

## SOCIOECONOMIC ATTAINMENT OF 30-YEAR OLD IMMIGRANT WOMEN IN CANADA

**Md Kamrul Islam**

Department of Sociology, University of Alberta,  
CANADA.

[mdkamrul@ualberta.ca](mailto:mdkamrul@ualberta.ca)

### ABSTRACT

*This research examines whether age at immigration is an important determinant of socioeconomic attainment among immigrant women aged 30 in 2001. Multivariate analysis indicates that child immigrant women (i.e., those who immigrated to Canada before age 13) have higher educational attainment, and higher occupational prestige at age 30 than those who had moved to Canada in their teens (i.e., between age 13 and 19). Age at immigration shows an indirect effect on income attainment, mediated through education and occupational prestige. These findings are explained in the context of a theoretical framework that considers, among other factors, the importance of differential parental expectations for their immigrant children with regard to educational attainment.*

**Keywords:** Age at immigration, socioeconomic attainment, Canada

### INTRODUCTION

The process of socioeconomic attainment has received a great deal of attention in the Canadian and American based immigrant studies literature (e.g., Boyd, 2002; Boyd and Grieco, 1998, and Portes and Zhou, 1995). Within this body of work the Canadian literature has paid limited attention to the association of age at immigration and socioeconomic attainment specifically among immigrant women. In this investigation I examine this topic with respect to 30-year old immigrant women in Canada based on a multivariate analysis of 2001 census data. Socioeconomic attainment was measured in terms of immigrant women's education, occupational prestige, and income and test the hypothesis that among immigrant women aged 30 in 2001 age at immigration is inversely associated with socioeconomic attainment. The expectation is that immigrant women who had moved to Canada as children, below age 13, will exceed the socioeconomic status of women that had migrated to this country when they were in their teens, between the ages of 13 and 19.

The hypothesis is grounded on the premise that age at immigration is an important factor in the socioeconomic attainment of immigrants (Myers et al., 2009). For instance, it has been argued that in the case of adult immigrants who have completed their education in their own countries their qualifications are often not recognized as equivalent to the standards of the host country, and this can account for reduced socioeconomic returns for the immigrants. Thus, older age at immigration along with having completed one's schooling in the country of origin serves as an impediment to socioeconomic success in the new country. As well, as compared to younger immigrants those who arrive at an older age are less able to learn the new language and culture of the receiving society. This in turn may make it difficult to generate earnings appropriate one's formal educational and occupational training. For younger immigrants, especially child immigrants, the socioeconomic attainment process would be expected to be less overloaded by such circumstances, as their education would be attained within the new country. At the same time younger immigrants would be expected to

integrate much more readily and easily into the new society (Schaafsma and Sweetman, 2001). Thus, age at immigration is one of the most important factors in the explanation of variation in immigrant integration and socioeconomic attainment. In this connection Myers and colleagues (2009) have argued that immigrants who arrive young tend to eventually resemble quite closely the socioeconomic attainment profile of their native-born peers.

Immigrant women of 30-years of age have been selected for this study because this is a crucial age for women. By this age many women have completed their education, have entered the labour force, and are likely to be in a marital union or in a cohabiting relationship. As well, many women at this age may be having their first or second child. Thus, age 30 represents an important juncture in the lives of women and represents an important point of the life cycle for immigrant women at which to assess their socioeconomic situation

### **Age at Immigration and Socioeconomic Attainment**

A process of socioeconomic attainment has received a great deal of attention in the Canadian and American based immigrant studies literature (e.g., Boyd, 2002; Boyd and Grieco, 1998, and Portes and Zhou, 1995). Within this body of work the Canadian literature has paid limited attention to the association of age at immigration and socioeconomic attainment specifically among immigrant women. In this investigation I examine this topic with respect to 30-year old immigrant women in Canada based on a multivariate analysis of 2001 census data. Socioeconomic attainment was measured in terms of immigrant women's education, occupational prestige, and income and test the hypothesis that among immigrant women aged 30 in 2001 age at immigration is inversely associated with socioeconomic attainment. The expectation is that immigrant women who had moved to Canada as children, below age 13, will exceed the socioeconomic status of women that had migrated to this country when they were in their teens, between the ages of 13 and 19.

