Component of Statistics Canada Catalogue no. 11-008-X
Canadian Social Trends

Article

Quality of personal networks: Does living alone make a difference?

by Mireille Vézina

November 30, 2011

Statistics Canada Statistique Canada

Canada

CST Standard symbols for Statistics Canada

The following standard symbols are used in Statistics Canada publications:

.	not available for any reference period
..	not available for a specific reference period
…	not applicable
0	true zero or a value rounded to zero
0^s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
^{p}	preliminary
^{r}	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
^{E}	use with caution
F	too unreliable to be published

Quality of personal networks: Does living alone make a difference?

by Mireille Vézina

Introduction

Family, friends and acquaintances play a fundamental role in our lives. When going through life changes,[1] the people in our personal networks provide tangible and psychological support. They give advice, sometimes help with everyday tasks, and provide opportunities to exchange information and resources.[2] In this article, the term "personal networks" refers to all the social relationships created and maintained in various contexts, such as family, neighbourhood, work, leisure or other activities. Relationships in virtual social networks are excluded.

Research has shown that social relationships or "social capital" are beneficial, and that having good networks of close friends and relatives is associated with better physical and mental health.[3] Some studies have even suggested that long-term mortality may be reduced.[4] Others have found that networks of acquaintances can play a vital role in finding a job or moving off social assistance[5] and in increasing employment earnings.[6]

Various federal and international organizations have recognized the potential of personal networks in complementing public policy development. Personal networks can reduce poverty or social exclusion, increase neighbourhood safety, provide care and assistance to sick relatives, boost participation in the labour market, and foster the social integration of immigrants.[7]

Personal networks can be especially important to people who live alone, since they often have to bear the cost of life's uncertainties on their own. Simply having a spouse or partner can help expand someone's personal networks, thereby improving their well-being. Some studies have even found that people who are part of a couple—and especially men—are happier and less likely to have mental or physical health problems, and have a longer life expectancy.[8] Since people living alone are much more likely to have lower incomes than those living in a couple,[9] support from their personal networks is often critical.

In this article, the personal networks of 25- to 64-year-old adults who live alone are compared with those of adults living in a couple, with or without children. Preliminary analyses revealed that the presence of children has little effect on the composition of personal networks. Therefore, in this analysis, a separate category based on the presence of children is not used (except in Table 1 for information only). The same is true for the marital status of people who live alone: in terms of the size of—or satisfaction with—their personal networks, single people who have never been married are not noticeably different from those who are divorced or separated.

The article begins by describing the personal networks of people living alone or in a couple, with a focus on three aspects: 1) the network size or scope, as measured by the number of close relatives, friends and acquaintances; 2) the frequency of contact; and 3) the extent of a feeling of social loneliness, that is, the perception of being surrounded or not by trustworthy people on whom one can rely in times of need.

These three aspects are then combined to create an overall indicator of personal network quality. Regression analysis is used to determine the degree to which the personal networks of people living alone differ from those of people living in a couple when other factors are taken into account, such as age, sex, education, income, dwelling status, employment, place of residence, place of birth and participation in organized activities.

What you should know about this study

Data source

This article uses data from Statistics Canada's 2008 General Social Survey (GSS), which collected data on social networks. Approximately 20,000 Canadians aged 15 and over who live in private homes in the ten provinces took part in the survey.

Study population

The study population includes people aged 25 to 64 who live alone or in a couple, with or without children. The sample consisted of 15,600 persons representing 15.8 million Canadians.

This age range was chosen because young adults under age 25 may not have completed their education and their sociability profile may differ once they enter the labour market. As well, many people aged 65 or over are retired or may live alone for different reasons than younger people (such as widowhood). Limiting the age group provides a more homogeneous study population. For more information on the personal networks of seniors, see "Senior Women" in *Women in Canada: A Gender-based Statistical Report*, 2010-2011, Statistics Canada Catalogue no. 89-503-X.

Definitions

Various aspects of personal networks are examined in this study: **network size or scope** (the number of people in them), **frequency of contact** (face-to-face and telephone contact) and **feeling of social loneliness** (the perception of being surrounded or not by trustworthy people on whom one can rely in times of need).

