Determinants of Household Headship

--- A Logistic Analysis

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I. Data of the General Social Survey (Cycle 1), 1985

The analysis is based on the data from the 1985 General Social Survey conducted by Statistics Canada. The total sample contains 11,200 respondents aged 15 and over, interviewed either personally or by telephone.

The 1985 General Social Survey is very useful for analyzing household headship as it has recorded items of health problems, physical disabilities and existence of close kin. These factors are known to have an important bearing on the household headship status.

However, the main problem is the absence of direct indicator of household headship, which has to be derived from the existing data base (more on this in dependent variable section). Although head of the family is identifiable from the data file, some further decision has to be made to conceptualize household headship. In addition, family and non-family household headships are to be distinguished for the current analysis.

Family, according to census reference dictionary, "consists of a husband and wife (with or without children who have never been

married, regardless of age) or a parent with one or more children never married, living in the same dwelling" (quoted from Catalogue 91-522, Statistics Canada, p. 15). Therefore, an individual living alone can be seen as a head of household, rather than a family head. To comply with the current classification of household headship, for example, we have to re-define 2368 cases of family heads while living alone as heads of household consisting of one person.

1.1 <u>Dependent variable</u>

Based on the above discussion, we distinguish two types of household heads: family household heads and non-family household heads. The sum of them constitutes all or total household heads.

A family household head is the head of the family living with (1) spouse/partner, or (2) being single lone parent, or (3) living with never-married child(ren). With GSS1 data, we have 3740 cases of family household heads.

Non-family household heads are those who live alone and a portion of those who live with relatives or non-relatives. With the latter, the complexity lies with the arbitrariness in household headship assignment. Imagine several siblings residing in one household as 'living with relatives', or a number of university students reporting as one household in the case of 'living with non-relatives', who in these two cases should be selected as the

household heads? To tackle this problem, we randomly assign fifty percent of individuals living with relatives or non-relatives in 2person households, thirty-three percent of those in 3-person households, and twenty percent of those in 4 and more person households as household heads. Thus altogether 2705 non-family household heads are identified.

The total number of household heads is 6445. Against the total sample size of 11200, the average household size is about 1.73, smaller than average household in 1986 which contains 2.8 Canadians (Burch, 1990, p. 13), calculated on the basis 1986 census publication data.

1.2 Independent variables

After considerable experimentation, we have selected most relevant predictors for household headship, with particular emphasis on demographic factors, such as age, sex, marital status, region of residence, number of nuclear kin, as well as socioeconomic factors including education, income and work status. Physical and environmental factors such as disability, types of dwelling and region of residence are also entered as covariates.

In general, we enter the same or similar variables for all age-sex categories in order to make comparisons across groups. Some adjustments are necessary in view of the nature of the case. For instance, the implication of number of nuclear kin on headship

varies for different age groups. The possibilities of being a household head for older people may be contingent on the number of children who are or not able to accommodate them at home. But the number of children for the younger or middle-age group may have little effect on the possibilities of the parents maintaining their headship. Moreover, the composition of income for the old may be mainly from investment or government transfer payments while for the other age group salary should be the major source of income, in addition to interest income and transfer payments.

All the independent variables are coded as categorical, mostly dichotomous. The decision on cutting points are made, for example, income being cut at \$6000 and \$25000 for three categories, to avoid highly skewed distributions.

The basic variables, except for those defined selfexplanatory, are listed as follows:

<u>Education</u>. Three categories of some secondary or less, secondary graduation or some post-secondary, and post secondary degree or diploma.

<u>Income</u>. Total individual income, including wages [except for those over 60], interest income, and transfer payments.

<u>Nuclear kin</u>. Total number of close kin reported. For persons over 60, this includes parents, siblings and children; for the remaining age groups, parents and siblings only.

<u>Disabilities</u>. A series of questions relating to severe physical disabilities [e.g. completely unable to walk up stairs] are combined and coded as a dichotomy: no severe disabilities; at least one severe disability.

<u>Work status</u>. Employed and unemployed are considered in the labour force [at least potentially], against those not in the labour force.

<u>Dwelling</u>. Those residing in single detached or semi-detached house make up one category. Those living in all other types of housing consist of the other.

