

Cultural Preferences and Economic Constraints: The Living Arrangements of Elderly Canadians*

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RÉSUMÉ

Utilisant les données du recensement canadien de 2001, nous examinons le rôle des préférences culturelles et des contraintes économiques sur la situation domestique des personnes âgées (vivre avec son enfant et/ou une personne apparentée versus vivre de façon autonome). Nos analyses révèlent que les membres de groupes ethniques partageant des valeurs familialistes (italien, chinois, sud-asiatique, et indien d'Asie) sont plus susceptibles que leur homologues individualistes (britannique, allemand, et néerlandais) de vivre avec un proche parent. Toutefois, l'importance des préférences culturelles et des contraintes économiques dépendent en grande partie de l'état matrimonial. Pour les personnes mariées, les préférences culturelles expliquent une grande proportion de la variation des situations domestiques. Pour ce qui est des personnes célibataires, les contraintes économiques sont plus importantes. En comparaison avec les études antérieures, où celles-ci négligent le rôle de l'état matrimonial, cette recherche contribue à une compréhension plus nuancée de la situation domestique des personnes âgées.

ABSTRACT

Using data from the 2001 Census Public Use Microdata Files on Individuals, we examine the role of cultural preferences and economic constraints in elderly Canadians' choice of living arrangements (living with one's children and/or other relatives versus living independently). We find that members of ethnic groups holding familistic cultural values (Italian, Chinese, South Asian, and East Indian) are more likely than their individualistic counterparts (British, German, and Dutch) to live with kin. Economic disadvantage also entails a greater likelihood of living with kin. However, the relative importance of cultural preferences and economic constraints as determinants of living arrangements among the elderly depends on marital status. Among the married, cultural preferences explain a greater proportion of the variation in living arrangements; among the non-married, economic constraints do. This research contributes a more nuanced understanding of living arrangements among the elderly than its predecessors, which neglected the role of marital status.

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Introduction

Since the 1950s, the number of elderly in Canada living alone has increased in both absolute and relative terms (Thomas & Wister, 1984; Turcotte & Schellenberg, 2007). The conventional explanation for such an increase in independent living is that rising standards of living since World War II have translated into higher incomes, with accompanying demands for “privacy” (Beresford & Rivlin, 1966; Boyd, 1991; Michael, Fuchs, & Scott, 1980; Thomas & Wister, 1984). At this point, preferences for living independently (i.e., living alone or living with one’s spouse/partner) in old age, as opposed to living with kin, tend to be taken for granted. On the one hand, studies show that these preferences are culturally determined where racial/ethnic differences in living arrangements persist among the elderly in Canada (Gerber, 1983; Lai, 2005; Thomas & Wister, 1984) and in the United States (Angel & Tienda, 1982; Burr & Mutchler, 1992, 1999; Lee & Angel, 2002; Wilmoth, DeJong, & Himes, 1997) even after economic determinants have been taken into account. As Wilmoth, DeJong, and Himes (1997) explained, “family-oriented cultural values among minority populations create normative obligations to other family members, particularly the elderly” (p. 60). On the other hand, constraints, particularly income considerations, dictate living arrangements in old age because they affect the ability of the elderly to pay for the costs of housing and other living expenses (Boyd, 1991). In considering these two lines of explanation, this article examines the impact of cultural preferences and economic constraints on the living arrangements among elderly Canadians. Our research was guided by two questions. First, how do cultural preferences and economic constraints factor into living arrangements in old age? Second, how does the relative importance of cultural preferences and economic constraints as determinants of living arrangements in old age vary by marital status?

In answering these two questions, we have improved upon previous research in three ways. First, we compared and contrasted the living arrangements of older persons by disaggregating large racial groups to specific ethnic groups that possess distinct cultural values. Earlier studies, many of which were based on the American experience, often aggregated ethnic groups, thus obscuring culturally specific behaviours (Angel & Tienda, 1982; Burr & Mutchler, 1992, 1999; Wilmoth, DeJong, & Himes, 1997). For example, the white population in some studies included British and Italians—ethnic groups that possess distinctive cultural values, as Mitchell (2001) noted. Similarly, as pointed out by a handful of researchers (Kamo & Zhou, 1994; Phua, Kaufman, & Park, 2001), ethnic groups from Asia have often been lumped together in research despite their considerable cultural differences.

