their communities. Associations between the different measures, such as continuity and intermarriage are also explored.

Session 4 – The Changing Character of Cities

Session 5 – Posters and Reception

1.   **Correlates of Persistent High Fertility and Prospects for Decline in Sub-Saharan Africa (SSA): Macro-Level Considerations:** (Dr. Hadgu Bariagaber, University of North West)

The Post World War II has witnessed unprecedented demographic revolution in the world in general and Sub-Saran Africa (SSA) in particular. The phenomenal ageing population in the western hemisphere as the result of fertility –dominated decline and the increase in the youthful population in the less developed societies as the result of relative mortality-dominated decline as compared with fertility levels have been great manifestations of the demographic evolution and revolution. Consequently, the population of Sub-Saharan Africa (SSA) was estimated to grow from 181 million at a growth rate of 2.2 percent per annum in 1950 and jumping to about 622 million in 1999 at a rate of 2.8 percent. By the end of 2000, the population was estimated to reach 806 million.

The prevailing biological and behavioural variables, such as all forms of poverty (education, nutrition, health, socio-cultural practices etc) and the proximate variables have been used to be important explanatory factors for enhancing fertility levels patterns and trends. Early ages at marriage and childbearing have been almost universal in rural agricultural environments of SSA. The high illiteracy rates, accompanied by low contraceptive prevalence and high infant mortality levels have still been important contributors to high fertility levels. Another interesting demographic feature of the SSA countries is that the age specific fertility patterns of SSA women have been characterised

by early age of onset for childbearing, consistently followed by bearing children until the end of menopausal period. Short birth intervals followed by too many births, with high desire for large family size, ranging between 6 and 8 in the early 1990's, are another salient features of the age-specific fertility rates of the African women.. In fact, in 2000, the average total fertility level for SSA stood at 5.7 children per woman as against 3.5 for less developing countries and 1.6 for industrialised societies during the same year.

At this juncture, one can argue that the rural/urban HIV/AIDS prevalence could impact fertility levels and patterns and the potential growth in-built in the age structure of the populations of the countries would be disturbed. It may be true that if the pandemic continues to spread, narrowing the gap in the prevalence between rural and urban Africa, a negative population growth rate could be envisaged to reach in a matter of a decade or two, especially in those already affected small areas such as the Rakai district of Uganda and other trading centres where the adult prevalence rate has reached about 35 percent. Even in those small areas in Uganda, the crude birth rate of about 52.9 per thousand populations appeared to exceed the crude death rate of about 41.7 per thousand population, yielding a natural increase of 1.12 percent. Furthermore, the HIV/ AIDS impact of fertility could be felt in certain urban settlements in Botswana, Ethiopia, Kenya, Tanzania etc where the HIV/AIDS prevalence was estimated to have reached between 25-30 percent of the productive and reproductive segments of their populations.

In the same vein , certain projection results showed that the SSA population growth rate would be negative if the prevalence rate reaches as high as 50 percent of the adult population, which appears to be very unlikely for two main reasons: first, the high efforts being exerted by all African nations assisted by global resources mobilization could halt the spread and eventually eradicate the pandemic; second , the prevailing progressive and expansive population structures as the results of persistently high fertility levels and general moderately declining mortality conditions as the results of the invention of antibiotics, anti-malarial spraying, and increased use of vaccination for all tropical diseases and relative improvement in food production in SSA countries could stand the impact of the HIV/AIDS pandemic. Accordingly, the SSA fertility correlates can best be explained by development factors and family planning programmes rather than the influence of the prevalence of HIV/AIDS in the Sub-Continent.

However, the future doesn't totally seem to be too gloomy to exhibit progress towards the fertility transition. Some countries of Southern African Sub-region, such as Botswana, Zimbabwe, and South Africa etc., have already manifested some decline .For example, the average total fertility level of Southern African Sub region appeared to decline from 6.5 in the 1960s to about **4.**1 in the year 2000, as against from 6.7 to 6.4 for East Africa and West Africa and from 5.9 to 5.7 for middle Africa during 1970-2002. Consequently, the superiority of fertility force over mortality levels in SSA implies that the demographic transition, which had been experienced in Western Europe and tending to experience in the majority of the Asian and Latin American countries, though the decline in fertility appears to be prospective, has a long way to continue for some years.

