Gender Differences in Language Acquisition and Employment Consequences among Southeast Asian Refugees in Canada

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Lorsqu'elles sont arrivées au Canada, les femmes réfugiées provenant du sud-est de l'Asie avaient moins de chance de parler l'anglais que les hommes en avaient. L'avantage linguistique des hommes était encore en évidence une décennie plus tard. Les femmes avaient moins d'opportunités que les hommes d'apprendre l'anglais durant la période suivant la migration. Par contre, avec ironie, les femmes ont bénéficié encore plus que les hommes d'opportunités comme des cours de langue seconde en anglais. Cette abilité pour parler l'anglais permet d'augmenter les chances de demeurer dans le marché du travail. Cet effet était encore plus fort chez les femmes que chez les hommes. Les politiques de transfert de population doivent assurer une opportunité sans biais d'acquérir la langue de la société qui reçoit.

When they arrived in Canada, female Southeast Asian refugees were far less likely than males to speak English. The male linguistic advantage was still in evidence a decade later. Women had fewer opportunities than men to learn English during the post-migration period. Ironically, however, women benefited even more than their male counterparts from opportunities such as English as a second language (ESL) classes. English-language ability improved the likelihood of staying in the labour market. This effect was even stronger for women than for men. Resettlement policies must ensure unbiased opportunity to acquire the language of the receiving society.

Language proficiency plays a key role in Canadian immigration policy. Because the ability to speak the language of the receiving society is a powerful predictor of successful resettlement (Canadian Task Force 1988), applicants can earn nine of the 70 points they require to qualify for independent immigrant status in Canada if they are proficient in either English or French. Since linguistic achievement plays no official part in refugee selection, many of the 15,000 to 20,000 people admitted each year under this designation speak neither English nor French. More than 80 percent of refugee males and

more than 90 percent of refugee women who came to Canada in the decade between 1978 and 1987 spoke neither of the country's official languages (ibid.).

Ontario alone spends more than $390 million per year on language training for adult newcomers (Ontario. Ministry of Education, personal communication 1999). Despite the availability of programs which might be expected to compensate for initial disadvantage and to prevent its perpetuation, refugee women remain the group least likely to become proficient in the language of the receiving society (Tran 1988; Boyd 1992; Beiser 1999). Are refugee women less likely than men to learn English because they have less access to learning opportunities, including language training classes (Boyd 1990; Jasso and Rosezweig 1990; Espenshade and Fu 1997), or because women and men make different use of opportunity, or a combination of the two?

Linguistic fluency is important human capital, the possession of which improves prospects for both working and earning. This observation prompts a relatively gloomy view of the resettlement prospects for refugee women. It suggests that their attempts to adapt to life in their adopted country will be marked by economic disadvantage, much of it due to lack of language. Few studies prior to the current one have examined this assumption.

The fact that most previous studies of the determinants of language proficiency and the role of language in resettlement have relied on cross-sectional analyses is a further limitation of the extant research literature. According to previous investigations by our research team, the resettlement phase affects the salience of factors determining the acquisition of language competence (Beiser and Hou 1999; Beiser 1999). For example, language proficiency may not be an important determinant of employment during the initial phases of resettlement; however, over time, it may become an increasingly significant predictor not only of employability, but of occupational mobility (Beiser 1999).

Using data from the Refugee Resettlement Project (RRP) — a decade-long investigation of the resettlement of Southeast Asian refugees in western Canada — the current study examines gender differences in the determinants of English-language acquisition as well as male-female differences in the employment consequences of language proficiency at two points in the resettlement process, the first after the refugees had been in Canada for approximately two years, and the second at the conclusion of their first decade in the country.

Literature Review

Lack of language compromises economic opportunity, access to social resources, and opportunity to become part of the power structure of a given society (Chiswick and Miller 1995). Newcomers' language difficulties also create costs for the receiving society. Delivering services in heritage rather than mainstream languages is, for example, both difficult and expensive (Swan *et al*. 1991).

Among all categories of immigrants, refugee women are the least likely to speak English or French at arrival (Canadian Task Force 1988). After they resettle, refugee women continue to lag behind the other groups in acquiring this form of social and human capital (Tran 1988; Boyd 1992; Beiser 1999). These observations might suggest that past accomplishment predicts future acquisition, in other words that language skill at the point of arrival will determine the long-term trajectory of language acquisition. According to this premise, the reason many refugee women never master an official Canadian language is that very few spoke English or French on arrival. Eventual linguistic proficiency may, however, depend as much on opportunity as on initial advantage. Research documenting gender-related inequities in opportunities for language training, as well as in access to the type of work that provides informal settings for learning a new language (Boyd 1990; Canadian Task Force 1988; Jasso and Rosenzweig 1990; Espenshade and Fu

1997; Beiser 1999) raises the possibility that lack of opportunity may be an important part of the explanation for the tenacity of linguistic disadvantage among female refugees.

No matter whether people come to Canada as immigrants or refugees, mastery of at least one of the country's languages is both an index of integration and a prerequisite for full participation in it. Although most research on language acquisition has tended to focus on immigrants, authorities agree that the resettlement process for both groups is closely similar. As a consequence, concepts about resettlement — including the acquisition of language — derived from the study of immigrants can probably be applied to refugees as well (Berry 1997; de Silva 1997). Recent investigations suggest that a framework for conceptualizing possible determinants of language acquisition should take into account (i) demographic factors, (ii) pre-immigration exposure, (iii) post-immigration opportunities and (iv) resettlement incentives to learn the dominant language (Chiswick and Miller 1992, 1998; Espenshade and Fu 1997; Stevens 1994).

Demographic Variables

Aside from gender, age at immigration and marital status each affect language acquisition (Chiswick and Miller 1992, 1995; Jasso and Rosenzweig 1990).

The young learn new languages more easily than their older counterparts (Jasso and Rosenzweig 1990). Learning a new language is a task that calls on short-term memory, a skill that declines with age. However, biological advantage probably accounts for only part of the association between linguistic advantage and youth. Differential exposure is a significant part of the explanation: majority culture schools provide children and youth a routine and intensive exposure to the dominant language for which the adult experience provides no parallel.

The human capital framework offers an alternative perspective on age differences in acquiring a new language. According to this framework, language is human capital, and people are willing to invest time and effort in acquiring it because their investment offers potential long-run returns through enhanced prospects for employment and earnings. Compared with their older counterparts, immigrant youth may be willing to make a larger initial investment because they can expect to enjoy a longer period of pay-back (Chiswick and Miller 1992, 1995).

Context helps determine the relationship between marital status and language acquisition. Persons who marry after immigrating may choose a partner whose mother-tongue is different from their own, and mixed-language couples often use the dominant language to communicate with each other. On the other hand, couples who were married before immigrating are highly likely to retain their common mother-tongue at home (Espenshade and Fu 1997). Endogamous marriage also promotes cultural retention, as well as the preservation of large family networks which encourage heritage-language retention (Chiswick and Miller 1992).