For all age group models, <u>Age</u> groups are categorized into 15-29, 30-59 and 60 and over.

II. <u>Methods</u>

The qualitative nature of the dependent variable [to be a family household head or not, to be a non-family household head or not and to be a household head or not] suggests use some form of logit model. Between log-linear and logistic regression, we have chosen the latter within SPSS-X LOGISTIC REGRESSION. This procedure yields regression-like coefficients, which allow an assessment of the relevance of a particular predictor, and has the advantage of being able to work with polytomous as well as dichotomous dependent variables. Judgements of adequacy of the model(s) will be based on substantive grounds and its ability to

replicate findings from past research (where a direct comparison is possible). We will also consider the significance of parameter estimates and the size of standardized residuals.

Three models of family household, non-family household and all household are fit with respect to each age-sex category, single sex category and all respondents.

III. Results of Logistic Regression Analysis

Age-sex specific headship analyses are conducted by family, non-family and all household respectively. When there is a mention of association or relationship, 'statistical significant' is assumed. Unless otherwise explained explicitly, an expected relationship should reach statistical significance at least at 0.1 level noted. In our table presentation, relationships that attain significance at 0.05 and 0.001 are also specially noted.

3.1 <u>Females 60 and over</u>

For all three types of headship, being married is associated with lower odds of being a household head. While living in detached or semi-detached houses are related to higher odds of being a family household head, it is however related to lower odds of being a non-family and all household head (see Table 3.1. In the parentheses are reference categories for each covariate in all the tables here and after).

For the family household model, being in the labour force and living in Ontario, all else being equal, increase the odds of being a family household head.

For the all household model, lower education is associated with lower odds of being a household head, as is also the case with non-family head. Moreover, disability also reduces the possibility of being a head: multiplicative B (B exponential) indicates that the odds ratio of being a head for older women with at least one severe disability against their counterparts reporting no disability is less than 82 percent.

| Table 3.1 | |
|--|-----|
| LOGIT ANALYSIS OF HOUSEHOLD HEADSHIP, CANADA (GSS1), 1 | 985 |
| Females 60 & over (N=2068, Valid case N=2000) | |

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| | | Coet | fficients o | on odds | of | |
|---|------------------------|--------------------|----------------------------|-------------------|--------------------|-----------------|
| Predictor | Famil; househo B | y old Exp(B) | Non-fami household B | ly d Exp(B) | All househ B | old Exp(B) |
| Education Some secondary Secondary grad (Univ. degree) | 023 .017 | .975 1.017 | 359** .132 | .698 1.141 | 369* .171 | * .698 1.187 |
| Marital Status Now married (Not married now) | 543*** | .581 | -2.412*** | .090 | -2.062* | **.127 |
| Income \$0-\$6000 \$6001-\$25000 (\$25001-high) | .006 | 1.006 | 083 | .920 | 086 | .918 |
| Disability 1 severe or more (Not disable) | 166 | .848 | 092 | .912 | 199* | .819 |
| Kin 0 - 2 kin 3 - 5 kin (6 or more kin) | 242 265 | .785 .767 | .181 .013 | 1.199 1.013 | .029 167 | 1.029 .846 |
| Dwelling Detached/Semi (Other types) | .352** | 1.422 | 578*** | .561 | 412** | * .662 |
| Labour force statu Un/employed (Non-labour force | 1s .395** e) | 1.485 | 050 | .951 | .339* | 1.404 |
| Region Rest of Canada (Ontario) | 290** | .749 | .079 | 1.082 | 115 | .892 |
| Constant - | -2.559*** | | 1.272*** | | 035 | |
| -2 Log likelihood Model Chi-square df | 563. 43. 10 | 034 272 | 705. 726. 10 | 185 410 | 760. 741. 10 | 111 066 |

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*** p <.001 ** p < .05 *p < .1

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3.2 Males 60 and over

Table 3.2 shows the results of logistic analysis for males 60 and over. It has been found that types of dwelling, marital and work status are associated with the probabilities of being a household head. While being married, participating in the labour force and living in the detached or semi-detached house are associated with higher odds of being a family household head, these factors are related to lower odds of being a non-family household head. The effect of the latter two appear to cancel out in all household model, showing no statistically significant relationship between work status and types of dwelling with household headship in general.