Network size or scope: A scale was created using information on the number of close relatives, close friends and acquaintances, then respondents were divided into four groups of similar size (quartiles). The scale measures the size of personal networks. Respondents with the smallest personal networks were placed in the lowest quartile.

Frequency of contact: Frequency of contact is measured on a scale that combines face-to-face and telephone contact with close relatives on one hand, and with friends and acquaintances on the other.

Social loneliness indicator: Social loneliness is measured on a scale that combines responses to three statements in the GSS: "There are plenty of people I can rely on when I have problems," "There are many people I can trust completely," and "There are enough people I feel close to." The possible responses were "no" (0 points), "more or less" (0.5 points) and "yes" (1 point). To create the social loneliness scale, the points for each statement were totalled (0, 0.5 or 1). Respondents scoring 1.5 points or less were considered to have a strong degree of social loneliness, because they had answered "no" or "more or less" to all three statements. Analyses have shown that a loneliness scale created in this way, using the three variables, is valid and reliable.[1]

Overall personal network quality: To examine the profile of the population having personal networks of poor or good quality, the three indicators above (network size or scope, frequency of contact and degree of social loneliness) were combined. These combined variables were then used to create a scale of overall personal network quality.

The population was divided into quartiles, with those in the lowest quartile considered as having poor quality personal networks and those in the upper quartile as having good quality ones.

Statistical models

Two logistic regression models were used to determine the degree to which people living alone were more likely than those in a couple to have poor or good quality personal networks, while accounting for the potential effects of other factors.

In the first model, the dependent variable was the likelihood of having poor quality personal networks and, in the second model, the likelihood of having good quality ones.

The results of the models were analyzed using odds ratios. These allow the researcher to measure the degree to which living alone or in a couple is linked to having poor or good quality personal networks, when other factors are held constant (that is, controlling for the effects of other variables that may be associated with the likelihood of having poor or good quality social networks).

Data limitations

Personal networks change over time, depending on life cycle stages and transitions. The information collected by the GSS describes personal networks at a specific time in the lives of respondents. Therefore, it is impossible to determine the impact of status changes—for example, moving from living in a couple to living alone—on the composition of someone's personal networks. Furthermore, it is not possible to determine from the data how the length of time spent living alone or in a couple affects someone's personal networks.

What you should know about this study (continued)

People who have lived alone for many years may have larger personal networks than those who have done so for a short period as a result of a life event such as a relationship breakdown.

1. de Jong Gierveld, Jenny and Theo van Tilburg. 2006. "A six-item scale for overall emotional and social loneliness: confirmatory tests on survey data." *Research on Aging*. Vol.28, no. 5.

Smaller family networks for people living alone

Family is the first source of social bonds. Although family ties are "inherited," they are the foundation of social relationships, solidarity and mutual support.

According to the 2008 GSS, people living alone were less likely than those living in a couple to say that they felt close to a sizable number of their relatives (feeling close meaning that they felt at ease and could speak freely with them, and could call on them for help). In 2008, 70% of people aged 25 to 64 who lived alone said that they felt close to 3 or more relatives, compared with 81% of those living in a couple (Table 1). People living alone were also more likely to have fewer relatives (2 or less) to whom they felt close (30% of people living alone, compared with 19% of those living in a couple).

People living in a couple usually have access to their spouse or partner's family network in addition to their own, which increases their opportunities for establishing close ties. From this perspective, people living in a couple would appear to have an "advantage" when it comes to the potential for developing meaningful relationships with relatives.[10]

Persons living alone have approximately the same number of close friends . . .

Friendships vary in their intensity. The GSS distinguishes between close friends and acquaintances. Close friends are those with whom one feels at ease and can speak freely, and on whom one can call for help. In short, they are the most trusted friends who provide personal and emotional support in times of need. As far as the number of close friends is concerned, there was little difference between the personal networks of people living alone and those of people living in a couple—in both groups, a slight majority (55%) had 3 to 8 close friends. However, people living in a couple (19%) were slightly more likely than those living alone (15%), to report having 9 or more close friends (Table 1).