Second, we have contributed to past literature by examining the influence of various sources of economic constraints, including total personal income, payments from government, and home ownership. While total income is a standard determinant of older persons’ living arrangements in existing research, sources of income and home ownership have largely been ignored. Yet, whether an individual’s total income in old age comes from payments from government, which are often made on the basis of financial need, or from private savings speaks to his/her economic well-being. In a similar vein, whether an older person resides in a home that is owned, rather than rented, by him-herself or his/her kin reflects the economic well-being of the extended-family unit. According to Cameron (2000), for the elderly, the characteristics of their children and/or other relatives, such as home ownership, affect their choice of living arrangements, in that they determine feasibility of co-residence.

Third, this study has contributed to the knowledge in aging research by focusing on the relative importance of cultural preferences and economic constraints as determinants of the elderly’s living arrangements. Previous studies have often focused on non-married females, since they predominate in the elderly population because of women’s longer life expectancy (Boyd, 1991; Burr & Mutchler, 1992; Thomas & Wister, 1984). Studies that did not restrict sample selection in terms of marital status entered this variable into their analysis as a control (Burr & Mutchler, 1999; Cameron, 2000; Wilmoth, DeJong, & Himes, 1997).

Explaining Living Arrangements in Old Age: Cultural Preferences and Economic Constraints

It is commonly understood that older persons’ living arrangements are determined by both preferences and constraints. Indeed, as we already noted, the increasing prevalence of independent living among the aged has been explained in terms of a growing demand for “privacy” which accompanied post-World War II income growth. However, the inability to pay costs of housing and living expenses may prevent some seniors from living independently, in spite of their preference to do so (Boyd, 1991). Co-residence with children or other relatives may alleviate, at least in part, the economic constraints faced by such elderly persons (Burr & Mutchler, 1999).

Although preferences for privacy or living alone in old age tend to be taken for granted, recent research on living arrangements among the elderly in North America has challenged this assumption by documenting considerable ethnic/racial diversity (Burr & Mutchler, 1992). Hispanics, Blacks, and Asians in the United States (Angel & Tienda, 1982; Burr & Mutchler, 1992, 1999; Lee & Angel, 2002; Wilmoth, DeJong, & Himes, 1997), and Chinese,

South Asians, Italians, and French in Canada (Gerber, 1983; Lai, 2005; Thomas & Wister, 1984) tend to differ from the Anglo majority in their residential patterns during old age. Ethnic/racial diversity in living arrangements among the elderly that persists after other determinants are considered has been interpreted as reflecting differences in preferences stemming from cultural values about family roles and filial responsibility (Lai, Tsang, Chappell, Lai, & Chau, 2007; Thomas & Wister, 1984).

Burr and Mutchler (1992) argued that preferences for independent living, and specific responses to constraints that limit choice with respect to living arrangements, such as low income, are culturally determined. Family-oriented cultural values stipulate who (if anyone) should provide care for aged family members and the context in which that care should take place. In this way, cultural values influence preferences for various living arrangements among the elderly.

Mitchell (2001) distinguished between ethnic groups that are traditional and non-traditional in their cultural values. Traditional cultures, like those originating in Asian or Southern European countries, are usually associated with collectivist family values. These cultures strongly emphasize religion, familistic orientations (e.g., extended kinship ties), and filial piety. When it comes to elderly members of the family, these cultural values are manifested in expectations that adult children provide care for their aging parents, living under the same roof. The aging parents may be expected, in return, to look after their grandchildren while their adult children work outside the home.

In contrast, non-traditional cultures, such as those predominating in Canada, the United States, Britain, and Western Europe, are characterized by individualism. Individualism entails freedom from normative constraints on behaviour, and it is manifested by a tendency towards self-gratification. In the context of non-traditional cultures, seniors are expected to live either independently or in institutional settings, without relying on their children for functional assistance.

Are cultural preferences or economic constraints relatively more important as determinants of living arrangements among the elderly? This question has been largely left unanswered in existing research, even though studies of older persons' living arrangements in the United States and Canada by Burr and Mutchler (1992) and Thomas and Wister (1984) indicated the relative strength of the effects of cultural preferences and economic constraints respectively. Both demonstrated that education and income are weaker predictors of living arrangements in old age than ethnicity.