With regard to the economic predictor, lower income decreases the odds of being household heads in general, and family household heads in particular, but lower income bears no significant relationship with the probability of becoming a non-family household head. We can speculate that lower income may cause older men to be less eligible to maintain their own household, but the lower income 'effect' disappear when they have fewer other options (e.g. fewer kins are available) but to live alone, thus forming non-family households. As for the presence of nuclear kin, older men with fewer than two kin are more likely to be household heads, particularly non-family household heads perhaps by living alone. Besides, education does not appear to be a sensitive predictor for household headship in the case of older males.

| | | Coet | fficients (| on odds | of | |
|---|----------------------|--------------------|----------------------------|-------------------|--------------------|---------------|
| Predictor | Famil househ B | y old Exp(B) | Non-fami household B | ly d Exp(B) | All househ B | old Exp(B) |
| Education Some secondary Secondary grad (Univ. degree) | 004 .322 | .996 1.379 | .088 438 | 1.092 .645 | 003 005 | .997 .995 |
| Marital Status Now married (Not married now) | 2.731***) | 15.350 | -2.803*** | .061 | .624*** | 1.866 |
| Income \$0-\$6000 \$6001-\$25000 (\$25001-high) | 283** | .754 | 138 | .871 | 338** | .713 |
| Disability (1) 1 severe or more (Not disable) | .263 | 1.301 | 341 | .711 | 011 | .989 |
| Kin 0 - 2 kin 3 - 5 kin (6 or more kin) | 031 .111 | .970 1.117 | .632** 229 | 1.882 | .546** 164 | 1.726 .849 |
| Dwelling Detached/Semi (Other types) | .375** | 1.454 | 361* | .697 | 085 | 1.089 |
| Labour force state Un/employed (Non-labour force | us .494** e) | 1.640 | 370* | .691 | .228 | 1.256 |
| Region Rest of Canada (Ontario) | .078 | 1.081 | 158 | .854 | 059 | .942 |
| Constant | .032 | | -1.763*** | | 2.410** | * |
| -2 Log likelihood Model Chi-square df | 436. 573. 10 | .010 .795 | 261. 550. 10 | 084 026 | 478. 29. 10 | 293 749 |

Table 3.2LOGIT ANALYSIS OF HOUSEHOLD HEADSHIP, CANADA (GSS1), 1985Males 60 & over (N=1684, Valid case N=1631)

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*** p <.001 ** p < .05 *p < .1

3.3 Females Aged 30-59

For middle-aged women, being married is associated with lower odds of becoming any types of household head. As a matter of fact, none of the coefficients in family household headship model, except for marital status, attains significance at our highest criterion level of 0.1. This may be due in part to the "greater homogeneity of middle-aged women in respect to marital status and living arrangement -- the vast majority are married and live with spouse" (Burch and McQuillan, 1988, p. 25).

For all household and non-family household headship models, lower education, living in detached or semi-detached houses and residing in Ontario reduce the odds of being a head for the two types of household. For all household model alone, three more relationships appear to be significant. A middle-aged woman in the labour force and with fewer than two kin is more likely, other things being equal, to be a household head, whereas lower income reduces the odds of obtaining headship.

| Table 3.3 | | | | | | | | | | |
|-----------|----------|-----|-----|----------|-----|---------|------|-------|---------|------|
| LOGIT | ANALYSIS | OF | HO | USEHOLD | HE. | ADSHIP, | CANA | ADA | (GSS1), | 1985 |
| | Female | 30- | -59 | (N = 24) | 57, | Valid | case | N = 2 | 2359) | |