. . . but have fewer acquaintances

Acquaintances are also important because they help reduce social isolation and may provide more focused or specialized help. People living alone were less likely than those living in a couple to have a large number of acquaintances outside their circle of close friends. Specifically, 44% of those living alone had 20 or more acquaintances, compared with 52% of those living in a couple. People living alone were also slightly more likely to have relatively few acquaintances. Having a spouse or partner may increase a person's chances of meeting new acquaintances.

To measure the overall size of personal networks, a scale was created that combined data on the number of close relatives, close friends and acquaintances, which was then divided into quartiles.[11] The results show that 31% of those living alone had a small overall network, compared with 21% of those living in a couple. At the opposite end of the scale, 25% of those living in a couple had a very large overall network, compared with 16% of those living alone.

People who live alone are in more frequent contact with their friends

Regardless of the size of someone's personal networks, time constraints may limit how frequently they keep in contact. Someone with children and a spouse or partner at home has different schedules and responsibilities than someone living alone. In fact, people living alone are in slightly more frequent contact with friends or acquaintances—81% of those living alone said that they met or phoned a friend at least once a week, compared with 77% of those living in a couple. The gap was wider in terms of daily contact: 30% of those living alone met or spoke with friends or acquaintances every day, compared with 21% of those living in a couple.

People living in a couple, while more likely to have large family networks, were not much different from those living alone in terms of how frequently they were in contact with close relatives. In fact, both groups were almost equally likely to meet or speak with close relatives at least once a week (Table 1).

Family status had little effect on people's satisfaction with their frequency of contact: approximately 85% of both those living alone and those living in a couple said that they were satisfied with how frequently they were in contact with relatives, friends and acquaintances.

Neighbours

Information collected through the GSS describes personal networks in general but does not provide details on ties to particular people in a network, except for neighbours.

Neighbours can provide certain types of practical, occasional help that relatives and friends cannot—in part because relatives and friends don't necessarily live in the same neighbourhood. Knowing the neighbours can also foster a sense of community. People living alone were more likely than those living in a couple to say that they didn't know anyone in their neighbourhood well enough to ask for a favour (20% versus 11%). People living alone were also less likely than those living in a couple to say that they could ask 6 or more people in their neighbourhood for a favour. One reason may be that those who live alone tend to reside in the central areas of large census metropolitan areas (CMAs), where people move more often.[1]

1. In 2006, the percentage of lone-parent families in central municipalities of CMAs (18.5%) was higher than the percentage in outlying municipalities (14.0%). The same pattern holds for persons living alone (Statistics Canada, 2006 Census of Population). Intra-metropolitan mobility flows primarily from central municipalities to outlying municipalities.

Percentage of people aged 25 to 64 living alone or in a couple, by number of people in the neighbourhood of whom the respondent could ask a favour

Number of people in the neighbourhood of whom the respondent could ask a favour	Family status	
	Living alone[1]†	Living in a couple[2]
	percentage	
None	19.6	10.5*
1 to 5	57.6	55.4*
6 or more	22.8	34.1*

† reference group
* statistically significant difference from reference group at $p < 0.05$
1. Includes lone-parents.
2. Includes couples with or without children.
Source: Statistics Canada, General Social Survey, 2008.

People living alone experience greater social loneliness

The size of one's personal networks may mean different things to different people. Some may have smaller than average networks and be completely satisfied with the number of members in them. Others may have many friends and acquaintances they are frequently in touch with yet still experience social loneliness.[1,2]

In general, people living alone are less likely to be satisfied with the size of their networks. Specifically, 79% of those living alone thought that there were enough people to whom they felt close, compared with 86% of those living in a couple. In addition, 74% of those living alone said that there were many people on whom they could rely on in times of need, compared with 80% of those living in a couple. Lastly, people living alone were less likely than those living in a couple to say that there were many people whom they trusted completely (58% versus 68%). These three aspects of how someone can perceive their personal networks were combined to create an indicator of social loneliness. The results showed that 21% of people living alone had a strong feeling of social loneliness, compared with 14% of those living in a couple (Table 1). For more information on the social loneliness indicator, see "What you should know about this study."

