Immigrant Integration and "Welcome-ability" of Canadian Cities:
A Multi-level Analysis of the 2006 Canadian Census Data

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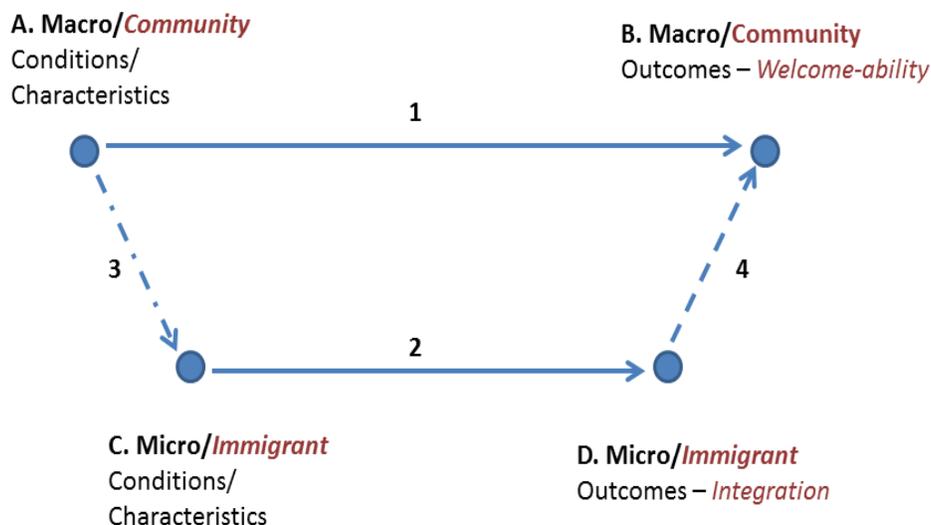University of Western Ontario

This study aims at examining the capacity of Canadian cities to welcome and integrate immigrants and the influence of this capacity on the economic well-being of newcomers. We make use of a macro-micro framework and multi-level analysis on data gathered through the 2006 Canadian Census through a two-stage process. In the first stage, we derive a "welcome-ability' index for the Census Metropolitan Areas (CMAs) in Canada using aggregate variables such as percentage of employed immigrants, percentage of immigrants with low income, and population ethnic diversity, which serve as indicators of economic opportunities (or lack thereof) and opportunities for social integration in the cities. With several similar indicators available from the Census, we do an exploratory factor analysis to identify latent constructs in the economic and social domains, and a confirmatory factor analysis (or structural equation modeling - SEM) to examine the existence of and relationships among the theoretically established latent constructs. In the second stage, we use the derived index of welcome-ability as one of the explanatory variables in a multi-level regression analysis of newcomers' economic integration indicated by their labour force participation and levels of income. We confine the regression analysis to immigrants aged 30-64 who arrived in Canada in the last 5 years before the census, and include individual-level characteristics such as gender, education and visible minority status.

Immigrant Integration and Welcome-ability

Integration is often used as a characteristic of society. As noted by Entzinger and Biezeveld (2003:6) "(T)he more a society is integrated, the more closely and the more intensely its constituent parts (groups or individuals) relate to one another". They went on to state that "the term social cohesion has become widely used as an equivalent for integration as a characteristic of a society." For conceptual clarity, we take "integration" as an individual-level characteristic and make use of the definition by Joppke and Seidle (2012: 9) of *immigrant integration* "as a process through which newcomers become capable of participating in the economic, social and civic/political life of the receiving country". Furthermore, as "social cohesion" has a connotation that encompasses more than the immigrants, we make use of the term "*welcome-ability*", an aggregate-level concept referring to the characteristic of communities that enables them to welcome and integrate newcomers.

A Theoretical Multi-level Framework for Analysis of Integration

To examine the influence of welcome-ability of cities on the economic integration of immigrants, we adapted a macro-micro framework of analysis, originally proposed by Coleman (1990) and subsequently elaborated upon by other scholars.

A. Macro/*Community*
Conditions/
Characteristics

B. Macro/*Community*
Outcomes – *Welcome-ability*

1

3

4

2

C. Micro/*Immigrant*
Conditions/
Characteristics

D. Micro/*Immigrant*
Outcomes – *Integration*

Exploring the influence of macro on micro-level conditions or characteristics is now often done particularly with the availability of multi-level data as well as statistical techniques of analysis. This relationship represents opportunities or constraints on individuals arising from the environment or society that they are in. This is shown in Figure 1 as arrow 3 and referred to by Raub, Buskens and van Assen (2011) as "bridge assumptions". In one of our earlier studies on integration (Ravanera and Rajulton, 2006), for example, we found that the community's age-structure, availability of opportunities, and predominance and homogeneity of values have influence on integration.

Data and Methods

The 2006 Census public use micro-data file has a variable that identifies 23 major Census Metropolitan Areas and combines all other CMAs, Census Agglomerations and other geographies into one "Other" category (Statistics Canada, 2006). This last category could be further disaggregated by using the "Province" variable, into 11 other provincial categories. We thus have 34 geographic areas as our macro-level unit of analysis.

With the information collected in the census on various topics including employment, income levels and sources, ethnicity, language, housing, modes of transportation, and immigration status, we derive aggregate level characteristics (for example, percentage of employment, percentage of immigrants with low income, and population diversity in terms of ethnicity and language) for each of the geographic units of analysis (that is, CMAs and other non-CMAs). With the derived aggregate-level variables, we do exploratory factor analysis to identify latent constructs in the economic and social domains, and a confirmatory factor analysis (or structural equation modeling - SEM) to examine the existence of and relationships among the theoretically established latent constructs. We have used these methods in our earlier study to measure social cohesion (Rajulton, Ravanera, and Beaujot, 2007), and more recently, to measure the welcome-ability of Ontario communities (Ravanera, Esses, and Rajulton, 2013).

Having derived the welcome-ability index, we then examine its influence on the economic integration of newcomers through a multi-level regression analysis. Our individual level units of analysis are recent immigrants aged 30-64. In the regression analysis, we use two indicators of economic integration, labour

force activity and employment income. We do separate analysis for each of these two dependent variables, and include individual-level characteristics as independent variables, namely, gender, age, education, language ability, period of arrival in Canada, and visible minority status.

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