2.   **Demography of Islands in India** (Sayeed Unisa,, Mumbai, India, R.S Reshmi, Mumbai, India,Sucharita Pujari, Mumbai, India

Indian states and union territories also consist of islands that are spread in the Bay of Bengal and Arabian Sea. People view these islands as romantic view tourist places with varied cultures and distinctive traits that differ from larger landmasses. It is noteworthy to study the socio-economic and demographic indicators of islands in relation to mainland dwellers in India. In the present study two union territories namely Andaman & Nicobar and Lakshadeep that consist of 36 and 10 inhabited islands respectively are selected. The people of Andaman can be broadly categorized in to two groups namely indigenous and immigrants. Literacy rate of immigrant population is 81.18 that is much higher than the main land population with very low density of 37 person per kilometer. In Lakshadeep, majority belongs to tribal population (94.5%) but they are not indigenous tribes and most of them are Muslims. Literacy rate in Laksadeep is 87.52, sex ratio is 947 females per 1000 males, and density in this area is 1894, these indicators are much higher than main land. Education has made good strides as indicated by high degree of literacy in the islands. Most of the socio-economic and demographic indicators of population living in the Lakshadeep are much higher than the main land. Fertility and mortality is estimated by indirect methods to study demographic behaviour of population.

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3.   **Ethnicity and Reproductive-Child Health Outcomes in Low Income Groups: Evidence from India and its Constituent States** (Anil Kumar K, School of Health Systems Studies**,** Tata Institute of Social Sciences)

Ethnic groups in most South Asian nations are identified based on caste affiliation, religious beliefs, geographical regions of origin and at times based on language spoken. Ethic demography in such countries, therefore, refers to a complex spectrum of population aspects, and their consequences for quality of life.

This paper begins with an attempt to operationally define ethnicity in India considering the wide diversities and existing disciplinary approaches to define ethnicity in the country. It then proceeds to study the demographic differentials across ethnic groups. By doing so, the paper also provides and explanation for the existing differentials specially in population growth and child sex ratio. By examining the levels and trends in child sex ratio, education and work participation, the paper postulates that ethnic minorities suffer a relative deprivation in development which in turn can have an adverse effect on demographic outcomes.

Subsequently, by analyzing the National Family Health Survey 2 data and the Reproductive and Child Health Survey Data, the paper brings out the causal associations between ethnic affiliation, deprivation and reproductive-child health outcomes. Finally, the paper discusses the policy and research implications of the findings.

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4.   Sociocultural and Geographic Disadvantages in Child Immunization in Nepal (Prem Bhandari[1], Sundar. S. Shrestha[1] and Dirgha. J. Ghimire[2] [1]The Pennsylvania State University and [2]University of Michigan)

Sociocultural and geographic disparity in socioeconomic condition of people including health and well-being has drawn much attention of policy makers, donors, and development agencies in a multi-cultural and geographically diverse setting of Nepal. Children are not the exceptions. About half of the children are still deprived of receiving a complete dose of vaccination despite government's efforts to provide universal immunization. Previous research has primarily examined the effects of factors such as household structure, household economic resources, parental education and access to health services. In this study, we examined whether any child is left behind in receiving immunization services based on his/her caste-ethnicity, gender, and place of residence. Using the 2001 Nepal Demographic and Health Survey data, we provide evidence that children are socioculturally and geographically disadvantaged. Children of minority ethnic group (for example, Bangali, Musalman, Rajbhar) were less likely to be fully immunized compared to those of high caste Hindu. Although significant gender gap was not observed to be fully immunized, boys were more likely to receive DPT and BCG than girls. Geographically, children living in the central, western, and far-western region of the country were found to be relatively disadvantaged compared to those living in the eastern region. Differences in immunization coverage by parental education and household economic status were quite prominent. From a policy perspective, the findings suggest a focus on sociocultural and geographic aspects along with household socioeconomic factors in order to improve the existing low immunization coverage in Nepal.

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5.   The "Welfare Trap"? Social Assistance, Unobserved Heterogeneity, and the Life Course (Martin Cooke, Assistant Professor at the University of Waterloo)

Discourse about social assistance receipt in Canada has often referred to the problem of "dependency" on welfare, typically characterized as long-term receipt. However, dependency is a problematic concept, and at its root refers to a lack of choices or options, or the absence of individual agency. Marxist and feminist critiques of the welfare state locate it in terms of social structures, while economic models of the social assistance "decision" take social assistance use as the result of a cost-benefit analysis. This paper takes the perspective of the life course in order to incorporate both social structure and individual agency in an analysis of the duration and dynamics of social assistance receipt by Canadian lone mothers. Using Panel 2 (1996-2001) of the Survey of Labour and Income Dynamics and parametric and semi-parametric event history models, it investigates the effect of previous life course events, local labour market conditions, and human capital, on the duration of social assistance receipt for lone mothers and other family types. The paper finds that the overall duration of welfare spells is fairly short, although lone mothers had slightly longer duration. Never- married lone mothers tended to have longer social assistance durations, but the number or ages of children had only small effects. Local unemployment rates and minimum wages also had significant effects on the duration of social assistance. Declining hazards of leaving and

insignificant heterogeneity terms indicate the presence of a "welfare trap", or that social assistance is harder to leave with increasing duration.