Pre-migration Factors

Important pre-migration factors include previous exposure to the host language and formal education. Stevens (1994) has suggested that selection on the basis of language is an important determinant of general language fluency among immigrants. Although this is a plausible hypothesis, the fact that few studies have been able to directly measure dominant-language proficiency upon arrival makes it difficult to investigate the competing claims of pre-migration selection versus post-migration opportunity in determining long-term language proficiency.

Formal education affects language acquisition. Highly educated immigrants have an advantage in learning a second language because they have developed meta-linguistic skills — knowledge about language — based on advanced learning in their first language (Dicker 1996).

Post-migration Factors

Post-migration factors influencing language learning include the level of personal investment in remaining in a receiving country, and the host country's encouragement of language learning through the provision of opportunities and incentives (Espinosa and Fu 1997; Stevens 1992, 1994).

Learning a second language requires continuing effort and devotion. Pursuing formal education in a receiving country, using the dominant culture media, and studying with a private language tutor are techniques immigrants commonly use to improve their language skills (Tran 1988). Since commitment to remaining in a resettlement country reinforces willingness to invest effort in language training, researchers have investigated the predictive effects on language acquisition of variables such as owning a home, obtaining citizenship, and the presence of immediate relatives in the receiving country (Espenshade and Fu 1997).

Labour market opportunities and incentives to learn English include employment status and occupation (Espenshade and Fu 1997). Since the relationship between current socio-economic status and dominant-language proficiency is likely to be reciprocal, research must take into account the sequencing of relationships between activities such as working and the acquisition of dominant-language skills.

Macro-social studies of opportunities and incentives have focused on measures such as residential segregation and the numerical size of minority language groups (Espinosa and Massey 1997; Jasso and Rosenzweig 1990; Stevens 1992). The presence of a large ethnic community can provide a socio-economic environment and leisure activities which encourage the use of the mother tongue.

Studies focusing on the micro-environment of the family suggest the importance of household size, the presence of children, and the immigrant's relation to the household head (Espenshade and Fu 1997). Younger generation immigrants in a household typically learn the dominant language at school and in the neighbourhood, then bring it home and diffuse it among other members of the family (Chiswick and Miller 1992). Family size affects language acquisition. Elderly persons living in large households often rely on children and youth to be their linguistic and cultural interpreters, thereby insulating themselves from the need to learn a new language in order to fulfill quotidian tasks (Espenshade and Fu 1997).

The use of cross-sectional data compromises the contribution that studies can make to assessing the relative importance of pre- and post-immigration determinants of dominant-language acquisition. Census data, used in many previous studies, provide questionable proxy measures of pre- and post-immigration factors. For example, source country has been used as a proxy measure for pre-migration exposure to English or French, the assumption being that immigrants coming from a country such as India are more likely to have been exposed to English than immigrants from the Chinese mainland (de los Santos 1998). Time spent in a receiving country has been used to measure post-immigration exposure to opportunities and incentives for learning a new language (Stevens 1994).

The present study draws upon a relatively unique data set, a ten-year study of the resettlement of Southeast Asian refugees in Canada. The longitudinal nature of the data makes possible an examination of the temporal salience of factors affecting English-language acquisition, as well as the sequencing of relationships between variables such as participation in the labour market and language proficiency. We hypothesize that, in the early period of resettlement, disadvantage in pre-immigration exposure is the overriding determinant of female refugees' relative lack of English proficiency. Over time, however, post-immigration opportunities and incentives become increasingly important predictors of language acquisition (Beiser

and Hou 1999). We further hypothesize that unequal access to opportunity accounts for the persistence of female linguistic disadvantage during the first decade of resettlement.

The present study's second objective is to examine the moderating effect of gender on English ability as human capital. Specifically, we investigate male-female differences in the relationship between English fluency and economic adjustment among Southeast Asian refugees at two to three years, as well as a decade after arrival. The literature regarding immigrant adjustment suggests that dominant-language proficiency, gender, and education are among the major factors influencing immigrant employability, occupational status, and income (Hou and Balakrishana 1996; Chiswick and Miller 1995). However, the role of linguistic disadvantage as an explanation for female immigrants' difficulties in economic adjustment is far from clear. The extant literature is also silent on the question of whether gender moderates the effects of dominant-language proficiency on economic adjustment. We hypothesize that gender differences in English proficiency explain a substantial part of the gender differences in labour force activities and employment income. Since female refugees have less human capital in general than males (for example, less formal education), we hypothesize that English-language proficiency will have an even stronger effect on refugee women's employability and employment income than on that of their male counterparts.

Background to the Study

Following Chinese-Vietnamese border hostilities in the late 1970s, the Hanoi government expelled Chinese residents of Vietnam. Ethnic Vietnamese opposed to the new communist regime took advantage of the confusion to flee, along with the Chinese. Vietnam's invasion of neighbouring Cambodia gave Pol Pot's victims an opportunity to flee his reign of terror. Laotians who had resisted communism in their country and who were fearful of reprisals from their new communist government became part of the human tide pouring out of the Southeast Asian peninsula. The confluent flights from Southeast Asia resulted in the "Boat People" crisis.

Between 1979 and 1981, years marking the height of the crisis, Canada opened its doors to 60,000 Southeast Asians, the largest number of refugees ever admitted to the country during such a short time. The Refugee Resettlement Project, housed at the Centre for Addiction and Mental Health, and the University of Toronto's Department of Psychiatry, is a longitudinal survey of the refugees' psychological, economic, and social adaptation. The study took place in Vancouver, British Columbia, where 5,000 of the "Boat People" were initially resettled. The RRP research team interviewed a large sample of Chinese, Vietnamese, and Laotian refugees in 1981 and conducted two follow-up interviews during the ensuing ten years. In 1981, Vancouver could boast one of the largest Chinese communities in North America but had no pre-existing Vietnamese or Laotian communities. This created an "experiment in nature" with which to test the effect of a large like-ethnic community presence on acquiring a new language.

The Refugee Resettlement Project has documented the Southeast Asian refugees' remarkably good psychological and economic adaptation. During their first two years in Canada, refugee rates of depression approximated those found in majority culture North American communities. Thereafter, the prevalence of depression among the refugees declined; after a decade, it was far lower than the rates found in most general population surveys. The refugees experienced high levels of unemployment during the initial years of resettlement. However, by the end of the decade, they were more likely to be gainfully employed and less likely to be consumers of social services than their Canadian-born counterparts (Beiser 1999; Beiser, Hou and Hyman 1999).

Data and Methods

In 1981, RRP staff interviewed 1,349 adults, a one in three probability sample of all refugees 18 years and older who had resettled in and nearby Vancouver. Details of the multi-wave sampling procedures have been reported elsewhere (Beiser, Turner and Ganesan 1989; Beiser 1999). The demographic profile of the resulting sample approximated the federal government figures describing the total population of Southeast Asian refugees who came to Vancouver between 1979 and 1981. In 1983, we succeeded in locating and re-interviewing 1,169 persons, 87 percent of the original sample. Six hundred and forty-seven members of the original sample participated in a third wave of the survey in 1991. Thirty-nine refugees who took part in the third survey had not participated in the second wave. There were no significant differences in gender balance, educational level, or initial employment status between the retained and lost-to-follow-up subsamples. Compared to the "drop-outs," the retained sample was younger, more likely to be married, and had higher levels of initial English-language ability at Time 1. Multivariate data analyses incorporate a procedure suggested by Heckman (1979) to detect potential selection bias due to sample attrition.