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| | | Coefficients on odds of | | | | | | |
|---|----------------------|-------------------------|------------------------------|-------------------|-----------------------|---------------|--|--|
| Predictor | Famil househ B | y old Exp(B) | Non-fami household B I | ly d Exp(B) | All househo B B | old Exp(B) | | |
| Education Some secondary Secondary grad (Univ. degree) | .014 .107 | 1.014 1.113 | 312** .054 | .732 1.056 | 147* .123 | .864 1.131 | | |
| Marital Status Now married (Not married now | 736***) | .479 | -2.274*** | .103 | -1.629** | **.196 | | |
| Income \$0-\$6000 \$6001-\$25000 (\$25001-high) | 116 .129 | .891 1.137 | 199 206 | .819 .814 | 204** 002 | .816 .998 | | |
| Disability (1) 1 severe or more (Not disable) | .194 | 1.214 | 218 | . 804 | .147 | 1.159 | | |
| Kin 0 - 2 kin 3 - 5 kin (6 or more kin) | .085 047 | 1.089 .954 | .242 .035 | 1.274 1.036 | .204** 033 | 1.227 .968 | | |
| Dwelling Detached/Semi (Other types) | 093 | .911 | 549*** | .578 | 388**> | ⊧ .679 | | |
| Labour force stat Un/employed (Non-labour forc | us .045 e) | 1.046 | .189 | 1.208 | .122* | 1.129 | | |
| Region Rest of Canada (Ontario) | .026 | 1.027 | .278** | 1.320 | .155** | 1.168 | | |
| Constant | -1.081*** | : | -2.860*** | | 003 | | | |
| -2 Log likelihood Model Chi-square df | 2118, 190. 11 | 739 029 | 730. 751. 11 | 172 537 | 1944. 952. 11 | 094 298 | | |

*** p <.001 ** p < .05 *p < .1

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3.4 Males Aged 30-59

For Males aged 30-59, marital status, types of dwelling, work status and region of residence appear to be associated with their probabilities of being a household head.

While being married, participating in the labour force and living in the regions other than Ontario are related to higher odds of being a household head, specifically family household head. Living in a detached or semi-detached house increases the odds of being a family household head, this factor is related to lower odds of being a household head in general, and non-family household head in particular. Our interpretation is that a middle-aged man is more apt to become a family household head if he owns a detached or semi-detached house (presumably with his family), but is less likely to obtain household or non-family household if he still resides in his parent-owned house. In addition, being married is associated with lower odds of being a non-family household head, as would be expected. The coefficients of income factor, however, does not attain significance at our criterion level in any of the three model for this age-sex category, although the negative association of lower income with the probability of headship is suggested in all these models.

| | | | Tabl | <u>e 3.4</u> | | | | |
|-------|----------|-------|------------|--------------|-------|--------|---------|------|
| LOGIT | ANALYSIS | OF HO | USEHOLD | HEADSHIF | , CAN | ADA | (GSS1), | 1985 |
| | Male | 30-59 | (N = 2050) |), Valid | case | N = 19 | 989) | |

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| | Coefficients on odds of | | | | | | | | |
|---|---------------------------------|---------------|---------------------------|-------------------|-----------------------------|---------------|--|--|--|
| Predictor | Family household B Exp(B) | | Non-fami househol B | ly d Exp(B) | All household B Exp(B | | | | |
| Education Some secondary Secondary grad (Univ. degree) | .014 051 | 1.015 .951 | 137 .112 | .872 1.119 | 050 004 | .951 .996 | | | |
| Marital Status Now married (Not married now) | 2.209*** | 9.105 | -2.394*** | .091 | .833*** | 2.301 | | | |
| Income \$0-\$6000 \$6001-\$25000 (\$25001-high) | 024 .041 | .976 1.041 | 145 .020 | .865 1.020 | 116 .043 | .891 1.044 | | | |
| Disability (1) 1 severe or more (Not disable) | 114 | .893 | 123 | .885 | 150 | .861 | | | |
| Kin 0 - 2 kin 3 - 5 kin (6 or more kin) | .041 150 | 1.042 .860 | .041 .072 | 1.042 1.075 | .087 118 | 1.091 | | | |
| Dwelling Detached/Semi (Other types) | .172** | 1.188 | 600*** | ⊧ .549 | 246** | .782 | | | |
| Labour force state Un/employed (Non-labour force | us .479*** e) | 1.614 | 050 | .951 | .384** | 1.467 | | | |
| Region Rest of Canada (Ontario) | .131** | 1.140 | .101 | 1.107 | .168** | 1.183 | | | |
| Constant | 546** | | -2.053*** | * | 1.242** | * | | | |
| -2 Log likelihood Model Chi-square df | 1594. 1175. 11 | 910 125 | 777 1000 11 | .466 .783 | 1724. 157. 11 | 457 714 | | | |

*** p <.001 ** p < .05 *p < .1

3.5 Females Aged 15-29

For younger females, earning lower income and living in detached or semi-detached houses (presumably remaining in parental residence) are significantly related to lower odds of being any types of household head. There is also a significant relationship between being married and lower odds of becoming household heads, particularly non-family household heads. While lower education is associated with lower odds of becoming non-family household head, but it is related to higher odds of becoming family household head (both against older age group of women). Lower education in general has no bearing on overall probability of becoming a household head.