Similarly, previous studies on the living arrangements of the aged have tended to focus on non-married females,

and studies that have not restricted sample selection in terms of marital status entered this variable into their analysis as a control. As a result, knowledge of the extent to which marital status conditions the effect of cultural preferences and/or economic constraints is limited. Yet, there is reason to suspect that the relative importance of cultural values and economics as determinants of older persons' living arrangements depends on marital status. In general, those without spouses are more likely to seek alternatives that provide supportive living environments with the help of others. Kinship ties promote adherence to cultural values about family life through sanctions on behaviour. As well, seniors living with a spouse generally have more immediate and easier access to support and care in times of need (sickness, disability, long-term health problem) than seniors living alone. The non-married (e.g., single/never married, divorced, widowed) tend to have fewer and less intense kinship ties than the married (Barrett, 1999). Further, the non-married may have fewer economic resources than the married, since the former do not benefit from the income of another individual or from economies of scale in consumption as do the latter (Liang, Brown, Krause, Ofstedal, & Bennett, 2005). Also, seniors who live alone, and particularly senior women, are at greater risk of experiencing incidence of low income (Turcotte & Schellenberg, 2007). For these reasons, living arrangements in old age may be more a matter of economic constraints than cultural preferences among the non-married, whereas the reverse may be true among the married.

Methods

Data

We analyzed the Public Use Microdata File (PUMF) on Individuals of the 2001 Census of Canada, a 2.7 per cent probability sample of the population enumerated in the census. We chose this data set because it is the only public-use data set in Canada with detailed information on both of the focal independent variables: (a) cultural preferences, as measured by ethnic origin, and (b) economic constraints, as measured by total income, retirement incomes, and home ownership. Although some other national data sets, such as General Social Surveys (GSS), may be preferred over the census data because of their availability of health indicators which are also determinants of living arrangements among the elderly, such data do not contain any ethnicity variables for us to infer any cultural distinctions.

Sample

Our analyses of the census data were restricted to respondents aged 55 years and older who reported one of the following seven (single) ethnic origins: British,

German, Dutch, Italian, Chinese, East Indian, and South Asian. The choice of this age group followed previous studies on living arrangements among the elderly (Burr & Mutchler, 1992, 1993, 1999; Thomas & Wister, 1984). We focused on the aforementioned seven ethnic origin groups based on both their relative size and their degree of cultural diversity.¹

Dependent Variable

In the residency decision, the elderly normally choose between living independently (i.e., living alone or living with their spouse/partner only) and living with children or other relatives (Cameron, 2000). Using three indicators of family and household structure in the census data – economic family status, census family status, and household type – we created a dependent variable that is dichotomous, indicating whether the respondent lives independently in the household (living alone, living with non-relatives only) or living with children and/or other relatives.² We set living independently as the reference group.

Independent Variables

Two sets of independent variables were included in this study: (a) economic constraints variables and (b) cultural preferences variables. The degree of one's economic constraints was measured by total income, retirement income, and home ownership. Income was associated with the ability to pay the costs of housing and other living expenses, so we expected that low incomes imply a reduced ability to absorb the economic costs of living alone and, therefore, an increased likelihood of living with children and/or other relatives (Boyd, 1991). We used information on the individual total income in 2000 that is available in the census data. According to the census definition, total income refers to the total money income received from wages and salaries (before taxed), net farm income, retirement incomes, investment incomes, and others.³

Although previous studies have relied on total income as the primary measure of economic constraints on living arrangements in old age (Angel, Angel, & Markides, 2000; Burr & Mutchler, 1999; Thomas & Wister, 1984; Wilmoth, DeJong, & Himes, 1997), our study included indicators of presence/absence of retirement incomes as other measures of economic constraints. A total of four dummy variables indicated whether or not respondents receive income from: (a) Old Age Security (OAS) pensions and Guaranteed Income Supplements (GIS); (b) Canada or Quebec Pension Plan (C/QPP) benefits; (c) other government sources;⁴ and (d) retirement pensions, superannuation, and annuities. We expected a lack of income from the OAS/GIS, C/QPP, or retirement pensions, superannu-

ation, and annuities to increase the likelihood of living with kin. The respondent's economic disadvantage was reflected by the lack of retirement incomes from these sources, and, therefore, it may have increased the likelihood of living with children and/or other relatives. In contrast, we expected a lack of income from other government sources to decrease the likelihood of living with kin. This expectation arose because other government sources of income, such as social assistance payments (for details of other government sources, see endnote 4), are offered on the basis of financial need. The absence of income from other government sources, then, implies economic advantage.