6.   **A statistical analysis-to women empowerment: A case study of Bagalkot district** (Revati Deshmukh and Huilgol Pralhad, Baddalkit Karnataka College, India)

The study of women's empowerment is important for the very development of region, since it will help to enhance both quality and quantity of human resources available for development. Further, success of development efforts depends on the fruits of development reaching on all members of the community. The extent, to which this happens, however, depends critically on gender relations within the community that set the worth of one sex relative to the other. One of the fundamental reasons for promoting empowerment of women is that in failing to empower women as well as men to reach their full potential is a violation of their basic human rights. The constitution of India has explicitly given women equal rights and opportunities – political, social economic with men. Since ages women in Indian society has been treated as inferior to men in all spheres of life. In spit! e of government efforts to improve the condition of women in various fields through different programmes there is not much progress in its endeavour. Many studies have been conducted in India to assess the level of women's empowerment at macro level by using data from national surveys like NFHS and assessed women's through composite index. The present study is conducted to assess not only the degree of women's empowerment but also indicators for sources and conditions of women's empowerment in a backward district of Karnataka. And it also attempts to know the influence of sources and conditions for empowerment on women's empowerment. It is hoped that the results of the study will help the government to know the level of women's empowerment and thereby to plan to future programmes to improve women's condition.

7.   **Health indicators for areas with a high proportion of aboriginal residents in Canada: Methods for use with administrative data lacking explicit aboriginal identifiers.** (Russell Wilkins, Sharanjit Uppal, Philippe Finès, Adam Probert, Statistics Canada, Jean-Marie Berthelot, Canadian Institute for Health Information, Eric Guimond, Sacha Senécal, Indian and Northern Affairs Canada)

Canada has a wealth of population-based administrative data on health, but with a dearth of information explicitly concerning race, ethnicity or socioeconomic status. While small area-based methods have been widely used with respect to neighbourhood socioeconomic characteristics, this paper shows that such methods can also be used for routine surveillance of health indicators for areas with a relatively high proportion of aboriginal residents. Using this method, Canadian 6-character alpha-numeric postal codes are first converted to census dissemination area (or enumeration area) codes, and then health outcomes for dissemination areas with a high proportion of aboriginal residents are compared to health outcomes for dissemination areas with a low proportion of aboriginal residents. However, since dissemination areas served by rural postal codes are imprecisely coded via the postal code conversion process, a misclassification-adjusted proportion aboriginal is first determined for each dissemination area. Because they are

highly concentrated in isolated northern settlements, Canada's Inuit population is efficiently and effectively identified using area-based methods. In rural and northern areas, First Nations communities are also fairly well-identified using such methods, but First Nations people living in urban areas are much less highly concentrated, as are Métis people in both urban and rural areas. Life expectancy at birth (with associated standard errors) will be shown for areas with a high concentration of Inuit, First Nations and Métis people, respectively, based on three different thresholds for what constitutes a "high" proportion aboriginal. The strengths and weaknesses of this method will be discussed. (Funding from Health Canada and Indian and Northern Affairs Canada is gratefully acknowledged.)

Session 6 – Fertility and Family Planning (part 1)

1.   **Abortion and Contraception in Cuba** (Danièle Bélanger, University of Western Ontario, Andréa Flynn, University of Western Ontario, Grisell Rodriguez Universidad de la Habana)

This research project examines the following paradox: Cuba has very low fertility, very high contraceptive use and yet one of the highest abortion rates in the world. We examine the social construction of abortion and contraception and the experiences of women seeking abortion in Cuba in order to shed light on this issue. We use a gender approach by interviewing both women and men about the decision making-process that led to the decision to have an abortion.

We conducted in-depth interviews in 2005 and 2006 in a municipality of Havana with 26 couples seeking abortion services. We also interviewed medical professionals and other local experts in the area of reproductive health. Results suggest that study participants conceptualize abortion and contraception as two available options, without privileging one over the other. We explore historical and cultural factors underlying this perception. We discuss implications of our results for policies that aim to reduce Cuba's abortion rate.