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However, Jones (1981) found no support for the vulnerable age thesis in his analysis of educational attainment among immigrants in the Canadian Mobility Study of 1973. Cahan and associates (2001) also found no evidence of a vulnerable age effect. Rather they discovered a negative relationship between age at immigration and educational achievement among immigrant children who at the time of the study were 14 years of age.

It is assumed that the effect of age at immigration on education, income, and occupation in adulthood mediates through parental expectation for a child's educational attainment (high vs. low) and ability to learn English/French. Immigrant parents have higher educational expectations for their younger children because in many circumstances teen immigrants might be expected to leave school early and seek paid employment to help support the family. Thus, the presumption is that parental expectation leads to higher educational attainment for child immigrants; and this in turn translates into higher occupational prestige and higher levels of income in adulthood. This socioeconomic attainment process is facilitated by younger immigrants' greater ability to learn a new language. This reasoning is consistent with Goyder's (2005) analysis of the dynamics of occupational prestige (1975-2000) in Canada, who found that higher educational attainment leads to higher occupational prestige and this in turn leads to higher income for immigrants.

The greater expectation towards child immigrants by immigrant parents can also be explained by the "immigrant optimism" hypothesis introduced by Kao and Tienda (1995). Their "immigrant optimism hypothesis" suggests that immigrant parents have high expectations for their children, which in turn lead to higher educational achievement compared to the native-born population. Overall, Kao and Tienda (1995) found that child immigrants had higher educational performance and aspirations than children of native-born parents net of race, ethnicity, and parental socioeconomic status.

As already suggested, once in Canada child immigrants possess a greater ability to learn English/French and this in turn contributes to higher educational attainment. Higher educational attainment leads to higher occupational prestige and due to this higher educational prestige child immigrant women can have comparatively higher income than that of teen immigrants.

Previous studies have addressed the relationship between age at immigration and ability to learn English/French. Collier (1987) found that although each year of duration of residence added higher proficiency in English for all age groups, age at immigration had higher influence in achieving second language proficiency. More specifically, students who had immigrated below 12 years of age had better performance in English proficiency than those who immigrated at ages 12-15. Asher and Garcia (1969) found that those who had immigrated at an age younger than six years had the highest probability of acquiring a near native pronunciation of English whereas those whose age at immigration was above thirteen had the lowest chance of near-native speech. Akresh (2007) noticed that those who immigrated at older ages are less inclined to speak English in these different spheres.

Therefore, based on earlier research it is assumed that education has both direct effect and indirect effects on income. The indirect effect of this variable on income is mediated through marital status and occupational prestige. The assumption is that those who are higher educated have higher chance of being married and therefore married women are more likely to earn a higher income at age 30. It is also likely that those who have higher education have a reduced chance of being divorced. Finally, higher education should be positively related to

occupational prestige, and this in turn should increase the likelihood of higher income. Based on these assumptions it is hypothesized that child immigrant women have higher educational attainment, occupational status, and income attainment at age 30 than teen immigrant women at age 30.

## DATA AND METHODS

I used data from the 2001 census of Canada. The data file contains six categories of age at immigration: 0-4, 5-12, 13-19, 20-24, 25-29, and 30-39. I define those who immigrated below or equal to age 12 as being “child immigrants,” and those who were above age 12 when they immigrated as “teen immigrants.” This codification is consistent with previous research in this area (Ellis and Goodwin-White, 2006). Since the data file constrained the categories of age at immigration we used age 12 as the cut off point for “child” and “teen” immigrants. Collier (1987) also used age 12 as the cut off points for “young” and “old” immigrants.

Ordinary Least Squares Regression (OLS) was applied to test research hypotheses. Age at immigration was entered in the multivariate models as a binary variable, defined as 1 = child immigrants, and 0 = teen immigrants.