Quality of personal networks lower for people living alone

An overall indicator of personal network quality was created by combining the three aspects of personal networks described above, namely, network size (close relatives, friends and acquaintances), frequency of contact and feeling of social loneliness. The higher the score on this scale, the higher the quality of personal networks.

The percentage of people living alone who reported poor quality personal networks (32%) was higher than that of people living in a couple (23%) (Chart 1 and Table 2). Conversely, the percentage of people living alone who reported good quality personal networks (24%) was lower than that of people living in a couple (31%). As for networks of fair or average quality, there were only small differences between people living alone and those living in a couple.

A number of factors other than living alone or in a couple were associated with having poor quality personal networks, for example, having a lower income, renting, and living in a census metropolitan area. However, when these factors were held constant in a logistic regression

Table 1 Percentage of people 25 to 64 years of age, by personal network characteristics and family status, Canada, 2008

	Family status		Family status by presence of children			
			Living alone		Living in a couple	
	Living alone[1]†	Living in a couple[2]	Without children†	With children	Without children†	With children
	percentage					
Number of relatives to whom the respondent feels close						
None	5.3	2.6*	6.1	3.9[E]*	2.8	2.5
1 or 2	25.1	16.0*	25.3	24.6	16.8	15.4
3 or 4	26.7	22.7*	27.0	26.0	23.4	22.3
5 to 8	24.6	29.7*	24.2	25.3	29.0	30.1
9 or more	18.4	29.1*	17.4	20.2	28.0	29.7
Number of close friends						
None	6.2	5.1*	6.7	5.5[E]	5.2	5.1
1 or 2	23.4	21.3*	21.4	26.9*	20.8	21.6
3 or 4	28.0	27.2	27.4	29.2	27.2	27.2
5 to 8	27.3	27.5	28.7	25.0*	27.6	27.4
9 or more	15.0	19.0*	15.9	13.5	19.2	18.8
Number of acquaintances						
None	8.1	5.5*	8.1	8.1	5.9	5.2
1 to 7	22.1	17.5*	22.0	22.3	18.0	17.1
8 to 19	25.4	25.3	24.8	26.5	24.9	25.5
20 to 30	22.4	26.0*	22.5	22.3	25.5	26.3
More than 30	22.0	25.8*	22.7	20.9	25.7	25.9
Overall network size in quartiles						
Small	30.5	21.3*	30.5	30.5	21.7	21.0
Medium	28.3	26.0*	27.2	30.2	26.3	25.8
Large	24.9	27.5*	25.1	24.5	26.9	27.9
Very large	16.4	25.3*	17.2	14.9	25.2	25.3
Frequency of contact with relatives[3]						
Every day	26.0	22.6*	24.0	29.4*	23.6	22.0
Once a week or more	49.7	55.1*	51.5	46.5*	54.5	55.5
1 to 3 times per month	16.5	17.5	16.1	17.2	17.0	17.8
Not in the last month[4]	7.9	4.8*	8.4	6.9	4.9	4.7
Frequency of contact with friends and acquaintances[5]						
Every day	30.2	21.3*	29.7	31.0	19.4	22.5*
Once a week or more	50.9	55.5*	52.4	48.5	56.0	55.2
1 to 3 times per month	14.7	19.9*	13.7	16.4	21.2	19.1*
Not in the last month[6]	4.2	3.3*	4.3	4.2[E]	3.4	3.3
There are enough people to whom the respondent feels close						
Yes	79.2	86.1*	79.8	78.1	87.6	85.0*
More or less	10.8	9.0*	10.4	11.7	7.8	9.7*
No	10.0	5.0*	9.8	10.3	4.6	5.3
There are many people the respondent can rely on in times of need						
Yes	74.3	80.0*	74.5	73.7	82.4	78.3*
More or less	13.8	11.7*	13.2	14.6	10.5	12.6*
No	11.9	8.3*	12.3	11.6	7.1	9.2*