2.   **Fertility Change and Its Proximate Determinants in Bangladesh** (Abu Hasanat Mohammad Kishowar Hossain,University of Dhaka)

In 1971-75, women in Bangladesh were having on average 6.3 children. The total fertility rate (TFR) declined to 5.1 fifteen years later and to 4.3 in 1989-1991. The TFR plateaued at around 3.3 for most of the 1990s. Recent survey indicates that after almost a decade-long stagnation, the Bangladesh fertility rate has declined slightly to 3.0 children per woman. Four major determinants such as marriage, contraception, postpartum infecundability and induced abortion affect fertility. This study will critically examine the fertility change in Bangladesh through a systematic analysis of its proximate determinants. An attempt will be made to explore the relative importance of the effect of

different proximate determinants on fertility in Bangladesh and their changing role on fertility decline. The data used in this study will come from the 2004 Bangladesh Demographic and Health Survey (BDHS). BDHS is a nationally representative survey of 11,440 women age 10-49 and 4,297 men age 15-54 form 10,500 household covering 361 sample points (clusters) throughout Bangladesh. The possible outcomes of the study are, despite the significant decline of TFR, with a TFR of 3.0, Bangladesh is in mid-range countries; contraceptive use does not reach at satisfactory level; a large proportion of marriages still take place before the legal age of 18; median durations of postpartum amenorrhea, abstinence and insusceptibility depend on socio-economic back-ground of the respondents. Although the proximate determinants of fertility are improving, their changing roles affect fertility to decline.

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3.   **Impact of family planning on fertility and unwanted fertility level in Nepal**
(Tika Ram Aryal, Hitotsubashi University)

This paper has attempted to study the impact of family planning on fertility and unwanted fertility level in Nepal. The impact of family planning on fertility has been assessed by the way of translating parity progression ratio into total fertility rate and parity distributions. The data are taken from the Nepal Demographic Health Survey.

It was found that the sterilization has changed parity distribution significantly and its impact on fertility was about a birth per woman. The amount of averted births was found to be 0.29, 0.13 and 0.10 per woman due to use of injectables, condoms and pills respectively, whereas an over all impact was found to be 1.66. The expected number of children would be about 4 per woman for the present prevailing situation whereas it would be about 6 for nonuser.

The unwanted and wanted fertility rate was found to be 1.3 and 3.0 births per woman respectively. About 30 per cent births were accounted as unwanted in Nepal. Unwanted births were found very low among women of higher education and residing in urban areas. A strong negative relationship was found between wanted fertility and education. A high level of unwanted births was found among rural and *Mountain*'s women, which may be due to the unmet need as well as low use effectiveness of contraception, and lack of awareness. Findings may help the planners and policy makers for designing proper programs for reducing the fertility in a country.

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4.   **Status of Women and Fertility in Pakistan** (Ali Muhammad, Brock University and Rajulton Fernando, University of Western Ontario)

Women's subordinate position and limited decision-making power in the household, low autonomy, restricted mobility, lack of control over economic resources and less control over their own lives are likely to establish their status in their household and in the society. As argued by many scholars, low status of women is associated with high fertility and thus an important determinant of fertility. Yet, it is the most neglected area in fertility studies because of measurement complications. Concept itself needs clarification since there is no exact definition of the status of women. Its definition varies in different

cultures as well as in different religions. Thus, ambiguity exists in defining as well as measuring the status of women.

Despite these complications, this study attempts to measure the status of women in Pakistan utilizing fourteen theory-driven indictors, extracted by factor analysis, and examines its relationship with fertility. The objective is achieved in two steps. In the first step, the unobserved and latent variable "status of women" is measured by Structural Equation Models and latent scores on status are extracted. In the second step, a path model of fertility is build using the scores on status of women as a continuous variable along with other manifest variables.

The results of this study confirm a negative association between status of women and fertility in Pakistan and recommends that raising women's status is crucial to bring about fertility changes in this country.

Session 7 – Fertility and Family Planning (part 2)

1.   **Determinants of Attitudes toward Having Children outside Marriage** (Amir Erfani, Roderic Beaujot, University of Western Ontario)

In the context of low fertility and a high proportion of persons who are not living in marital unions, it is important to study the attitudes toward having children outside of marriage. Based on a sample from Oxford and Middlesex counties in Ontario, Canada, we find that there are more positive attitudes toward having children outside of marriage for persons who have a more liberal orientation to gender division of labour and to cohabitation, those who are less religious, have smaller ideal family size, and where the first relationship was a cohabiting union. While the relation was not significant, there were also more positive attitudes toward non-marital childbearing for respondents whose parents experienced cohabitation or marital dissolution. The effect of having full-time employment differed by gender: women who had full-time employment were more likely to favour non-marital childbearing, but the opposite holds for men.