Furthermore, we included as a measure of economic constraints a variable indicating whether the home in which the respondent resided was owned or rented. Cameron (2000) argued that for the elderly, the characteristics of their children and/or other relatives affected their choice of living arrangements in that they determined whether co-residence is feasible. Home ownership by the elderly, their children, and/or other relatives may be more conducive to living with kin than renting because it reflects the economic well-being of the extended-family unit.

The second set of independent variables measured elderly respondents' cultural preferences. Following Angel and Tienda (1982), Kamo and Zhou (1994), and Thomas and Wister (1984), we measured cultural preferences with respect to living arrangements in old age by ethnicity. As Thomas and Wister (1984, p. 305) suggested, the rationale for using ethnicity as an indicator of cultural preference could be attributed to variations in kinship ties and responsibilities and that these variations reflect cultural diversity after controlling for major socio-economic and demographic correlates. As already mentioned, we included seven ethnic origin categories: British, German, Dutch, Italian, Chinese, East Indian, and South Asian. In our multivariate analyses, the British served as the reference group. Moreover, as previously mentioned, in terms of cultural values about family life, Italians, Chinese, East Indians, and South Asians were designated as "traditional" ethnic groups, while British, Germans, and Dutch were designated as "non-traditional" ethnic groups (Mitchell, 2001). We expected that older persons from traditional ethnic groups were more likely to live with their adult children and/or other relatives. Older persons from non-traditional ethnic groups were, in contrast, expected to have higher propensities to live independently.

Control Variables

Previous research has identified several correlates of living arrangements among the elderly as explanatory

variables; accordingly, we incorporated them into our analysis as control variables. We included the following: (a) nativity/duration in Canada,⁵ (b) age, (c) gender, (d) residency in a Census Metropolitan Area, (e) proficiency in English and/or French, and (f) educational attainment. Although previous research has identified health status and the number of children as important factors influencing the living arrangements among the elderly, we were unable to control for these factors in the analysis because such indicators are not available in the census data.

Analytical Technique

Given that the dependent variable is dichotomous (living with children and/or other relatives versus living independently), we employed binary logistic regression to examine the impacts of economic constraints and cultural preferences on the elderly living arrangement, net of other socio-demographic characteristics. For the ease of interpretation, we report only odds ratios of co-residence with kin, which we obtained by exponentiating logits. An odds ratio of a category that is higher than one indicates that those who are in this category are more likely to live with children or relatives than those in the reference group. Conversely, an odds ratio of a category lower than one suggests that persons in this category are less likely to live with their children or relatives than those in the reference group.

Consistent with the literature examining living arrangements among the elderly (Wilmoth, 2001), we performed hierarchical logistic regression analysis in order to illuminate the relative magnitudes of cultural preferences and economic constraints on living arrangement. In this analysis, Model 1 included the control variables only, serving as the baseline model in comparing the impacts of economic constraints and cultural preferences. In Model 2, we added economic constraints variables to Model 1. In Model 3, only cultural preferences variables were added to Model 1. We assessed the relative magnitudes of economic constraints versus cultural preferences by calculating the reduction in $-2 \log$ likelihoods between Model 1 (baseline) and Model 2 (economic constraints added), and between Model 1 and Model 3 (cultural preference added). Given that the greater reduction in $-2 \log$ likelihood from Model 1 indicates the greater improvement in the estimate of living arrangement, we defined the model with greater deviation in $-2 \log$ likelihood from Model 1 as having the greater magnitudes on living arrangement.

We performed the aforementioned hierarchical logistic regression analysis first for the entire sample – those aged 55 and older from one of the seven (single) ethnic

origin groups. Then, we stratified our analysis by marital status, defined as either married (including cohabiting) or non-married (including single/never married, divorced, and widowed). We repeated this procedure to examine the extent to which marital status conditions the relative importance of cultural preferences and economic constraints as determinants of older persons' living arrangements.

In this study, all the logistic regression analyses were performed using a population weight adjusted to the sample size. We have checked for multicollinearity between the variables using condition indices. Our test suggested that there is no serious problem with multicollinearity among the variables.