Language: The Dependent Variable. During each of the three interview waves, respondents rated their English-language proficiency on a three-point scale of "none," (coded as 1), "little" (2) and "good" (3). Self-reported English-language proficiency[1] at the second and third wave interviews, in 1983 and 1991 respectively, constitute the dependent variables to address the first study objective.

Demographic Variables. (a) Gender was coded as female=1, male=0. (b) Age at immigration was coded as age in years. Marital status was represented as two dummy variables: (c) married before immigration (1) versus others (0), (d) married after immigration (1) versus others (0), with the reference group consisting of those not in a marriage.

Pre-migration Variables: These include (e) self-reported English ability at the first interview. Although it is possible to attribute the language ability of those refugees reporting good English-language proficiency at the initial interview to post-migration training rather than pre-migration exposure, it is most likely a combination of the two since, at the time of the first survey, the refugees had been in Canada a relatively short period of time and would have had little chance to take part in ESL classes. (f) Education was coded as number of years of formal schooling completed prior to immigration.

Post-immigration Factors. These include (g) Canadian education, coded as 1 for those who obtained any formal education within the Canadian school system, whether secondary schooling, college or university, or vocational training, and 0 for others. (h) Use of private English tutoring, coded as 1 for those who used private English tutors and 0 for others. (i) Use of Canadian media, measured as a mean score derived from answers to the following questions: "During the past few weeks, how often have you done the following? (1) watch non-ethnic TV programs, (2) listen to non-ethnic radio, (3) read non-ethnic newspapers and magazines, and (4) see non-ethnic movies?" Answers were coded as: never=0, seldom=1, sometimes=2, often=3. (j) Presence of ethnic community, measured through the proxy variable of ethnicity, 0= Chinese, 1= non-Chinese. (k) Non-ethnic network, based on a question inquiring about the persons each respondent considered as most important in his or her life at the time of the survey. Respondents were permitted to name up to 15 people, and were then asked to indicate the ethnicity of each. The percentage of those named whose ethnic background differed from that of the respondent was computed and used as a measure of non-ethnic network. (l) Presence of children, coded as 1=yes, 0=no. (m) Participation in English as a Second Language (ESL) classes, coded as 1=yes, 0=no. (n) Employment history. At the second wave, this was measured as the percentage of time the respondent had been fully employed during the two years prior to the interview. For the third wave interview, employment

history was measured as the percentage of time spent in full employment during the five years prior to the interview. (o) Use of English at work, based on the question "To what extent is English required at work?" The answer was coded as 1=seldom, 2= sometimes, 3= often. (p) Contact with persons of the same ethnic origin at work, coded as 1 for those whose employers and customers were both of the same ethnic origin as the respondent, and 0 for others. Descriptive statistics for all explanatory variables appear in Table 1.

We also included the interaction terms between gender and each of other explanatory variables. Statistically significant interaction terms suggest that the explanatory variable in question had a different effect among men than it had among women.

In the multivariate analyses reported in Table 3, English-language proficiency was regressed on explanatory variables measured during the two-year interval preceding the interview at which the language measure was obtained, with the exception of those variables that did not change over time. For example, employment history and private tutoring obtained prior to the second interview were used as an explanatory variable for English-language proficiency at the second interview. Similarly, in Table 4, employment history covering the five years prior to the third interview was used in the predictive equation for English-language proficiency at the third interview.

For both second and third wave interview data, we estimated four successive ordered logistic regression models[2] in order to examine the way in which gender differences in the English level might change as a result of considering additional explanatory variables. The first model included gender, age, and marital status. The second model added to Model 1 the variables addressing pre-immigration exposure. The third model added post-immigration exposure variables. The final model added significant interaction terms between gender and other explanatory variables. Since application of Heckman's test suggested that sample selection due to attrition did not significantly bias our model estimation,[3] the models reported in this publication do not include the correction factor.

To explain the employment consequences of gender differences in the English-language proficiency, we used polytomous logistic regression[4] to predict the odds of unemployment and not being in the labour force on the one hand, versus being employed on the other. For data at each point in time (1983 or 1991), analyses were carried out only for adults below the age of 65. Control variables included age at immigration, current marital status, ethnicity, presence of children at home, level of education, and employment status at the time of the earlier survey. For each time period, we estimated three models. Model 1 included all the control variables and gender (female). Model 2 added English-language proficiency.[5] The change in the regression coefficient for the female variable from Model 1 to Model 2 indicated the extent to which gender differences in employment status might be explained as a function of gender differences in English proficiency. To examine the possibility that English proficiency affected the probability of employment differently for males and females, Model 3 introduced an interaction term incorporating gender and English proficiency.

In order to explore the income consequences of gender differences in English-language proficiency, we used an ordinary least-square regression model for those who were currently employed at the time of the third survey. Control variables included age at immigration, current marital status, ethnicity, presence of children at home, level of education, and occupational status. Occupational status was measured by the Blishen scale, a Canadian-normed measure that ranks occupations based on a combination of income and educational differentials (Blishen, Carroll and Moore 1987).

Results

According to the results in Table 1, the refugee women in this sample were more likely than the men

TABLE 1
Explanatory Variables for English-Language Proficiency

Variables	*Second Interview*		*Third Interview*	
	Female (n=511)	*Male (n=658)*	*Female (n=259)*	*Male (n=349)*
1. Demographic variables				
a. Age at immigration (mean & std)	32.15 (12.53)	31.09 (11.03)	31.05 (11.49)	30.72 (10.23)
b. Gender	—	—	—	—
c. Married	63.2%	50.9%*	78.4%	62.8%*
d. Married in Canada	9.2%	10.3%*	16.6%	30.9%
2. Pre-migration factors				
e. Initial English level (mean & std)	1.81 (.60)	2.09 (.57)*	1.85 (.58)	2.13 (.57)*
f. Initial education (mean & std)	7.30 (3.28)	9.25 (2.77)*	7.27 (3.47)	9.26 (2.74)*
3. Post-migration factors				
g. Formal Canadian education	2.9%	5.6%*	5.8%	10.8%*
h. English tutoring	8.8%	7.8%	15.1%	10.6%
i. Use Canadian media (mean & std)	1.07 (.59)	1.43 (.68)*	1.44 (.61)	1.69 (.62)*
j. Ethnicity (% non-Chinese)	40.1%	51.4%*	55.2%	57.6%
k. Non-ethnic network (mean & std)	0.58 (.88)	0.59 (.94)	0.51 (.85)	0.47 (.83)
l. Presence of children	23.3%	39.2%*	21.6%	37.0%*
m. ESL class (% of ever attended)	83.2%	93.8%*	82.2%	94.6%*
n. Years of employment	1.61 (.57)	1.55 (.63)	3.78 (1.83)	4.46 (1.25)*
o. Use English at work (% of Often)	15.7%	33.9%*	26.6%	39.3%*
p. Ethnic co-workers (% of yes)	23.7%	18.2%*	5.4%	7.4%

Note: *p<0.05, significantly different between males and females.

to be Chinese, and to have been married prior to migration. Conversely, they were less likely to have married after coming to Canada. Females had less formal education than males, both before and after entry to Canada, used Canadian media less often, were less likely to attend ESL classes, less likely to speak English at work and more likely to have like-ethnic fellow workers.