2.   **Sex Preferences and Fertility of Chinese-Americans** (Zongli Tang and Johnna Childs, Auburn University Montgomery)

Using 5% PUMS data of the 1990 and 2000 Censuses, this study for the first time examines Chinese-American sex preference for children and its effects on their fertility behavior, in comparison with whites. We discover that while Chinese-Americans prefer a gender balance like whites, they do show a strong son preference. The effect of the preference is insignificant on the second birth, but it is visible on higher parities. This preference is more prevalent among the Chinese who have received less education and who were not born in the United States. This preference encourages Chinese fertility. Yet, the impact of the preference has been diminishing, which, along with Chinese

achievement in education and difficulties in the immigration process, explains the low fertility among Chinese-Americans.

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3.   **Social Capital of Fathers: What Does the Social Engagement Survey Tell Us?**
(Zenaida R. Ravanera, University of Western Ontario)

An often cited explanation for the greater likelihood of developmental problems of children from non-intact families is the lower level of social capital invested on them. This explanation is used particularly when differences in outcome of children persist even after controlling for human and financial capital. The validity of this residual explanation has been difficult to examine because of lack of conceptual clarity and of data to measure social capital. The 2003 General Social Survey (Cycle 17) on Social Engagement provides an opportunity to examine social capital as it gathered information on social and civic participation, sense of belonging, levels of trust, and values. While social capital is expected to vary by age, social class, gender, and ethnicity, this paper focuses on social capital and its variation among men; that is, on the differences in social capital by fatherhood status categorized as (1) men with no children, and (2) fathers in (a) intact, (b) step, (c) blended, and (d) lone parent families, controlling for human (e.g. education) and financial (e.g. income) capital. The focus on men stems from a concern that their role in families has not been as extensively studied as that of women.

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4.   **Why are Canadians Having Children? An Investigation of the Impact on Desire for Children of the Value Placed on Children** (Melissa Moyser, University of Toronto)

In the context of contemporary industrialized countries, strong economic disincentives to parenthood exist. Nevertheless, most individuals in industrialized countries desire, and subsequently have, at least one child. This study considers why presently childless Canadians want children, in spite of the sizable and long-term net-positive cost that children represent to parents. It is hypothesized that Canadians make the transition to parenthood because they attribute some advantages and utilities or "values" to children. Previous studies in the value-of-children tradition of fertility research emphasize the role of a single value (or category of values) of children in individuals' desire for children. Hence, they fail to consider that multiple values regarding children may work together, or that different values may work independently, in contributing to individuals' desire for children. This study goes beyond existing research in the value-of-children tradition by considering the impact on Canadians' desire for children of a summary measure recommended by Hoffman and Hoffman (1973)[1] that implicitly takes into account all of the values that children may represent to parents: personal evaluations of the happiness provided by children. Data from a sub-sample of childless respondents to the 2001 General Social Survey are analyzed by means of sequential multiple regression. The results show that the value placed on children by presently childless Canadians makes an important contribution to predicting their desire for children. Those who report that it is

important to their happiness to have at least one child want an average of one more child than those who do not.

Session 8 – Influences on Child Well-Being

1.   Learning From Each Other: Early Learning and Child Care Experience in Canadian Cities (Rianne Mahon, Jane Jenson, University of Toronto, Katherine Mortimer, Carleton University)

2.   **Children and Youth** (Jianye Liu, Lakehead University, Don Kerr, University of Western Ontario and Roderic Beaujot, University of Western Ontario)

The second demographic transition has had important consequences for the well-being of children, for both the better and the worse. The primary trends associated with this transition include delays in fertility and marriage, further reductions in completed fertility, increases in cohabitation and divorce, increases in maternal employment as well as a climb in non-marital fertility. Some of these trends can clearly be thought of as beneficial for children, whereas others suggest potential losses. In the Canadian context, one outcome of this second demographic transition has been a further decline in the fertility – which has recently fallen to an unprecedented low (at about 1.5 births per woman in 2001).   While this might be thought of as a mixed blessing for children (for example, fewer siblings to compete for parental resources) on a societal level this decline in fertility has major ramifications.

Using census data from 1971 to 2001, this research documents some of the more fundamental trends associated with the life experience of children and youth in Canada over the last several decades, from basic demographic and family characteristics to many of the central educational and economic attributes. In this research children are defined as all persons 0 to 14 years, and youth as all individuals 15-24 years. We compare the situations of children and youth systematically over time and across selected segments of Canadian society.