Concerning education, the data file contains information on total years of schooling, coded as: less than grade 5; 5-8 years; 9 years; 10 years; 11 years; 12 years; 13 years; 14-17 years; and 18 or more years. To make the variable continuous, midpoints were computed for each of these classes: less than 5 = 2.5; 5-8 = 6.5; 9 = 9; 10 = 10; 11 = 11; 12 = 12; 13 = 13; 14 – 17 = 15.5; and 18 or more = 19.5. This recoded variable was used in regression models.

The classification of occupation in the census file includes 14 categories of occupation. I create an ordinal scale of occupational prestige based on a survey of 10 sociologists. Each person was asked to rank from highest (=10) to lowest (=1) the prestige associated with each of these occupational categories. The ranking were as follows: (13) professionals, (12) senior managers, (11) middle and other managers, (10) semi professionals and technicians, (9) supervisors, (8) supervisors: crafts and trade, (7) administrative and senior clerical personnel, (6) skilled crafts and trade workers, (5) skilled sales and service personnel, (4) clerical, intermediate sales and service personnel, (3) semi-skilled manual workers, (2) other sales and service personnel, and (1) other manual workers.

In the 2001 Census, total individual income was measured as the total money received from various sources such as wages and salaries. For the regression analysis it was decided to transform the income variable (total individual annual income) into its natural logarithm because in preliminary analysis we found this variable to be not normally distributed.

For marital status, the census file contains information on five categories: legally married and not separated; separated but still legally married; divorced; never legally married (single); and widowed. In order to include this variable into our regressions we computed dummy variables for each category, with “single” as the reference group.

Regarding the knowledge of official languages, an ordinal variable for proficiency of official languages was created, ranging from 0 to 3 (0 = neither English nor French, 1 = French only, 2 = English only, 3 = both English and French). The higher the score on this variable, the higher is the language proficiency.

The census file does not contain any direct information on parental expectation. A proxy variable for parent’s educational expectations was created based on information on father’s education of each respondent. This proxy was created by considering education of fathers as

being determined by age and place of birth. The cohort of 55-64 was considered as the parent generation for 30-year old women in 2001. Previous research shows that father's education has a strong effect on educational attainment of immigrant children (Jones, 1987).

### Sample Characteristics

The total number of 30-year old immigrants in the 2001 Census file was 86,809 of which 46,354 were females and 40,455 were males. Since the main focus of the study was women, males were excluded from the sample. Thus, 46,354 females were selected from this study. However, only child immigrant women and teen immigrant women were selected for regression analysis (N=16,870).

**Table 1. Sample characteristics: 30-year old women in 2001 Census**

<i>Sample Characteristics</i>	<i>Percentage</i>	<i>Frequency</i>
<i>Marital Status</i>		
Divorced	3.7	1737
Legally married and not separated	64.0	29,673
Separated but still legally married	3.7	1,738
Never legally married-Single	28.1	13,021
Widowed	0.4	185
Total	100.0	46,354
<i>Age at Immigration</i>		
0-4 years	9.6	4,107
5-12 years	13.9	5,959
13-19 years	9.6	6,804
20-24 years	9.6	11,912
25-29 years	9.6	12,317
30-34 years	9.6	1,813
Total	100.0	42,912
<i>Knowledge of official language</i>		
English only	78.4	36,359
French only	4.2	1,926
Both English and French	14.1	6,517
Neither English nor French	3.3	1,552
Total	100.0	46,354
<i>Education</i>		
Primary Education	3.8	1,778
Secondary Education	22.1	10,240
Post Secondary Education	74.1	34,336
Total	100.0	46,354
<i>Occupation</i>		
High Prestige	19.5	7,033
Medium Prestige	3.2	1,147
Low Prestige	77.3	27,888
Total	100.0	36,068
<i>Income</i>		
Low Income	72.3	35,517
Middle Income	24.0	11,134
High Income	3.7	1,703
Total	100.0	46,354

Table 1 shows that majority of 30-year old immigrant women (64.0%) were legally married and not separated, followed by never legally married-Single (28.1%), divorced (3.7%), separated but still legally married (3.7%), and widowed (0.4%). Regarding knowledge of official language, it was found that most of the immigrant women (78.4%) were proficient only in English, followed by proficient both in English and French (14.1%). However, only a small percentage of the immigrant women (3.3%) were neither proficient in English nor French (Table 1).