Gender Differences in English Proficiency

As Table 2 illustrates, both men and women showed a steady gain in English proficiency over time. However, the linguistic disadvantage with which women began their stay in Canada was still in place ten years later. At the time of the initial survey, about one in four female refugees spoke no English, compared to about one in ten men. At arrival, or shortly afterwards, more than twice as many male as female refugees spoke English well. Ten to 11 years later, very few males (4.3 percent) spoke no English, whereas the comparable figure for females was considerably higher. A comparison of the respective increases in the proportion of refugees who felt they spoke good English after living in Canada for a decade or longer also suggests a persistent female disadvantage.

TABLE 2
Gender Differences in English-Language Proficiency over Time: Frequency Distribution

	Initial Interview		*2 Years after Immigration*		*10 Years after Immigration*	
	Male	*Female*	*Male*	*Female*	*Male*	*Female*
	(%)	*(%)*	*(%)*	*(%)*	*(%)*	*(%)*
None	34 (9.8)	65 (25.1)	15 (4.3)	36 (13.9)	15 (4.3)	32 (12.4)
Fair	235 (67.3)	168 (64.9)	230 (65.9)	173 (66.8)	200 (57.3)	164 (63.3)
Well	80 (22.9)	26 (10.0)	104 (29.8)	50 (19.3)	134 (38.4)	63 (24.3)
χ^2 (df)	35.8 (2)*		22.8 (2)*		22.4 (2)*	

Note: *significant at α<.001.

Tables 3 and 4 present ordered logistic regression models examining the impact of hypothesized explanatory variables on English-language proficiency. Table 3 describes results two years after the refugees arrived in Canada, while Table 4 presents ten-year, post-arrival data.

According to Model 1 in Table 3, after controlling for age at immigration and marital status, the odds of female refugees being in any given proficiency category or higher were roughly one-half those for male refugees (exp{-.80}=.45). With the introduction of the initial level of English proficiency and educational level prior to arrival in Model 2, the gender effect observed in Model 1 was no longer significant. The finding suggests that, at this early phase of resettlement, female disadvantages in English-language proficiency were attributable to educational inequality and to relative lack of exposure to English prior to immigration. Model 3 introduced post-immigration exposure variables to the equation. The regression coefficient for the female variable increased slightly, suggesting that, in comparison with males, female refugees tended to have fewer opportunities to learn English during the first few years of resettlement. The positive and statistically significant interactions between gender and having private English tutoring and between gender and using English at work observed in Model 4 suggest that female refugees benefited more than their male counterparts from having English tutoring and from using English at work.

Table 4 presents ordered logistic regression models bearing on the refugees' English-language proficiency a decade after their arrival in Canada. Model 1 results revealed the long-term persistence of female refugees' linguistic disadvantage. Although female disadvantage decreased with the introduction of pre-immigration exposure factors in Model 2, it remained significant. The findings suggest that, over the long term, language improvement occurred more slowly among females than among males. However, the effects of the gender variable became non-significant in Model 3, an observation suggesting that the relative lack of post-immigration opportunities and incentives helped account for the female lag in acquiring facility in English. The significant interaction between gender and attending ESL which appeared in Model 4 suggests that, if they participated in ESL classes, female refugees benefited even more than their male counterparts. *Post hoc* tests help to clarify the interactions. If both men and women took ESL classes, they were likely to achieve comparable levels of English proficiency. However, among ESL non-attenders, men were more likely than women to acquire some English-language skills.

TABLE 3
Ordered Logistic Regression of Selected Explanatory Variables on English-Language Proficiency Two Years after Immigration

Variables	*Model 1*	*Model 2*	*Model 3*	*Model 4*
Demographic				
a. Age at immigration	-.09 (.01)***	-.05 (.01)***	-.05 (.01)***	-.06 (.01)***
b. Female	-.80 (.13)***	-.16 (.15)	-.10 (.15)	-.53 (.22)*
c. Married bef. immigration	-.38 (.14)**	-.53 (.15)***	-.47 (.18)**	-.46 (.18)*
d. Married aft. immigration	-.13 (.22)	-.39 (.24)	-.43 (.25)	-.45 (.25)
Pre-immigration exposure				
e. Initial English level		1.26 (.14)***	1.13 (.15)***	1.13 (.15)***
f. Initial education		.26 (.03)***	.26 (.03)***	.25 (.03)***
Personal investment				
g. Canadian education			.21 (.34)	.24 (.34)
h. Private English tutoring			.86 (.25)***	.24 (.34)
i. Use of Canadian media			.52 (.13)***	.54 (.13)***
j. Like-ethnic community			-.21 (.15)	-.21 (.15)
k. Non-ethnic network			.05 (.09)	.07 (.09)
l. Presence of children			.05 (.18)	.05 (.18)
m. Attendance at ESL class			.05 (.23)	.04 (.24)
n. Employment history			.41 (.12)**	.45 (.13)***
o. Use of English at work			.02 (.07)	-.07 (.08)
p. Ethnic co-workers			-.06 (.18)	-.06 (.18)
Interaction items				
Female*Eng. tutoring				1.39 (.51)**
Female*Eng. at work				.25 (.12)*
Intercept 1	2.12 (.21)***	-4.14 (.48)***	-5.47 (.63)***	-5.32 (.63)***
Intercept 2	6.35 (.31)***	1.02 (.46)*	-.10 (.59)	-.11 (.60)
N	1169	1169	1169	1169
- 2 log likelihood (df)	319 (4)***	565 (6)***	611 (16)***	624 (18)***
R_L^2	.16	.28	.30	.31

Notes:
1. Numbers in parentheses are standard errors.
2. R_L^2 is a proportional reduction in χ^2 or a proportional reduction in the absolute value of the log-likelihood measures. It is calculated as (-2 log likelihood for covariates) /(-2 log likelihood for intercept only).
3. * Significant at α<.05; ** α<.01; *** α<.001.