Besides, participating in the labour force is related to higher odds of becoming a household head, especially non-family household head, although this relationship does not attain significant level for family household model.

| Table 3.5 | | | | | | | | | |
|-----------|----------|---------|----------|---------|----------|---------|------|--|--|
| LOGIT | ANALYSIS | OF HOUS | SEHOLD H | EADSHIP | , CANADA | (GSS1), | 1985 | | |
| | Female | 15-29 | (N=1580) | , Valid | case N= | 1533) | | | |

| • | | Coet | fficients | on odds | of | |
|---|---------------------------------|---------------|-------------------------------------|---------------|--|-----------------|
| Predictor | Family household B Exp(B) | | Non-family household B Exp(B) | | All household B Exp(B) | |
| Education Some secondary Secondary grad (Univ. degree) | .442** 138 | 1.556 | 420** .047 | .657 1.048 | 3.02E-0 060 | 6 1 .942 |
| Marital Status Now married (Not married now | .329***) | 1.390 | -1.208*** | .299 | 435** | * .647 |
| Income \$0-\$6000 \$6001-\$25000 (\$25001-high) | 540** .321* | .583 1.379 | 843*** 129 | .431 .879 | 789** .107 | * .454 1.113 |
| Disability (1) 1 severe or more (Not disable) | 026 | 1.026 | 196 | .822 | 090 | .914 |
| Kin O - 2 kin 3 - 5 kin (6 or more kin) | 198 084 | .820 .920 | 327 .358** | .721 1.431 | 305 .132 | .737 1.141 |
| Dwelling Detached/Semi (Other types) | 470*** | .625 | 927*** | .396 | 786** | * .456 |
| Labour force stat Un/employed (Non-labour forc | us .159 e) | 1.173 | .267** | 1.306 | .237** | 4 1.267 |
| Region Rest of Canada (Ontario) | .058 | 1.059 | 029 | .971 | 003 | .997 |
| Constant | -2.525*** | | -3.028*** | | -1.658* | *** |
| -2 Log likelihood Model Chi-square df | 891. 92. 11 | 125 509 | 883. 288. 11 | 738 973 | $\begin{array}{r}1441\\248\\11\end{array}$ | .097 .196 |

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3.6 <u>Males Aged 15-29</u>

For men in the youngest group, education and income appear to be important predictors for headship. Lower income is related to lower odds of acquiring any types of household headship and lower education reduces the odds of becoming household heads, particularly non-family household heads. In addition, living in other types of houses, participating in the labour force and being married are associated with higher odds of being a household, specially family household head. In fact, it is obvious that being married is highly related to becoming a family household head.

Considering the regions which the respondents are living in, it seems that living in other parts of Canada slightly increases the odds of becoming household head, especially family household head.

| | | | Table | <u>e 3.6</u> | | | |
|-------|----------|--------|-----------|--------------|----------|---------|------|
| LOGIT | ANALYSIS | OF HOU | JSEHOLD I | HEADSHIP, | CANADA | (GSS1), | 1985 |
| | Male 1 | 5-29 | (N=1361) | , Valid c | ase N=13 | 17) | |