3.   **The effects of non-marital union disruption on children's school performance** (Zheng Wu, University of Victoria, Feng Hou, Statistics Canada and Christoph M. Schimmele, University of Victoria)

It has been well documented that marital breakdown threatens children's well-being in numerous respects. By contrast, we know relatively little about the implications of nonmarital union (cohabitation) breakdown for children. A substantial proportion of cohabitations include children, as about 13% of all Canadian children lived in cohabitational (common-law) households in 2001, a four-fold increase from 1981. Because cohabitations are highly instable unions, a large proportion of these children will experience the hardship of union disruption. In this study, we examine the effects of nonmarital union disruption on children's school performance. We compare and contrast

the effects of marital and nonmarital union disruption with those of stable marital and nonmarital union. We use 5 waves (covering 1994 – 2003) of data from Canada's National Longitudinal Survey of Children and Youth (NLSCY). We examine four aspects of children's school performance: a) parent's assessments of child's school performance, b) child's math test score, c) high school dropout, and d) child's self-reported school performance (ever failing a course in the last two years, and feelings about high school). Longitudinal data analysis techniques are used in the data analysis. Results are discussed in the context of changing role of family structure in child growth and development.

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4.   Transition to Adulthood in Canada: The Interrelationship Between School, Work and Conjugal Relationships (Darcy Hango et Céline Lebourdais, McGill University)

In this paper we examine the transition to adulthood; specifically transitions related to school, work and conjugal relationships. We use a new Canadian longitudinal data set, the Youth in Transition Survey (YITS), to study these patterns for young adults aged 18 to 20 in 2000 who are re-interviewed two years later. We are particularly interested in disentangling the processes of education, work and partnership over this time period. Initially we descriptively analyze the sequence of these events and then we utilize discrete time models to further explain the dynamics between school completion, work transitions and partnership formation. By capitalizing on the longitudinal nature of the data we hope to gain a better understanding on the role of education, work and relationship formation in the transition to adulthood among this recent cohort of Canadian youth.

Session 9 – Health and Quality of Life

1.   **Differences in disability by race/ethnicity: a cross-national comparison using the 2003 Joint Canada/United States Survey of Health** (Edward Ng ,Statistics Canada, Barbara Altman ,National Centre for Health Statistics and Jean-Marie Berthelot, Statistics Canada)

Racial issues have played important roles in the debate on equality in the U.S., but not as much in Canada. In the area of health and disability, there is concern that certain racial and ethnic minorities in the U.S. tend to have higher rates of disabilities. In Canada, no such concern was raised, except perhaps for the situation of the aboriginal peoples. Given the recent debates on the role of socioeconomic status in explaining racial/ethnic disparities in health outcome, our objective here is to use the 2002/2003 Joint Canada/US Survey of Health (JCUSH) to examine within each country the role of potential confounders such as socioeconomic status and other health-related factors in the relationship between race and disability, based on the Health Utilities Index, supplemented by the 2003 Canadian Community Health Survey. We use logistic regression to unpack the contribution of income, education, chronic disease, obesity and, for the U.S. only, health insurance status in the racial disparity. Preliminary analysis for

the U.S. shows that after controlling for SES, the initial relationship between race and disability disappeared (the Black included) except for the Natives and those having multiple ethnicities. Similar analysis will also be conducted for Canada to examine if certain ethnic groups (especially the aboriginals) reported higher risks of disabilities, even after controlling for potential confounders.

2.   **Social class on health, functional outcomes and health services use Among older people in An African Context** (Barthelemy Kuate-Defo, University of Montréal)

The evidence that social class is a powerful determinant of a multitude of factors that affect most measures of health-related outcomes is well documented in the literature from a variety of perspectives. Although social class is not in itself a causal factor, understanding its linkages to health status, functional outcomes and health services use among older people can provide clues to actual mechanisms involved. Factors embodied in the measurement of social class differences include possession of (or access to) individual-level, household-level and community-level resources as well as the quality of the physical and residential environment that reflects differential opportunity structures or exposure to adverse conditions. This study argues that the mechanisms through which social class might influence health-related outcomes in the elderly varies across different cultures and countries and that studies of ethnically and culturally diverse populations are most likely to yield findings that can better inform our understanding of these mechanisms. Drawing on theories and empirical research on the evolution of population health status and longevity and using unique data from a representative sample of over 5000 respondents aged 50 years or more from two Cameroon Family Health Surveys fielded in 2002 and 2003 in 141 rural and urban localities, this study tests the hypothesis that health status, functional outcomes and health services use among older men and women are a function of social class differences in different contexts, even after controlling for unobserved heterogeneity at the individual, household or neighborhood levels, using single-level and multilevel multivariate regression models.