TABLE 4
Ordered Logistic Regression of Selected Explanatory Variables on English-Language Proficiency Ten Years after Immigration

Variables	*Model 1*	*Model 2*	*Model 3*	*Model 4*
Demographic				
a. Age at immigration	-.10 (.01)***	-.07 (.01)***	-.02 (.01)	-.02 (.01)
b. Female	-.91 (.18)***	-.41 (.19)*	-.08 (.21)	-1.88 (.74)**
c. Married bef. immigration	.53 (.25)*	.40 (.27)	.28 (.29)	.25 (.30)
d. Married aft. immigration	.43 (.28)	.17 (.30)	.25 (.33)	.27 (.34)
Pre-immigration exposure				
e. Initial English level		1.25 (.21)***	.96 (.21)***	.98 (.21)***
f. Initial education		.12 (.04)***	.10 (.04)**	.09 (.04)*
Post-immigration factors				
g. Canadian education			1.40 (.39)***	1.36 (.39)***
h. Private English tutoring			.60 (.29)*	.61 (.30)*
i. Use Canadian media			.48 (.18)**	.48 (.19)**
j. Like-ethnic community			.05 (.22)	.07 (.22)
k. Non-ethnic network			-.05 (.11)	-.06 (.11)
l. Presence of children			.58 (.21)**	.61 (.21)**
m. Attendance at ESL class			.27 (.34)	-.96 (.57)
n. Employment history			.48 (.09)***	.49 (.10)***
o. Use of English at work			.09 (.08)	.09 (.08)
p. Ethnic co-workers			-.87 (.42)*	-.90 (.43)*
Interaction items				
Female* Attendance at ESL				1.97 (.71)**
Intercept 1	2.08 (.36)***	-2.57 (.66)***	-7.1 (.99)***	-5.93 (1.07)***
Intercept 2	6.18 (.48)***	2.05 (.68)**	-1.9 (.92)	-.58 (1.02)
N	608	608	608	608
- 2 log likelihood (df)	152 (4)***	231 (6)***	313 (16)***	319 (17)***
R_L^2	.14	.22	.30	.30

Notes:
1. Numbers in parentheses are standard errors.
2. R_L^2 is a proportional reduction in χ^2 or a proportional reduction in the absolute value of the log-likelihood measures. It is calculated as (-2 log likelihood for covariates) /(-2 log likelihood for intercept only).
3. * Significant at α<.05; ** α<.01; *** α<.001.

Work and English Proficiency: Gender Differences

Table 5 examines male-female differences in work patterns. At the end of ten years in Canada, both men and women were more likely to be working consistently than they had been at the end of their first two years of residence. Employment rates for men were higher than for women at both time periods measured. Unemployment rates for people actively seeking work were low. The higher employment rates for men were offset by the higher non-availability rates for women. Working women earned less than working men. The average salary category for women was $15,000 to $19,999 per year; the comparable figure for men was $20,000 to $29,999.

Analyses in Table 6 explore the employment consequences of gender differences in English-language proficiency two years after the refugees' arrival. Each polytomous logistic model contains two sets of regression coefficients. One set is unemployed versus employed, the other is not in labour force versus employed. According to the results in Model 1, being female increased the likelihood of falling into the "unavailable for work" category. However, females who had entered the labour force had the same unemployment rate as men. Models 2 and 3 results suggest that English-language proficiency had no significant impact on the probability of staying in the labor force, and that gender differences in English-language proficiency did not significantly affect gender differences in employment status at this early stage of resettlement. According to the pattern of results in Model 3, older respondents were more likely than their younger counterparts to fall into the unavailable for work category. Married people were more likely to be working than the unmarried, and Chinese were more likely to be employed than non-Chinese.

TABLE 5
Gender Differences in Employment Status and Income

Variable Name	*Second Interview*		*Third Interview*	
	Females	*Males*	*Females*	*Males*
	%		*%*	
Dependent variables				
Current employment status %		*		*
1. Employed	53.5	66.5	72.8	82.6
2. Unemployed	17.0	23.0	6.9	9.1
3. Not in labour force	29.4	10.5	20.3	8.3
Employment income (mean and std)(1)			5.04 (1.18)	6.05 (1.11)*
Explanatory variables(2)				
Employed at earlier survey %	52.5	69.9*	56.9	72.9
Occupation status (mean and std)			3035(718)	3208(940)*

Notes:
1. Employment income was measured only in the third wave of the survey, it was coded in the questionnaire as 1- no income; 2- <$5,000; 3- $5,000-$9,999; 4 - $10,000-$14,999; 5 - $15,000-$19,999; 6 - $20,000-$29,999; 7 - $30,000-$39,999; 8 - $40,000-$59,999; 9 - $60,000-$79,999; 10 - ≥ $80,000.
2. Descriptive statistics of other explanatory variables were presented in Table 1.
3. * p<0.05, significantly different between males and females.

TABLE 6
Polytomous Logistic Regressions Showing the Effects of Gender and English Proficiency on Employment Status Two Years after Immigration

	Model 1		*Model 2*		*Model 3*	
	Un-employed	*Not in Labour Force*	*Un-employed*	*Not in Labour Force*	*Un-employed*	*Not in Labour Force*
Constant	-1.04 (.47)*	-1.95 (.54)**	-.24 (.59)	-1.39 (.69)	-.60 (.64)	-2.09 (.81)*
Age at immigration	.01 (.01)	.06 (.01)**	.01 (.01)	.05 (.01)**	.01 (.01)	.05 (.01)**
Married(2)	-.38 (.19)*	-.60 (.22)**	-.41 (.19)*	-.62 (.22)**	-.40 (.19)*	-.60 (.22)**
Non-Chinese	.67 (.16)**	.21 (.19)	.67 (.16)**	.20 (.19)	.65 (.17)**	.17 (.19)
Presence of children	-.09 (.20)	-.20 (.25)	.11 (.20)	-.19 (.25)	.12 (.20)	-.18 (.25)
Education	-.02 (.03)	-.05 (.03)	.004 (.03)	-.04 (.03)	.006 (.03)	-.04 (.03)
Employed at earlier survey	-.68 (.16)**	-1.74 (.19)**	-.65 (.16)**	-1.71 (.19)**	-.56 (.16)**	-1.72 (.19)**
Female	.04 (.17)	1.10 (.20)**	-.06 (.17)	1.08 (.20)**	-.08 (.18)	1.05 (.20)**
English			-.40 (.17)*	-.19 (.20)	-.24 (.20)	-.05 (.27)
English*female					-.43 (.31)	-.58 (.34)
N	1135		1135		1135	
Model χ^2 (df)	280 (14)**		286 (16)**		290 (18)**	
Cox & Snell Pseudo R^2	.21		.22		.23	

Notes:
1. The dependent variable had three categories: employed, unemployed, not in labour force. The employed were the common reference groups in the polytomous logit regressions.
2. "Married" included both those married before as well as after coming to Canada.
3. * Significant at α<.05; ** α<.01.