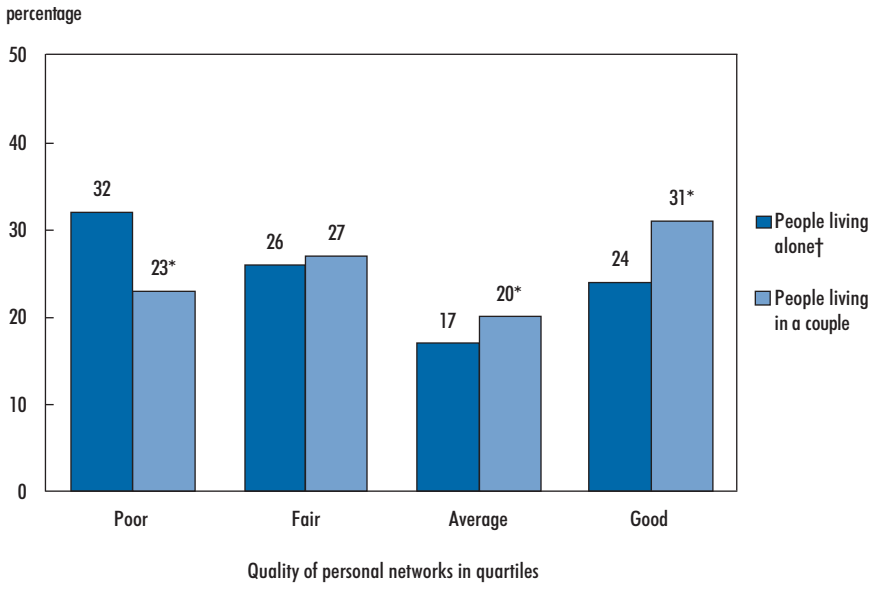
Table 1 Percentage of people 25 to 64 years of age, by personal network characteristics and family status, Canada, 2008 (continued)

	Family status		Family status by presence of children			
			Living alone		Living in a couple	
	Living alone[1]†	Living in a couple[2]	Without children†	With children	Without children†	With children
	percentage					
There are many people whom the respondent trusts completely						
Yes	58.2	67.5*	59.0	56.6	69.8	66.0*
More or less	20.7	18.0*	21.0	20.1	17.2	18.4
No	21.1	14.5*	20.0	23.3	13.0	15.6*
Feeling of social loneliness						
Slight	52.3	61.5*	52.7	51.7	64.5	59.6*
Moderate	26.7	24.2*	27.3	25.6	23.2	24.8
Strong	21.0	14.4*	20.0	22.7	12.4	15.6*

† reference group
* statistically significant difference from reference group at $p < 0.05$
1. Includes lone-parents.
2. Includes couples with or without children.
3. Contacts with relatives include face-to-face meetings and phone calls in the last month. This category excludes family members who live with the respondent.
4. Includes people with no living relatives.
5 Contacts with friends and acquaintances include face-to-face meetings and phone calls in the last month.
6. Includes people who declared having no friends or acquaintances.

Source: Statistics Canada, General Social Survey, 2008.

Chart 1 People living alone are more likely to have poor quality personal networks



† reference group
* statistically significant difference from reference group at $p < 0.05$
Source: Statistics Canada, General Social Survey, 2008.

model, people living alone remained more likely than those living in a couple to have poor quality personal networks (an odds ratio of 1.46) (Table 2).

As well, with all other factors held constant, living alone significantly reduced the probability of having good quality personal networks (Table 2).

Regression analysis also showed that being male, being over 35 or having a lower income increased the likelihood of having poor quality personal networks.

Conversely, owning one's home, being Canadian-born, having a job, living in a less populated area or participating in organized activities increased the likelihood of having a good quality personal network.