Results

Profiles of the Elderly in the Sample

We began our analysis with a brief overview of the sample of interest – those aged 55 and older who belong to one of seven (single) ethnic origin groups (British, Dutch, German, Italian, Chinese, South Asian, and East Indian). As Table 1 shows, the British group comprises more than 50 per cent of the sample (column 1). The traditional groups are rather underrepresented, with Italians, Chinese, East Indians, and South Asians comprising 13 per cent, 9 per cent, 4 per cent, and 1 per cent of the sample respectively. Over one third of the elderly in the sample did not receive retirement incomes in 2000, including the OAS/GIS (37%), C/QPP (33%), and other income from the governments (38%). More than 50 per cent of the seniors were born outside Canada. The majority of foreign-born seniors in the sample arrived in Canada as adults, comprising 43 per cent of the total sample. Married elders (68%) were the majority of the sample, followed by widowed (20%), separated or divorced (8%), and never married (4%).

When the sample is divided into two groups by living arrangement (columns 2 and 3), notable differences emerge in the distributions of some of the demographic and socio-economic characteristics. In comparison to the elderly persons who lived independently, Table 1 shows those living with kin were particularly overrepresented by (a) those who did not receive the OAS/GIS (45%) and C/QPP (46%); (b) the foreign born (72%); and (c) persons of non-European origins (Chinese 23%, East Indians 13%, and South Asians 3%).

Both Economic Constraints and Cultural Preferences Matter in Living Arrangements among the Elderly in Canada

As indicated earlier, we performed hierarchical logistic regression analysis in order to illuminate the

Table 1: Descriptive characteristics of the sample, Canada, 2001

	Total (1)	Living Independently (2)	Living with Kin (3)
<i>n</i> (unweighted)	44,160	33,240	10,920
<i>n</i> (weighted)	1,631,013	1,227,931	403,081
Independent Variables	%	%	%
Income	100.0	100.0	100.0
<\$5,000	7.2	5.6	12.0
\$5,000–\$9,999	10.2	10.0	11.0
\$10,000–\$14,999	21.3	20.1	25.0
\$15,000–\$19,999	15.8	15.9	15.3
\$20,000–\$29,999	16.9	17.8	14.3
\$30,000–\$39,999	11.0	11.8	8.6
\$40,000+ (reference group)	17.6	18.8	13.8
Did not receive OAS/GIS	37.0	34.3	45.0
Did not receive C/QPP	32.6	28.2	46.2
Did not receive Other Income from Government Source	38.3	39.8	33.8
Did not receive Retirement Pension or Others	60.0	55.3	74.4
Rented Home	17.7	19.8	11.2
Ethnic Origin	100.0	100.0	100.0
British (reference group)	53.0	59.9	32.1
German	15.2	17.6	8.1
Dutch	4.9	5.6	2.6
Italian	12.7	10.6	19.1
Chinese	8.8	4.2	22.9
East Indian	4.4	1.8	12.5
South Asian	0.9	0.3	2.7
Control Variables	%	%	%
Female	53.2	56.8	54.1
Age	100.0	100.0	100.0
55–59 (reference group)	16.1	15.2	19.0
60–64	17.9	16.7	21.5
65–69	18.7	18.6	19.0
70–74	18.1	18.7	16.2
75–79	14.7	15.7	11.5
80–84	8.7	9.3	6.9
85+	5.8	5.8	5.8
Generational Status	100.0	100.0	100.0
Foreign born, immigrated at age 0–19	8.7	8.7	8.9
Foreign born, immigrated at age 20–29	17.9	18.0	17.8
Foreign born, immigrated at age 30–39	10.5	10.3	11.2
Foreign born, immigrated at age 40–49	5.1	4.0	8.5
Foreign born, immigrated at age 50+	9.7	4.4	25.8
Canadian born (reference group)	48.0	54.7	27.7
Marital Status	100.0	100.0	100.0
Single, never married	4.11	4.21	3.83
Married, cohabiting (reference group)	67.92	69.17	64.18
Separated/Divorced	8.04	8.29	7.31
Widowed	19.92	18.34	24.68
Place of Residence	100.0	100.0	100.0
Montreal	5.6	5.1	7.2
Toronto (reference group)	21.1	16.4	35.6
Vancouver	10.8	9.1	15.7
Other CMAs & Non-CMAs	62.5	69.4	41.5
Educational Attainment	100.0	100.0	100.0
High school diploma or less (reference group)	63.1	60.4	71.1
Trades/College certificate or diploma	19.0	20.5	14.1
Some university	9.9	10.6	7.6
Bachelor's degree	4.4	4.4	4.3
University certificate or above Bachelor's	3.7	4.0	2.9

continued

Table 1: Continued

	Total (1)	Living Independently (2)	Living with Kin (3)
Language Proficiency	100.0	100.0	100.0
Official language neither English nor French	7.8	3.0	22.6
Mother tongue/home language neither English nor French, but official language English and/or French	13.8	10.4	24.1
Mother tongue neither English nor French but uses English and/or French as home language	16.2	17.1	13.2
Mother tongue is English and/or French (reference group)	62.2	69.5	40.2