Table 7, an examination of the association between English and employment status at the end of the first decade, suggests that linguistic proficiency had a more profound effect at this stage of resettlement than at the earlier phase examined in Table 6. In Model 1, female gender was still associated with the "unavailable for work" category. In contrast to Table 6, in which English-language proficiency had little or no relationship with employment status, Model 2 in Table 7 demonstrates a strong association with both unemployment and non-availability. The inclusion of English-language proficiency in the model also tended to reduce the absolute size of the regression coefficient of the female variable in the model for "not in labour force," suggesting that any female disadvantage in entering the labour force was partially attributable to disadvantage in language proficiency. The significant interaction between

TABLE 7
Polytomous Logistic Regressions Showing the Effects of Gender and English Proficiency on Employment Status Ten Years after Immigration

	Model 1		*Model 2*		*Model 3*	
	Un-employed	*Not in Labour Force*	*Un-employed*	*Not in Labour Force*	*Un-employed*	*Not in Labour Force*
Constant	-1.61 (1.03)**	-2.99 (.95)**	.84 (1.29)	.44 (1.20)	.41 (1.37)	-.71 (1.33)
Age at immigration	.04 (.02)*	.06 (.02)**	.03 (.02)	.06 (.02)**	.03 (.02)	.06 (.02)**
Married	-1.24 (.36)**	-.08 (.41)	-1.10 (.37)**	.06 (.41)	-1.08 (.37)**	.09 (.42)
Non-Chinese	.51 (.35)	.35 (.28)	.58 (.36)	.57 (.31)	.56 (.37)	.56 (.31)
Presence of children	.11 (.36)	-1.01 (.35)**	.26 (.37)	-.78 (.36)*	.27 (.37)	-.77 (.36)*
Education	- .05 (.06)	-.14 (.05)**	-.02 (.06)	-.08 (.05)	-.01 (.06)	-.08 (.05)
Employed at earlier survey	-1.29 (.33)**	-.56 (.28)*	-1.33 (.34)**	.54 (.29)	1.32 (.34)**	.55 (.29)
Female	-.40 (.36)	.85 (.31)**	-.52 (.37)	.65 (.31)*	-.62 (.41)	.32 (.37)
English			-1.14 (.36)**	-1.66 (.36)**	-.94 (.41)*	-1.09 (.45)*
English*female					-.84 (.83)	-1.41 (.73)*
N	585		585		585	
Model χ^2 (df)	136 (14)**		168 (16)**		173 (18)**	
R_L^2	.21		.25		.26	

Notes:
1. The dependent variable had three categories: employed, unemployed, not in labour force. The employed were used as the common reference groups in the polytomous logit regressions.
2. * significant at α<.05; ** α<.01.

female and English in the model for "not in the labour force" in Model 3 suggests that English-language proficiency had a stronger impact on the likelihood of entering the labour force among female, than among male refugees. Female refugees were less likely than males to enter the labour force, only if they did not speak English. However, if female refugees were able to speak English well, they were more likely to participate in the labour force than their male counterparts. Older age and households with children were associated with the "unavailable for work" category, whereas a previous work history predicted subsequent employment.

Table 8 examines some of the determinants of income. Both education and occupational status were positively and independently associated with income. However, even with education and occupational status controlled, women had lower incomes than men. Although English proficiency was associated with higher levels of income, there was no interaction between English and gender.

TABLE 8
Regressions Showing the Effects of Gender and English Proficiency on Employment Income Ten Years after Immigration (n=443)

	Model 1	*Model 2*	*Model 3*
Constant	5.15 (.39)**	4.51 (.44)**	4.46 (.47)**
Age at immigration	-.01 (.01)	-.01 (.01)	-.01 (.01)
Married	-.01 (.13)	-.01 (.12)	-.01 (.12)
Non-Chinese	.17 (.11)	.18 (.11)	.18 (.11)
Presence of children	-.14 (.13)	-.14 (.13)	-.14 (.13)
Education	.06 (.02)**	.05 (.02)*	.05 (.02)*
Occupation status	.01 (.00)**	.01 (.00)**	.01 (.00)**
Female	-.93 (.12)**	-.91 (.12)**	-.90 (.12)**
English		.31 (.11)**	.34 (.13)**
English*female			-.07 (.22)
Adjusted R^2 (df)	.202 (468)	.215 (467)	.213 (466)

Notes:
1. * significant at α<.05; ** α<.01.
2. Please see note 1 in Table 5 for details regarding the measurement of employment income.

DISCUSSION

Proficiency in the language of the dominant society continues to be an important component of immigrant selection policy. In principle, refugees are admitted on the basis of compassion rather than points. However, in practice, factors such as language skill affected the selection of Southeast Asian refugees during the "Boat People" crisis (Beiser 1999). Whether or not language fluency should affect refugee or immigrant selection is a contentious issue. A recommendation by a government-appointed task force to make language facility an absolute requirement for immigrant admission to Canada (Immigration Legislative Review 1997) touched off a storm of opposition. Unfortunately, there was little or no research available to aid in examining the claims of either side to the controversy. Although the current study results suggest that selection helps ensure labour market participation, providing an opportunity to learn a new language during the early years of resettlement is an equally important way to promote the human capital of refugees.

Gender affected the distribution of capital at the time of arrival. Compared to fewer than 10 percent of the male Southeast Asians who said they spoke no English upon arrival, one-quarter of the female refugees had no command of the language. Although both men and women learned English over their first decade in Canada, a hard-core non-English-speaking group emerged over time, and women were much more likely than men to be part of this group. During the first few years in the country, women's progress in language acquisition was, on the whole,

roughly equal to that of their male counterparts. However, after the first few years, men were more likely than women to improve their language skills. There was a gender gap upon arrival which was largely attributable to male advantage in the pre-immigration period. By the end of the refugees' first decade in Canada, the gender gap had widened, in large part because women had fewer opportunities than men to learn English.

Government policy was partly responsible for the increasing gender gap. During the 1980s, Canada directed English as a Second Language (ESL) training primarily toward people who seemed the most likely to enter the labour force. As a result, women, and particularly women with young children or the elderly, had little chance of benefiting from government-sponsored language training programs (Canadian Task Force 1988; Beiser 1999).

Women were far more likely than men to remain unavailable for work, probably because they were more likely to assume a family's child-care responsibilities. Although isolation at home may have militated against language learning, children appear to be an effective counter-force. The presence of children had no effect on English proficiency at the end of two years; however, by the end of the refugees' first ten years in Canada, children had a positive effect on the language skills of adults with whom they were living. It seems probable that, as children grew older, they exerted an increasingly potent acculturative influence on their households (see also Chiswick and Miller 1992). Previous studies have suggested that marriage prior to migration militates against learning the receiving society's language. Although this pattern appeared among the SEA refugees, it was only a short-term phenomenon: by the end of the first decade of resettlement, marital status had no discernable effect on language acquisition.

Study results suggest an interaction between language proficiency and exposure to the labour force. Women who remained outside the labour force were far less likely than their working counterparts to master the language of the receiving society. On the other hand, lack of language limited women's options: those with the least language skills were the most likely to stay outside the labour market.