| | | Coet | fficients o | on odds | of | |
|---|------------------------|---------------|-------------------------------------|---------------|-----------------------------|-----------------|
| Predictor | Family househo B | old Exp(B) | Non-family household B Exp(B) | | All household B Exp(B | |
| Education Some secondary Secondary grad (Univ. degree) | 090 .034 | .914 1.034 | 848*** .206* | .429 1.229 | 517*** .083 | • .597 1.086 |
| Marital Status Now married (Not married now | 4.020***;) | 55.678 | -1.253*** | .286 | 1.406*** | 4.079 |
| Income \$0-\$6000 \$6001-\$25000 (\$25001-high) | 717*** 096 | .488 .908 | 646*** 075 | .524 .928 | 893*** 127 | <.409 .882 |
| Disability (1) 1 severe or more (Not disable) | 1.525 | 4.597 | -1.364 | .256 | 014 | .986 |
| Kin 0 - 2 kin 3 - 5 kin (6 or more kin) | .084 143 | 1.088 .867 | 112 027 | .894 .974 | 056 080 | .945 .924 |
| Dwelling Detached/Semi (Other types) | 190* | .827 | 927*** | .396 | 770**> | ⊧ .463 |
| Labour force stat Un/employed (Non-labour force | us .721*** e) | 2.057 | .186* | 1.204 | .416*** | 1.517 |
| Region Rest of Canada (Ontario) | .248** | 1.281 | .102 | 1.108 | .175** | 1.191 |
| Constant | -1.751 | | -3,991 | | .033 | |
| -2 Log likelihood Model Chi-square df | 551. 1494. 11 | 625 283 | 1085. 351. 11 | 815 242 | 1361. 1087. 11 | 931 337 |

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3.7 Females as a Whole

When entire female model is examined, age, marital and work status are found to be significantly related to the likelihood of becoming a household head. While the younger women have lower odds of obtaining any types of household heads, middle-aged women are more likely than women in other age groups to become household heads, especially family household heads. Older women, however, have higher odds than their younger counterparts to obtain nonfamily household headship.

For all age groups of women, being married, living in detached or semi-detached house and earning lower income reduce the odds of becoming any types of heads. Moreover, labour force participation is found to be positively related to likelihood of being a household head, whatever types of household.

Lower education appears to be associated with lower odds of obtaining a household, especially non-family household headship, but the coefficient of education does not attain statistic significance even at our highest criterion level of 0.1 for the family household model.

| Table 3.7 | | | | | | | | | |
|-----------|----------|-----|-----------|-----------|---------|---------|------|--|--|
| LOGIT | ANALYSIS | OF | HOUSEHOLD | HEADSHIP, | CANADA | (GSS1), | 1985 | | |
| | Femal | Le, | (N=6105, | Valid cas | e N=589 | 2) | | | |

| | Coefficients on odds of | | | | | |
|---|---------------------------------|----------------|-------------------------------------|----------------|------------------------------|-----------------------------|
| Predictor | Family household B Exp(B) | | Non-family household B Exp(B) | | All household B Exp(B) | |
| Education Some secondary Secondary grad (Univ. degree) | .068 .044 | 1.071 1.045 | 370*** .042 | .691 1.043 | 153** .059 | .858 1.060 |
| Marital Status Now married (Not married now | 354***) | .702 | -2.000*** | .135 | -1.291* | **.275 |
| Income \$0-\$6000 \$6001-\$25000 (\$25001-high) | 233** .197** | .792 1.218 | 514*** 064 | .598 .938 | 460** .171** | * .631 1.187 |
| Disability (1) 1 severe or more (Not disable) | .030 | 1.031 | 075 | .927 | 027 | .974 |
| Kin O - 2 kin 3 - 5 kin (6 or more kin) | .007 131** | 1.007 .877 | .123 .083 | 1.131 1.087 | .099 075 | 1.105 .928 |
| Dwelling Detached/Semi (Other types) | 193*** | .825 | 680*** | .507 | 545** | * .580 |
| Labour force stat Un/employed (Non-labour forc | us .131** :e) | 1.140 | .209** | 1.233 | .185** | *1.203 |
| Region Rest of Canada (Ontario) | 010 | .991 | .106* | 1.111 | .065 | 1.067 |
| Age 15-29 30-59 (60 & over) | 427*** .724*** | .653 2.063 | -1.342*** 384*** | .261 .681 | -1.342* .431*** | < **. 261 < 1.538 |
| Constant | -2.077*** | | -2.141*** | | 674 | 9*** |

| -2 Log Likelihood Model Chi-square df | 3750.785 244.370 13 | $2398.170 \\ 2132.324 \\ 13$ | $\begin{array}{r} 4447.540 \\ 1883.202 \\ 13 \end{array}$ |
|---|---------------------------|------------------------------|---|
| | | | |

*** p <.001 ** p < .05 *p < .1

In the parentheses are reference categories for each covariate.