C/QPP = Canada or Quebec Pension Plan; OAS/GIS = Old Age Security/Guaranteed Income Supplements

Source: Statistics Canada, 2001 Census Public Use Microdata File of Individuals.

relative magnitudes of cultural preferences and economic constraints on elderly living arrangements. Table 2 presents the odds ratios of co-residence with kin for our focal independent variables for those aged 55 and older including all marital status groups.⁶ As Model 2 shows, economic characteristics of the elderly influenced their living arrangements. The lower the elderly person’s total annual income, the more likely he/she was to live with children or relatives, while the absence of retirement incomes, such as the OAS/GIS, raised the probability of living with kin.

Cultural preferences among the elderly, which are proxied by ethnic origin, also influenced the living arrangements of the elderly. As expected, the four ethnic groups characterized as traditional – Italians, Chinese, East Indians, and South Asians – were found to have significantly higher probabilities of living with kin than the British. Among these traditional groups, South Asians and East Indians had the highest propensities to co-reside with kin (odds ratios: 5.32 and 5.46 respectively). In contrast, the two ethnic groups characterized as non-traditional – German and Dutch – were significantly less likely than the British to live with relatives or children. The odds ratios of living with kin for these groups are 0.80 and 0.77 times in comparison to the British.

Given that both economic constraints and cultural preferences influence the living arrangements of the elderly, we next examined which factor better explained the variation in living arrangements among the elderly. To this end, we compared proportional reductions in the –2 log likelihoods between the two nested models – Model 1 (the baseline model) versus Model 2 (economic constraints variables added) and Model 1 versus Model 3 (cultural preferences variables added). Results suggested that economic constraints and cultural preferences influence the elderly living arrangement to a similar extent net of other characteristics. That is, addition of cultural prefer-

ences variables to Model 1 reduced the error measure of the baseline model by 2.4 per cent:

$$\left(1 - \frac{-2LL_{M3}}{-2LL_{M1}} = 1 - \frac{40187.9}{41174.9} = 0.024 \right)$$

and economic constraints reduced the errors to the similar degree, by 2.5 per cent:

$$\left(1 - \frac{-2LL_{M2}}{-2LL_{M1}} = 1 - \frac{40129.5}{41174.9} = 0.025 \right).$$

The Relative Importance of Economic and Cultural Factors Varies by Marital Status

This analysis shows that both economic constraints and cultural preference influenced the living arrangements of seniors in the sample. However, once we performed separate regression analyses by marital status, new patterns emerged in regard to the relative importance of cultural preferences and economic constraints between married (including cohabiting) and non-married (never married, divorced, and widowed) seniors.

For married elders, cultural preferences were found to have greater impacts on living arrangements than economic constraints. Adding the cultural preference variables improved the fit by 2.8 per cent

$$\left(1 - \frac{-2LL_{M3}}{-2LL_{M1}} = 1 - \frac{25818.0}{26573.4} = 0.028 \right),$$

which is more than twice the magnitude of the economic constraints factors (1.1% – calculation based on the above technique).

In comparison, economic constraints matter more than cultural preferences in the living arrangements of non-married elders. As Table 4 shows, adding the

Table 2: Odds ratios of living with kin by economic constraints and cultural preferences for all marital status groups, Canada, 2001

	Economic constraints added	Cultural preferences added
	Model 2	Model 3
Economic Constraints Variables		
Income		
<\$5,000	1.31***	
\$5,000–\$9,999	1.14*	
\$10,000–\$14,999	1.12*	
\$15,000–\$19,999	1.21***	
\$20,000–\$29,999	1.09 ^{ns}	
\$30,000–\$39,999	1.04 ^{ns}	
\$40,000+	rg	
Receipt of OAS/GIS		
Yes	rg	
No	1.31***	
Receipt of C/QPP		
Yes	rg	
No	1.28***	
Receipt of Other Income from Government Source		
Yes	rg	
No	1.16***	
Receipt of Retirement Pension or Others		
Yes	rg	
No	1.31***	
Home Ownership		
Owned	rg	
Rented	0.34***	
Cultural Preferences Variables		
Ethnic Origin		
British		rg
German		0.80***
Dutch		0.77***
Italian		1.84***
Chinese		3.14***
East Indian		5.46***
South Asian		5.32***
Controls ^a	Yes	Yes
	df	–2 Log Likelihood
Model 1 (controls only) ^b	25	41174.9
Model 2 (controls + economic constraints)	36	40129.5
Model 3 (controls + cultural preferences)	31	40187.9