3.   **Social vs. Physical - Which Characteristics are more Important for Good Mental Health?** (Berenice Monna, University of Calgary).

Psychological well-being has been measured in various ways in the literature including an individual's worth, sense of purpose, humour and overall mental health. It is a complicated variable that can manifest itself in many aspects of life. Not only can it influence decisions and reactions that individuals have to both joyful and adverse situations, but it is also in turn influenced by the social and physical elements within an individual's daily life. Literature from a sociological perspective emphasizes the effects of different social roles and support from social networks on mental health. Of main concern are the effects of number of close friends and relatives, and parental and spousal roles, which are often highly dependent on the gender of the individual in question. In contrast, the literature from the natural sciences emphasizes physical characteristics, such as weight, hours of sleep and physical exercise, as determinants of well-being. This

paper attempts to bridge these two bodies of literature in order to assess not only the unique contributions of each discipline to the understanding of individual-level variations in psychological well-being, but also their joint contributions. The data used in this paper come from the 2001 Canadian Community Health Survey. Using a series of logistic regressions, the paper examines the effects of gender, marital status, presence of children and social networks on psychological well-being, and compares them to the effects of various physical characteristics including weight, physical exercise and hours of sleep. Results show that physical characteristics are much more important for predicting individual-level variations in psychological well-being. The paper concludes with a discussion of the implications of these results for public health policy.

4. **Neighbourhood characteristics, individual and household attributes and health perception among elderly Canadians** (D. Walter Rasugu Omariba, McMaster University)

This paper uses the Canadian Community Health Survey of 2003 to examine health perceptions among elderly Canadians (age 60 and over). The results indicate that individual factors explain more of the variation in perceived health compared to community factors (employment rate, incidence of low income, percentage of visible minority, percentage of Canadians and percentage of non-family persons in private households). Among individual factors, age, sense of community belonging, education and income adequacy are particularly important in determining how individuals perceive their health. On the other hand, among community factors, the incidence of low income, percentage of visible minority and percentage of non-family persons had an independent effect on perceived health.

Key words: Health status, health perceptions, Aging population Neighbourhood effects, Canada

Session 10 – Statistics Canada, the 2006 Census and the General Social Survey

1. **2006 Census: Making census results visible** (J. Badets, L. Howatson-Leo, Statistics Canada)

The overall objective of the Census of Population dissemination program is to promote the use of census data as much as possible, making it accessible and relevant to the information needs of a broad range of data users. The 2001 Census products and services line was successful in that, for the first time, a relatively large volume of census data – in tabular and profile formats – were made available to the Canadian public via the Internet. This, coupled with highly visible releases, help demonstrate the value and relevance of census data to Canadians.

The 2006 Census dissemination program will build on the success of the 2001 Census, offering a range of products and services to be disseminated again via the Internet.
Plans regarding the content and dissemination of 2006 Census results will be presented at this session. New content for 2006 Census, for example in the area of education and income, and implications for census output will be highlighted, as well as when and how census results are planned to be made available, including new products and initiatives for 2006. Plans for making census data available to the research community, for example by means of a public use microdata file, will be presented and advice sought as to which products would best serve research needs.

2.   **The General Social Survey – New content, analysis and development** (Heather Dryburgh, Pascale Beaupré, Marcel Béchard)

The General Social Survey (GSS) offers a wide range of statistical information on the living conditions and well-being of Canadians. The GSS objectives are to gather data on social trends in order to monitor changes in the living conditions and wellbeing of Canadians over time; and to provide immediate information on specific social policy issues of current or emerging interest. The GSS is recognized for its regular collection of cross-sectional data that allows for trend analysis, and its capacity to test and develop new concepts that address emerging issues.

The GSS program annually produces results that help study social issues that have a multidisciplinary interest such as time use, family, social support and social capital. These topics help in the much wider study of the social impacts of change that affect Canadian society.

The objective of the presentation is to provide an overview of the General Social Survey and deal with survey themes that are of interest to data users interested in social issues in Canada. In this presentation we will look at recent results of the survey, what is new, and data products that will be disseminated over the next several months. We will also present a summary of the content of surveys that are currently in development.