3.8 Males as a whole

When men in all age groups are put together, the significant relationship have been found that lower income and younger in age are associated with lower odds of becoming a household head across all types. Being married and participating in the labour force, on the other hand, have been found to be significantly related with higher odds of becoming a household head, specifically family household head.

At the overall level, number of nuclear kin appears to be significantly associated with the odds of obtaining household headship. While fewer than two kin increase the odds of becoming a household head, as might be expected, men with three to five kin has lower odds to become a household head.

| Table 3.8 | | | | | | | | |
|-----------|----------|----|-----------|------------|--------|---------|------|--|
| LOGIT | ANALYSIS | OF | HOUSEHOLD | HEADSHIP, | CANADA | (GSS1), | 1985 | |
| | Mal | e, | (N=5095, | Valid case | N=4937 |) | | |

| | Coefficients on odds of | | | | | | |
|---|-------------------------|---------------------------------|------------------|-------------------------------------|------------------|------------------------------|--|
| Predictor | Family househo B | Family household B Exp(B) | | Non-family household B Exp(B) | | All household B Exp(B) | |
| Education Some secondary Secondary grad (Univ. degree) | 031 017 | .970 .983 | 360*** .059 | .698 1.061 | 206** 005 | .813 | |
| Marital Status Now married (Not married now) | 2.592*** | 13.356 | -2.255*** | .105 | 1.091***; | 2.978 | |
| Income \$0-\$6000 \$6001-\$25000 (\$25001-high) | 294*** .108 | .745 1.114 | 516*** .068 | .597 1.070 | 507*** .104* | .602 1.109 | |
| Disability (1) 1 severe or more (Not disable) | .083 | 1.087 | 058 | .943 | 036 | .965 | |
| Kin O - 2 kin 3 - 5 kin (6 or more kin) | .038 112 | 1.038 .894 | .147 -:083 | 1.158 .921 | .144* 136** | 1.155 .873 | |
| Dwelling Detached/Semi (Other types) | .062 | 1.064 | 740*** | .477 | 495*** | .610 | |
| Labour force statu Un/employed (Non-labour force | s .557***) | 1.746 | .093 | 1.098 | .380*** | 1.462 | |
| Region Rest of Canada (Ontario) | .171** | 1.187 | .082 | 1.085 | .164*** | 1.178 | |
| Age 15-29 - 30-59 (60 & over) | 1.124*** .073 | .325 1.075 | -1.398*** 013 | .247 .987 | -1.560** .020 | *.210 1.021 | |
| Constant | .781*** | | -2.042*** | | 1.3708 | *** | |

| -2 Log Likelihood Model Chi-square df | $2666.442 \\ 4593.521 \\ 13$ | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 3723.929 2719.134 13 |
|---|------------------------------|--|----------------------------|
| ······································ | | | |

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In the parentheses are reference categories for each covariate.

3.9 The Complete Models

Finally we look at the complete models involving three age groups and both sexes. Most of the relationships between a predictor and the probability of becoming a household head appear to be significant, showing a relatively satisfactory degree of goodness of fit for the complete models.

Demographic factors, such as younger age, female and married are associated with lower odds of being a household head. Socioeconomic factors, including lower education, lower income, detached or semi-detached housing residence, and non-labour force participation have a significant bearing on lower probabilities of obtaining household headship.

There is no unified effect of number of kins on the likelihood of household headship attainment. While 'medium' number of kin [3-5] reduces the odds of obtaining household headship, especially family household headship, individuals with fewer than two kin have a higher odds of becoming non-family household heads.

Lastly, the regional difference in household headship status seems to indicate that respondents living in the rest of Canada have a higher odds of obtaining household headship, although this relationship does not reach statistic significance at the criterion level of 0.1 for family household model.