^a Controlled for: generational status, sex, age, marital status, place of residence, language proficiency, and educational attainment.
^b Results are not shown here but available upon request.
 * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; ^{ns} = not significant at $p = 0.05$ level; significance levels are based on logits
 C/QPP = Canada or Quebec Pension Plan; df = degree of freedom; OAS/GIS = Old Age Security/Guaranteed Income Supplements; rg = reference group
 Source: Statistics Canada, 2001 Census Public Use Microdata File of Individuals.

Table 3: Odds ratios of living with kin by economic constraints and cultural preferences for married and cohabiting respondents, Canada, 2001

	Economic constraints added	Cultural preferences added
	Model 2	Model 3
Economic Constraints Variables		
Income		
<\$5,000	1.23**	
\$5,000–\$9,999	1.18*	
\$10,000–\$14,999	1.11 ^{ns}	
\$15,000–\$19,999	1.17*	
\$20,000–\$29,999	1.13*	
\$30,000–\$39,999	1.06 ^{ns}	
\$40,000+	rg	
Receipt of OAS/GIS		
Yes	rg	
No	1.22**	
Receipt of C/QPP		
Yes	rg	
No	1.25***	
Receipt of Other Income from Government Source		
Yes	rg	
No	0.91*	
Receipt of Retirement Pension or Others		
Yes	rg	
No	1.35***	
Home Ownership		
Owned	rg	
Rented	0.52***	
Cultural Preferences Variables		
Ethnic Origin		
British		rg
German		0.75***
Dutch		0.72**
Italian		2.01***
Chinese		3.64***
East Indian		5.62***
South Asian		6.10***
Controls ^a	Yes	Yes
	df	–2 Log Likelihood
Model 1 (controls only) ^b	22	26573.4
Model 2 (controls + economic constraints)	33	26288.8
Model 3 (controls + cultural preferences)	28	25818.0

^a Controlled for: generational status, sex, age, place of residence, language proficiency, and educational attainment.
^b Results are not shown here but available upon request.
 * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; ^{ns} = not significant at $p = 0.05$ level; significance levels are based on logits
 C/QPP = Canada or Quebec Pension Plan; df = degree of freedom; OAS/GIS = Old Age Security/Guaranteed Income Supplements; rg = reference group
 Source: Statistics Canada, 2001 Census Public Use Microdata File of Individuals.

Table 4: Odds ratios of living with kin by economic constraints and cultural preferences for non-married (single, divorced, and widowed) respondents, Canada, 2001

	Economic constraints added	Cultural preferences added
	Model 2	Model 3
Economic Constraints Variables		
Income		
<\$5,000	2.34***	
\$5,000–\$9,999	1.53**	
\$10,000–\$14,999	1.44**	
\$15,000–\$19,999	1.45**	
\$20,000–\$29,999	1.22 ^{ns}	
\$30,000–\$39,999	1.12 ^{ns}	
\$40,000+	rg	
Receipt of OAS/GIS		
Yes	rg	
No	1.22 ^{ns}	
Receipt of C/QPP		
Yes	rg	
No	1.20**	
Receipt of Other Income from Government Source		
Yes	rg	
No	1.00 ^{ns}	
Receipt of Retirement Pension or Others		
Yes	rg	
No	1.18**	
Home Ownership		
Owned	rg	
Rented	0.22***	
Cultural Preferences Variables		
Ethnic Origin		
British		rg
German		0.91 ^{ns}
Dutch		0.90 ^{ns}
Italian		1.57***
Chinese		2.07***
East Indian		4.98***
South Asian		3.98***
Controls ^a	Yes	Yes
	df	–2 Log
		Likelihood
Model 1 (controls only) ^b	22	14357.0
Model 2 (controls + economic constraints)	33	13438.8
Model 3 (controls + cultural preferences)	28	14131.4

^a Controlled for: generational status, sex, age, place of residence, language proficiency, and educational attainment.