Concerning education, 74.1% had post secondary education; this was followed by secondary education (22.1%) and primary education (3.8%). Notwithstanding the fact that so many of the respondents had post secondary education the majority of the respondents (77.3%) were employed in low prestige jobs. Only 19.5% of the respondents had high prestige jobs. Regarding income 72.3% were in low income group and 24.0% and 3.7%, respectively, fell in the middle or high income categories (Table 1). Regarding age at immigration, it was found that 23.5 per cent of 30-year old immigrant women was child immigrants (immigrated below 13 years of age), and 15.9 per cent was teen immigrants (13-19 years of age at immigration).

## RESULTS

The educational attainment of 30-year old immigrant women in 2001 is presented in Table 2. Consistent with previous research and the theoretical expectations, it was found that child immigrant women were likely to have higher educational attainment at age 30 compared to teen immigrant women even after controlling for marital status, fathers' education, and language proficiency. This can be explained by the fact that child immigrant women were advantaged in terms of higher parental expectation and higher proficiency in English/French compared to their teen counterparts.

**Table 2. Regression of educational attainment; 30-year-old immigrant women in 2001 (unstandardized coefficients)**

<i>Variables</i>	<i>Model-1</i>	<i>Model-2</i>	<i>Model-3</i>	<i>Model-4</i>
Constant	14.027	13.951	11.258	8.163
Age at Immigration (Child=1, Teen=0)	1.044**	1.056**	1.108**	0.991**
<i>Marital Status</i>				
Married		0.139**	0.133**	0.089
Divorced		-0.162	-0.120	-0.120
<i>Single (Ref.)</i>				
Fathers' education			0.200**	0.179**
Language proficiency				1.637**
R <sup>2</sup>	0.026	0.027	0.030	0.080
Model F	443.729**	151.905**	130.477**	294.938**
df for F-test	1 & 16,868	3 & 16,866	4 & 16,865	5 & 16,864
R <sup>2</sup> change		0.001	0.003	0.050
F-test for R <sup>2</sup> change		5.865**	64.479**	924.210**
df for F-test		2 & 16,865	1 & 16,864	1 & 16,863
N	16,870	16,870	16,870	16,870

\*significant at 0.05 level of probability

\*\*significant at 0.01 level of probability

The effect of age at immigration on occupational prestige of 30-year old immigrant women was examined in table 3 using marital status, language proficiency, and education as the control variables. Again consistent with our expectations, child immigrant women were likely to have higher occupational prestige at age 30 compared to teen immigrant women at age 30 even after controlling for marital status, language proficiency and education. The higher occupational prestige of child immigrant women can be attributed to the combined influences of higher parental expectations, greater language proficiency, and higher educational attainment of child immigrant women as compared to their teen counterparts.

**Table 3. Regression analysis of occupational prestige; 30-year-old immigrant women in 2001 (unstandardized coefficients)**

<i>Variables</i>	<i>Model-1</i>	<i>Model-2</i>	<i>Model-3</i>	<i>Model-4</i>
Constant	6.571	6.760	4.369	6.403
Age at Immigration (Child=1, Teen=0)	1.218**	1.174**	1.108**	0.581**
<i>Marital Status</i>				
Married		-0.117	-.146*	-0.176**
Divorced		-2.008**	-2.003**	-1.682**
Single (Ref.)				
Language Proficiency			1.154**	0.259**
Education				0.649**
R <sup>2</sup>	0.021	0.032	0.047	0.261
Model F	317.049**	163.367**	179.309**	1032.009**
df for F-test	1 & 14,611	3 & 14,609	4 & 14,608	5 & 14,607
R <sup>2</sup> change		0.011	0.014	0.214
F-test for R <sup>2</sup> change		84.709**	219.794**	4234.928**
df for F-test		2 & 14,608	1 & 14,607	1 & 14,606
N	14,613	14,613	14,613	14,613