Table 3.9

LOGIT ANALYSIS OF HOUSEHOLD HEADSHIP, CANADA (GSS1), 1985 (N=11200, Valid case N=10829)

| | Coefficients on odds of | | | | | |
|---|-------------------------|--------------------|-------------------------------------|----------------|------------------------------|--------------------------|
| Predictor | Famil: househo B | y old Exp(B) | Non-family household B Exp(B) | | All household B Exp(B) | |
| Education Some secondary Secondary grad (Univ. degree) | .062 002 | 1.064 .998 | 375*** .051 | .687 1.052 | 110** 003 | .896 .997 |
| Marital Status Now married (Not married now | 1.278***) | 3.589 | -2.149*** | .117 | 177*** | .838 |
| Income \$0-\$6000 \$6001-\$25000 (\$25001-high) | 402*** .107** | .669 1.113 | 491*** 002 | .612 .998 | 687*** .076** | 503 . 1.079 |
| Disability (1) 1 severe or more (Not disable) | .044 | 1.045 | 065 | .937 | .019 | 1.019 |
| Kin 0 - 2 kin 3 - 5 kin (6 or more kin) | 022 091** | .978 .913 | .136** .005 | 1.145 1.005 | .066 094** | 1.068 |
| Dwelling Detached/Semi (Other types) | 121*** | .886 | 704*** | .495 | 545*** | •.580 |
| Labour force stat Un/employed (Non-labour forc | us .276*** e) | 1.318 | .161** | 1.174 | .303*** | 1.354 |
| Region Rest of Canada (Ontario) | .046 | 1.048 | •.093** | 1.098 | .092*** | 1.097 |
| Age 15-29 30-59 (60 & over) | 824*** .260*** | .439 1.297 | -1.378*** 217*** | .252 .805 | -1.580** .192*** | * *. 206 1.212 |

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| Sex Male | 1 | . 374*** 3.952 | .131** | 1.140 | 1.108***3.0 | 28 |
|-------------------------------|---------------------|----------------------------|----------------------|------------|-----------------------------|----|
| Constant | 1 | .371*** | -2.131*** | | .4778*** | |
| -2 Log Lil Model Chi df | kelihood -square | 8104.591 5916.942 14 | 4703. 3879. 14 | 450 142 | 10150.814 4890.261 14 | |

*** p <.001 ** p < .05 *p < .1

In the parentheses are reference categories for each covariate.

IV. <u>A Brief Summary</u>

This study is based on 1985 General Social Survey data to investigate possible determinants or predictors of household headship. A good understanding of household headship would provide important insights into household formation, living arrangement and housing demand especially when family and non-family households are distinguished.

The first crucial step in this study is to recognize family and non-family household heads in the data base. After considerable experimentation in light of census definition of family, household and household head (later on termed as household maintainer, reference person or person number 1, etc.), we have identified the headship in the data set as close to reality as possible.

Economic and demographic literature on household formation specifies "multivariate behavioural frameworks containing individual and collective variables" to predict headship rates. While economic factors [such as income and housing costs] are central to the explanation and forecasting of headship, demographic research on household formation behaviour [for instance, marital status, living arrangement, availability of nuclear kin] among specific sub-groups has been especially noteworthy (Burch & Skaburskis, 1992, pp. 28-30). Informed by the theoretical

orientations, we have entered relevant demographic and economic variables in multivariate regression for each of the age-sex specific models.

As has been shown in separate model analysis, demographic variables such as age, sex, marital status and number of unclear kin are, to varying degrees, related to the likelihood of obtaining household headship, although the relationship between number of nuclear kin and headship status does not reach statistic significance until all-age group models are examined. Socioeconomic factors, including income, work status and education, are found to be associated with individual's household headship status. Physical and environmental variables [types of dwelling and region of residence] are also proven to be important predictors for headship. The coefficients of disability in most of the subgroup models, however, do not attain significance at our highest criterion level of 0.1.

In general, this exercise is intended to be exploratory rather than conclusive. Perhaps better specification of the models and further refinement of the variables are needed. Nevertheless, findings generated from this study do suggest the importance of behavioural determinants on headship status.

Reference

- Burch, T. K. & McQuillan, K. (1988). <u>One-adult and two-earner</u> <u>households and families: Trends, determinants and</u> <u>consequences</u>. Population Studies Centre, University of Western Ontario, London, ON.
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Burch, T. K. & Skaburskis, A. (1992). <u>Determinants and predictors</u> of household headship: A review of literature on behavioural <u>models</u>. Unpublished manuscript, Working Paper #1. The University of Western Ontario, Population Studies Centre.