^b Results are not shown here but available upon request.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; ^{ns} = not significant at $p = 0.05$ level; significance levels are based on logits; C/QPP = Canada or Quebec Pension Plan; df = degree of freedom; OAS/GIS = Old Age Security/Guaranteed Income Supplements; rg = reference group

Source: Statistics Canada, 2001 Census Public Use Microdata File of Individuals.

economic constraint variables to the baseline model (Model 1) improved the prediction of living arrangements by 6.4 per cent relative to the baseline model, whereas the cultural preference factors improved the prediction only by 1.6 per cent (Model 3). Such contrasting impacts of economic constraints and cultural preferences between married and non-married elders suggest that economic needs outweigh personal preferences associated with cultural values for the non-married elderly, who tend to have less financial stability with no spouse living with them. In contrast, married elders have more leeway to choose their living arrangement with the presence of the spouse, who may be able to provide additional sources of income to the household.

Conclusion

It is generally understood that living arrangements in old age are a product of both cultural preferences and economic constraints. Yet, previous studies of living arrangements have left unanswered questions of whether or not cultural preferences are relatively more important determinants of living arrangements among the elderly than economic constraints (Burr & Mutchler, 1992; Kamo & Zhou, 1994; Thomas & Wister, 1984). As well, the relative importance of cultural preferences and economic constraints as determinants of the living arrangements of the elderly is related to marital status has not been examined. To remedy these gaps, we investigated the effects of cultural preferences (as measured by ethnicity) and economic constraints (as measured by total income, its sources, and home ownership) on the living arrangements of elderly Canadians by analyzing the public use data from the 2001 Census of Canada.

Our research has yielded two major findings. First, we have found that both cultural preferences and economic constraints factor into the living arrangements of elderly Canadians. As expected, ethnic groups holding traditional cultural values (Chinese, South Asian and East Indian) are more likely than their non-traditional counterparts (British, Dutch, German and Italian) to live with kin. Our findings are consistent with previous studies that indicate racial and ethnic characteristics, which are generally considered indirect measures of cultural preferences, matter in later-life living arrangements (Burr & Mutchler, 1993; Wilmoth, 2001). In addition, we have found that economically disadvantaged elderly are more likely to live with kin than their economically advantaged counterparts, which is again consistent with previous research (Boyd, 1991). Second, the relative importance of cultural preferences and economic constraints as determinants of the living arrangements of the elderly is related to marital

status. Among the married, cultural preferences explain a greater proportion of the variation in living arrangements in old age; economic constraints matter more among the non-married. We suggest that economic constraints matter more than cultural preferences for living arrangements in old age among the non-married because of their relatively limited economic resources. Moreover, the non-married may be less integrated in kinship networks which reinforce cultural values about family life.

While our findings contribute to the knowledge of living arrangements among the elderly, some questions remain unanswered. For instance, the question of whether the health status of the elderly alters the relative magnitudes of cultural preferences or economic constraints on older persons' living arrangements was not addressed in our study due to data limitations. A longitudinal data set which contains time-varying indicators of health status may provide a more comprehensive understanding of the dynamics of living arrangements in the life course of elderly individuals. These areas deserve further research.

Notes

- 1 The unweighted sample sizes of the seven select ethnic origin groups are as follows: British (23,398), German (6,723), Dutch (2,150), Italian (5,623), Chinese (3,910), East Indian (1,956), and South Asian (400).
- 2 We identified a person's living arrangement on the basis of Figure 14. Economic and Census Family Membership and Family Status in the 2001 Census Dictionary (Statistics Canada, 2002). Details of the coding scheme for the dependent variable are available upon request.
- 3 Other incomes are (a) net non-farm income from unincorporated business and/or professional practice, (b) Canada Child Tax Benefits, (c) benefits from Employment Insurance, and (d) other money income (e.g., alimony, child support, severance pay) (Statistics Canada, 2006).
- 4 Refers to all transfer payments, excluding those covered as a separate income source (e.g., OAS/GIS, C/QPP), that were received from federal, provincial, or municipal programs during 2000. This income source included social assistance payments received by persons in need including elderly individuals. Also included are provincial income supplement payments to seniors and provincial payments to help offset accommodation costs. Furthermore, other transfer payments, such as veterans' pensions and pensions to widows and dependents of veterans, are included in this income source (Statistics Canada, 2006).
- 5 In this study, we defined the second generation as the Canadian-born whose parents are foreign-born, and the third-plus generation as the Canadian-born whose parents were born in Canada.
- 6 The odds ratios for the control variables, as well as results for Model 1, are available upon request.

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