ESL classes probably helped both men and women learn English. Ironically, although women had less access to government-sponsored language training, ESL was probably an even greater boon for them than it was for men. Men who did not attend ESL classes probably had opportunities to learn English in work and other social settings, whereas this was a far less likely occurrence for women. When opportunities such as private tutoring were available, women made better use of them than men. Steady employment advanced the English skills of both men and women, but had a particularly salutary effect on female language proficiency. These results are consistent with findings from other empirical studies which suggest female immigrants receive more benefits from participating in the mainstream labour force than their male counterparts (de los Santos 1998). On the whole, female immigrants and refugees probably have fewer opportunities outside the workplace than men to interact with others in English (ibid.).

The conceptualization of language fluency as human capital is based on the assumption that it promotes immigrant and refugee economic integration. The results in Tables 6 and 7 support this assumption, but the effect became manifest only after the refugees had been in Canada for a long time. During the early years of resettlement, English fluency did not predict the likelihood of entering the labour force, probably because most refugees worked at menial jobs during this period (Beiser 1999). In fact, as the results of the current study show, rather than language predicting employability, steady work promoted language acquisition (see also Beiser, Johnson and Turner 1993). Furthermore, gender differences in English proficiency had no impact on gender differences in employment status. Job market conditions at the time of the 1983 survey

may help account for these findings. Around the time of the second wave survey, Vancouver was in a severe economic recession. The tough job market affected everyone, men and women, immigrant and native-born alike (Beiser, Johnson and Turner 1993).

A decade after their arrival, both males and females were evidencing occupational mobility, and the gains were even more impressive for women than for men (Beiser 1999). As the results of the present study show, English proficiency became a significant factor in explaining the likelihood of unemployment and of staying in the labour force over the long term. Once people had entered the labour force, differences in English-language proficiency had no apparent effect on gender inequalities with respect either to compensation or to staying employed. English ability was an important predictor of both employment and of income for women as well as for men.

Many immigrant and refugee women face a serious dilemma. For the most part, they gain their landed immigrant status as dependents accompanying the main applicant, who is usually a man. On the whole, women are less likely than men to speak English or French on arrival in Canada (Canadian Task Force 1988). Classification as a dependent rather than a wage-earner limits women's access to language and skills-upgrading programs sponsored or subsidized by the government. Lack of language training in turn either keeps women out of the job market altogether, or steers them toward employment as domestics or in the garment industries, settings in which little opportunity exists to learn English or other occupational skills (Boyd 1986). Furthermore, even when eligibility is not an issue, long working hours and familial demands prevent women from taking full advantage of existing language training programs (Boyd 1992). Since the 1980s, when the Southeast Asian study took place, a number of new government-sponsored language training programs have been introduced. One of these programs, Language Instruction for Newcomers to Canada (LINC), is designed to improve the accessibility of language training for female immigrants. Despite efforts such as these, however, male-female inequities in the likelihood of obtaining language training persist (Boyd 1990, 1992).

Resettlement data suggest that Canada derives a net economic benefit from immigration, and that our selection policies are probably working well to ensure the continuation of this benefit (Akbari 1995; DeVoretz 1995). Although we have no right to expect refugee admission to result in economic benefit, the SEA refugee experience suggests that the compassion we offer to people in need of protection need not be costly (Beiser 1999). Improved policy and practice could, however, probably help ease the pain of resettlement and strengthen the capacity of new settlers to begin contributing to their adopted country. Ensuring that both male and female refugees have equitable access to language training is not only humane, it makes good economic sense (Chiswick and Miller 1995).

The results of the present study as well as several previous studies suggest that a "one size fits all" model is unlikely to be the best approach to resettlement programming. Right from the start, female refugees have a linguistic disadvantage compared to their male counterparts. Added to this initial disadvantage, women have fewer opportunities than men to learn the language of their adopted countries. However, if government assumes the responsibility to provide appropriate programs, women may be even more likely than men to benefit, and to use this benefit to contribute to the common good.

Notes

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[1]Chiswick and Miller (1998) examined a variety of measures of immigrant language skills, including self-assessed overall level of skills, speaking and reading skills in specific situations including the workplace, and immigrant reports about whether language difficulties were interfering with job opportunities. Information from all these domains was internally consistent. Furthermore, for each of the definitions of language skill employed, the pattern of relationships with important explanatory variables was similar. These results suggest that a single question of overall ability is likely to be satisfactory.

[2]Ordered logistic regression is the multivariate technique used to predict English-language proficiency. The ordered logistic regression model is appropriate since the dependent variable is restricted to three ordinal categories with a skewed distribution. The ordered logistic regression model for a dependent variable with k+1 categories is expressed as $g(Pr(Y \leq I \mid x)) = a_i + \beta x$, $1 \leq I \leq k$, where $a_1, ..., a_k$ are k intercept parameters, and β is the vector of ordered-logistic regression coefficients. The predicted logit is the cumulative probability of being in the response category j or lower (j=1, 2, ..., j-1). To facilitate interpretation, we reversed the coding of the English-language proficiency scales so that a positive regression coefficient β_i means that an increase in the value of the explanatory variable is expected to raise a respondent's English proficiency. More specifically, the $\exp\{\beta_i\}$ is the odds ratio or the proportionate change in the odds ratio of not being in a lower level of English proficiency, as a result of a one-unit increase in the explanatory variable x_i. The model estimate procedure fits parallel lines based on the assumption of cumulative distribution probabilities across the response categories. The validity of this assumption for our final models is subjected to analysis using the Score test for proportional odds (Espenshade and Fu 1997; Stokes, Davis and Koch 1997).

[3]We adopted a two-stage estimation procedure proposed by Heckman (1979) to examine whether sample attrition would bias the parameter estimation in the above multivariate models. In stage one, a probit model was constructed to estimate the propensity to remain in the follow-up survey. The probit model considered gender, age at immigration, marital status, ethnicity, educational level, English ability, employment status, and use of Canadian media at wave 1. These variables are important factors affecting SEA refugees' cultural, economic, and psychological adaptation (Beiser 1999). The results of the probit models indicated that at wave 2, only being married was significantly associated with lower probabilities of attrition. At wave 3, younger age at immigration, being married, and higher levels of initial English proficiency were significantly associated with lower probabilities of attrition.

In stage two, a correction factor, so-called the hazard rate (the inverse Mill's ratio), was computed for each observation based on the probit estimates. The hazard rate was then entered as an explanatory variable in the logistic regression models in Table 3 and Table 4. The results indicated that the correction factor was not significant and had no substantial influence on the parameter estimates of other variables in the logistic models. For instance, in Model 4 of Table 4, the Wald Chi-square for the correction factor was 3.49 (p=.061). The inclusion of the correction factor did not change the significance and sign of any variable in the models. Therefore, we conclude that selection bias due to sample attrition was ignorable.