Session 12 – Measurement of Demographic Shifts

1.   **Projection of the Internal Migration Component for the Growth of Aboriginal Identity Population in Canada, 2001-2017** (Ravi B. P. Verma, Statistics Canada)

In 2005, Statistics Canada published   projections of the Aboriginal population for Canada, provinces and territories, 2001 to 2017 (Catalogue, 91-547-SCB). For this project, we have incorporated internal migration assumptions for the two types of geographic (provincial/territorial) migration: inter-regional and intra-regional (migration among types of residence, i.e. on-reserve, census metropolitan area (CMA), non-CMA and rural areas). The first objective of this paper is to describe the migration patterns of the Aboriginal population by identity group in Canada, based on the mobility data

derived from the five-year mobility question in the 2001 Census. These migration patterns are broadly compared with those based on the 1996 Census data. The second objective is to describe the projections of internal migration for the Aboriginal groups, particularly those used for North American Indians and Métis. The third objective is to present the impact of internal migration assumptions on the projected population for the two Aboriginal groups, North American Indians and Métis. For the Inuit, as their mobility patterns are seen to be selective and less migratory to some regions ((Newfoundland and Labrador, Quebec, Northwest Territories and Nunavut), one set of projections of internal migration for the Inuit population is recommended for future projection   work.

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2.   **Postal Code and Migration Data in Canadian Census** (Y. Edward Shin, Brett Singbeil and Brad Hawkes, Statistics Canada)

Postal Code information improves the migration data quality in Canadian Census. Using the information that was available from the 2001 Census question on the place of residence 1-year earlier, the impact of the use of postal code information was evaluated for the smallest geographical unit, i.e., about 6000 Census Subdivisions (CSDs). When the exact location of the residence 1-year earlier was identified by the respondent provided postal code rather than by just the place name, the quality of the migration data improved.
Postal Code Conversion File (PCCF) was used to pinpoint the exact location of the place of residence 1-year earlier. If a respondent provided only place name without the postal code, then the location code was obtained, as in earlier censuses, from the place name file that was created within Statistics Canada.
Improvement was especially prominent in two cases: 1) for the neighbouring cities (CSDs) surrounding the central cities in Census Metropolitan Areas; and 2) for the duplicate name places (a pseudo-code is assigned to this type of responses) where, in the earlier censuses, proportional allocation method was used for assigning respondents to each place according to the population distribution. Based on this study, Statistics Canada has decided to include postal code write-in boxes for the place of residence of both 1-year and 5-year earlier in 2006 Census questionnaire.

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3.   **Longitudinal research on family structure effects: important methodological issues**. (Sheila McDonald, McGill University)

What, if any, is the causal effect of growing up in a non-intact family structure on the initiation of health-risk behaviors, such as sexual behavior and smoking, among Canadian adolescents? There is little work addressing two fundamental methodological issues in the above question: its longitudinal nature and the notion of causal inference. Longitudinal research constitutes more than data collection over time; important issues often overlooked include timing and number of exposure measurements, covariate measurement, postulated exposure effect (latent, cumulative, etc.) across time, and

modeling all of the above, separately and in combination. For this specific question, I will first propose an ideal observational design and analysis, using theory as a guide and directed acyclic graphs (DAGs; aka causal graphs). Second, I will present an overview of previous efforts taken to capture longitudinal exposure and a discussion of their merits. Third, I will discuss the limitations that exist regarding the best available Canadian cohort data (National Longitudinal Survey of Children and Youth) and what steps can be taken to deal with the discrepancy. A second goal of this study will be to address the research question using the counterfactual framework of causality. I will formulate the current research question in causal terms and present an overview of an appropriate analysis (i.e., marginal structural models). This study will shed light on important conceptual, methodological, and analytical issues for longitudinal research in general, and will have specific substantive implications for research on family structure effects during childhood.

4.   Demographic Shifts and Economic Strains: Canadian Communities 1981-2001 (Fernando Mata, HRSDC, and Ray D. Bollman, Statistics Canada)

Important demographic shifts have occurred in Canada between 1981 and 2001. As a consequence of these shifts regions not only experienced substantial changes in population size but have been subject to a variety of economic strains. Using special tabulations of the Agriculture Division of Statistics Canada, the paper explores how 2,607 consolidated census subdivisions classified according to the Mwansa/Bollman typology of demographic shifts were subject to economic strains over this time period. Using a general structural equation measurement model, two latent variables measuring strain were estimated using four indicators and compared across the nine cases of a community typology. Strain levels were found to be stable over time and affected, primarily, communities with declining populations in different regions. Relatively lower levels of strain were found in growing communities located within growing regions. The data analysis showed that past strains were strong precursors of present strains and that strains were correlated with structural attributes such as the presence of older populations, presence of movers and the proportion of individuals who did not have a post-secondary education diploma. Relative stability of economic strain hierarchies across different regions of the country was also observed.