\*significant at 0.05 level of probability

\*\*significant at 0.01 level of probability

Net of marital status and education, child immigrant women have higher income attainment at age 30 than teen immigrant women (Table 4, model 3). However, when occupation prestige was entered in model 4 along with the other control variables the coefficient for age at immigration became insignificant. This suggests that age at immigration do not have direct effect on income attainment. Rather, its effect on income attainment operates through education and occupation prestige.

**Table 4. Regression of logarithm of income; 30-year-old immigrant women (unstandardized coefficients)**

<i>Variables</i>	<i>Model-1</i>	<i>Model-2</i>	<i>Model-3</i>	<i>Model-4</i>
Constant	10.011	9.959	9.974	9.585
Age at Immigration (Child=1, Teen=0)	0.094**	0.104**	0.057**	0.024
<i>Marital Status</i>				
Married		0.069**	0.065**	0.074**
Divorce		0.190**	0.217**	0.311**
Single (R)				
Education			0.053**	0.016**
Occupational Prestige				0.056**
R <sup>2</sup>	0.002	0.004	0.030	0.070
Model F	31.842**	21.934**	112.076**	218.411**
df for F-test	1 & 14,611	3 & 14,609	4 & 14,608	5 & 14,607
R <sup>2</sup> change		0.002	0.026	0.040
F-test for R <sup>2</sup> change		16.946**	380.789**	624.616**
df for F-test		2 & 14,608	1 & 14,607	1 & 14,606
N	14,613	14,613	14,613	14,613

\*Significant at 0.05 level of probability

\*\*Significant at 0.01 level of probability

## CONCLUSION

As shown by these results, age at immigration is inversely related with socioeconomic attainment for 30-year old immigrant women in Canada. More specifically, child immigrant women have higher educational attainment, higher occupational prestige and higher income attainment compared with teen immigrant women. Similar findings were also reported in the earlier studies of Trovato and Grindstaff (1986), Boyd (2002), Schaafsma and Sweetman (2001), and Jones (1981, and 1987) who found that immigrant women who came to Canada as children (at age ten or under) had higher educational attainment, higher success in professional occupations, and higher income compared to adult immigrant women (ten to twenty years of age at immigration). More recently, this is corroborated by Halli and Vedanand (2007).

The theory developed in this research assumes that immigrant parents have higher expectation for educational attainment for their female child immigrants as compared to their older teenaged children. This differential expectation that leads to higher educational

attainment for child immigrant women and consequently greater educational attainment, which eventually translates into higher occupational prestige and earned income as compared to teen immigrant women.

I found no evidence in support of the “vulnerable age hypothesis” proposed by Inbar and Adler (1976, 1977). However, it should be stated that they used 0-5, 6-11, 12-16, and 16+ year of age at immigration to examine the educational attainment of immigrants. Census file does not allow following these refined age groups exactly. Therefore, in future research this should be addressed accordingly to attempt a more precise test of the vulnerable age thesis. Since the study of Inbar and Adler (1976, 1977) there have been important changes in immigration and integration policies in Canada. This may turn out to be an important factor in how well immigrant children perform educationally now as compared to earlier periods in Canada. Future research can confirm this possibility.

An important limitation of this research was that I did not look at the impact of age at immigration on the socioeconomic attainment of immigrant men. Comparison of socioeconomic attainment child immigrant women and teen migrant women with that of third generation and over might provide further insight into the possibility that age at immigration may affect men and women differently. An important avenue for further research is to examine how age at immigration and visible minority status may interact in explaining variations in socioeconomic attainment among immigrants and their descendants in Canada.

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