[4]Since employment status is a three categorical nominal variable, we use maximum likelihood polytomous logistic model to examine the consequences of gender differences in English. The general expression of polytomous logistic analysis in the three category model is:

$$P(Y=j/x) = \frac{e^{B_j(x)}}{\sum_{K=0}^{2} \beta_j(x)}$$

where P is three conditional probabilities of each outcome category and X is a set of explanatory variables. While k=0, 1, 2, indicates the three categories or alternatives, and j=1, 2, represents the two categories for which we will calculate conditional probabilities relative to the reference category, 0. β_j, shows how a change in the explanatory variables, X, affects the conditional probability of choosing alternative j relative to the reference group (Hosmer and Lemeshow 1989, p. 218). In our model, we chose being employed as a reference category. Therefore, the calculated regression coefficients are the log-odds ratios of unemployment and not in the labour force relative to being employed.

[5]In Tables 6 and 7, employment status as the dependent variable and English-language proficiency as a major explanatory variable were measured at the same time. To address the reciprocal variable problem, we used our three-wave panel data, applying structure equation models to test synchronous effects. The results showed that the casual relation from current employment status to English-language proficiency was not significant. The details of constructing the structure equation models were described in another research paper (Beiser, Hou and Hyman 1999).

References

Akbari, A.H. 1995. "The Impact of Immigrants on Canada's Treasury, circa 1990," in *Diminishing Returns: The Economics of Canada's Recent Immigration Policy*, ed. D.J. De Vorete. Toronto: C. D. Howe Institute.

Beiser, M. 1999. *Strangers at the Gate: The "Boat People's" First Ten Years in Canada*. Toronto: University of Toronto Press.

Beiser, M. and F. Hou. 1999. "Learning the Language of a New Country: A Ten-year Study of English Acquisition by Southeast Asian Refugees in Canada." Paper submitted for publication. Department of Psychiatry, University of Toronto.

Beiser, M., F. Hou and I. Hyman. 1999. "Language Acquisition, Employment and Mental Health Among Southeast Asian Refugees: A Ten Year Study." Paper submitted for publication. Department of Psychiatry, University of Toronto.

Beiser, M., P.J. Johnson and R.J. Turner. 1993. "Unemployment, Underemployment and Depressive Affect Among Southeast Asian Refugees," *Psychological Medicine* 23:731-43.

Beiser, M., R.J. Turner and M. Ganesan. 1989. "Catastrophic Stress and Factors Affecting its Consequences Among Southeast Asian Refugees," *Social Science and Medicine* 28(3):183-95.

Berry, J. 1997. "Immigration, Acculturation, and Adaptation," *Applied Psychology: An International Review* 46:5-34.

Blishen, B., W. Carroll and C. Moore. 1987. "The 1981 Socioeconomic Index for Occupations in Canada," *Canadian Review of Sociology and Anthropology* 24:465-88

Boyd, M. 1986. "Immigrant Women in Canada," in *International Migration: The Female Experience*, ed. R. James Simon and C.B. Brettell. Totowa, NJ: Rowman and Allanheld.

_____ 1990. "Immigrant Women: Language, Socioeconomic Inequalities and Policy Issues," in *Ethnic Demography: Canadian Immigrant, Racial and Cultural Variations*, ed. S.S. Halli, F. Trovato and L. Driedger. Ottawa: Carleton University Press, pp. 275-96.

_____ 1992. "Gender Issues in Immigration and Language Fluency," in *Immigration, Language, and Ethnicity: Canada and the United States*, ed. B.R. Chiswick. Washington, DC: The AEI Press, pp. 305-72.

Canadian Task Force on Mental Health Issues Affecting Immigrants and Refugees. 1988. *After the Door Has Been Opened: Mental Health Issues Affecting Immigrants and Refugees in Canada*. Ottawa: Supply and Services Canada.

Chiswick, B.R. and P.W. Miller. 1992. "Language in the Immigrant Labor Market," in *Immigration, Language, and Ethnicity: Canada and the United States*, ed. B.R. Chiswick. Washington, DC: The AEI Press, pp. 229-96.

_____ 1995. "The Endogeneity Between Language and Earnings: International Analyses," *Journal of Labor Economics* 13:246-88.

_____ 1998. "Language Skill Definition: A Study of Legalized Aliens," *International Migration Review*, 32:877-900.

Citizenship and Immigration Canada. 1999. *Facts and Figures 1998.* Ottawa: Minister of Public Works and Government Service Canada, Cat. No. MP43-333/1999E.

de los Santos, K.K. 1998. "Talk the Talk: Determinants of English-Language Proficiency Across Asian Immigrant Groups." Paper presented at the annual meeting

of the American Sociological Association, San Francisco.

De Silva, A. 1997. "Immigrant Participation in the Unemployment Insurance System," *Canadian Public Policy/Analyse de Politiques* 23(4):375-97.

DeVoretz, D.J. 1995. "New Issues, New Evidence, and New Immigration Policies for the Twenty-first Century," in *Diminishing Returns: The Economics of Canada's Recent Immigration Policy,* ed. D.J. De Voretz. Toronto: C. D. Howe Institute.

Dicker, S.J. 1996. *Languages in America: A Pluralist View*. Clevedon: Multilingual Matters Ltd.

Espinosa, K.E. and D.S. Massey. 1997. "Determinants of English Proficiency among Mexican Migrants to the United States," *International Migration Review* 31:28-50.

Espenshade, T.J. and H. Fu. 1997. "An Analysis of English-Language Proficiency among U.S. Immigrants," *American Sociological Review* 62:288-305.

Heckman, J. 1979. "Sample Selection Bias as Specification Error," *Econometrica* 47:153-61.

Hosmer, D. and S. Lemeshow. 1989. *Applied Logistic Regression*. New York: John Wiley & Sons.

Hou, F. and T.R. Balakrishnan. 1996. "Integration Process of Visible Minorities in Contemporary Canada," *Canadian Journal of Sociology* 21(3):307-26.

Immigration Legislative Review (Robert Trempe, Chair). 1997. *Not Just Numbers: A Canadian Framework for Future Immigration.* Cat No. Ci63-21/1998E. Ottawa: Minister of Public Works and Government Services Canada.

Jasso, G. and M.R. Rosenzweig. 1990. *The New Chosen People: Immigrants in the United States*. New York: Russell Sage Foundation.

Stevens, G. 1992. "The Social and Demographic Context of Language Use in the United States," *American Sociological Review* 57:171-85.

_____ 1994. "Immigration, Emigration, Language Acquisition, and the English Language Proficiency of Immigrants in the United States," in *Immigration and Ethnicity: The Integration of America's New Arrival,* ed. B. Edmonston and J.S. Passel. Washington, DC: The Urban Institute Press, pp. 163-85.

Stokes, M.E., C.S. Davis and G.G. Koch. 1997. *Categorical Data Analysis Using the SAS System.* Gary, NC: SAS Institute Inc.

Swan, N., L. Auer, D. Chenard, A. dePlaa, A. deSilva, D. Palmer and J. Serjak. 1991. *Economic and Social Impacts of Immigration: A Research Report Prepared for the Economic Council of Canada*. Cat. No. EC22-176/1991E. Ottawa: Supply and Services Canada.

Tran, T.V. 1988. "Sex Differences in English Language Acculturation and Learning Strategies among Vietnamese Adults Aged 40 and Over in the United States," *Sex Roles* 19:747-58.