Table 2 Quality of personal networks by selected characteristics of people aged 25 to 64, Canada, 2008

	Quality of personal networks[1]					
	Poor[2]			Good[3]		
	percentage	odds ratio		percentage	odds ratio	
Family status						
Living alone	32*	1.54*	1.46*	24*	0.74*	0.78*
Living in a couple†	23	1.00	1.00	31	1.00	1.00
Sex						
Men	28*	....	1.85*	27*	...	0.68*
Women†	22	....	1.82	31	...	0.70
Age group						
25 to 34†	18	...	1.00	35	...	1.00
35 to 49	26*	...	1.82*	29*	...	0.70*
50 to 64	28*	...	1.93*	27*	...	0.65*
Education						
University degree†	22	...	1.00	32	...	1.00
Postsecondary other than university	24*	...	1.11	29*	...	0.92
High school diploma or less	30*	...	1.15	27*	...	0.97
Personal income						
Less than $15,000	31*	...	1.77*	24*	...	0.59*
$15,000 to $29,999	28*	...	1.62*	25*	...	0.62*
$30,000 to $49,999	25*	...	1.41*	28*	...	0.70*
$50,000 to $79,999	21	...	1.18	33	...	0.87
$80,000 or more†	19	...	1.00	35	...	1.00
Not stated	28*	...	1.54*	29*	...	0.80*
Tenure of dwelling						
Renter†	33	...	1.00	23	...	1.00
Owner	23*	...	0.81*	31*	...	1.21*
Employment						
Unemployed†	30	...	1.00	26	...	1.00
Employed	23*	...	0.76*	31*	...	1.16*
Place of residence						
Census metropolitan area (CMA) with population over 1 million†	28	...	1.00	26	...	1.00
Other CMA	22*	...	0.78*	31*	...	1.20*
Census agglomeration	23*	...	0.82*	32*	...	1.27*
Other area	22*	...	0.76*	34*	...	1.37*
Place of birth						
Outside Canada†	36	...	1.00	19	...	1.00
In Canada	22*	...	0.57*	32*	...	1.76*
Involvement in organized activities[4]						
No†	33	...	1.00	22	...	1.00
Yes	18*	...	0.50*	36*	...	1.81*

† reference group

* statistically significant difference from reference group at $p < 0.05$

1. This indicator is a scale that combines data on three aspects of social networks, namely network size, frequency of contact and feeling of social loneliness.
2. This category corresponds to the quartile (25%) of respondents with the lowest scores for overall personal network quality.
3. This category corresponds to the quartile (25%) of respondents with the highest scores for overall personal network quality.
4. Includes political parties and groups; sports and recreational organizations; cultural, educational and hobby organizations; religious-affiliated groups; school groups; neighbourhood, civic and community associations; and service clubs and fraternal organizations.

Source: Statistics Canada, General Social Survey, 2008.

Summary

The personal networks of people living alone differ from those of people living in a couple. People living alone have fewer close ties with relatives and fewer acquaintances. These differences may be partly because people living in a couple have more opportunities to broaden ties with family and extend their network of acquaintances.

However, the contribution of a spouse or partner's network of friends does not appear to significantly affect the number of close friendships. In fact, people living alone and those living in a couple have similar numbers of close friends in whom they can confide. Those living alone are a little more likely to be in frequent contact with their friends. However, they are also more likely to experience a strong feeling of social loneliness than people living in a couple.

When the data on their network size, frequency of contact and degree of social loneliness are combined, people living alone are more likely to have poor quality personal networks.

Further analysis using logistic regression shows that, even when taking into account several risk factors, people living alone remain more likely to have poor quality personal networks, and those living in a couple, to have good quality ones.

These results are especially important given the currently rising number of people who live alone and whose economic circumstances are less secure than those of people living as part of a couple.

Mireille Vézina is an analyst in the Social and Aboriginal Statistics Division, Statistics Canada.

1. For more information on the role of personal networks during life changes, see: Keown, Leslie-Anne. 2009. "2008 General Social Survey report: Social networks help Canadians deal with change." *Canadian Social Trends*. No. 88. Statistics Canada Catalogue no. 11-008-X.
2. Degenne, Alain and Michel Forsé. 1994. *Les réseaux sociaux*. Paris: Armand Colin.
3. Berkman, L.F., T. Glass, I. Brissette and T.E. Seeman. 2000. "From social integration to health: Durkheim in the new millennium." *Social Science and Medicine*. Vol. 51, no. 6.
4. House, J.S., K. R. Landis and D. Umberson. 1988. "Social relationships and health." *Science*. Vol. 41, no. 4865.
5. Granovetter, M.S. 1973. "The strength of weak ties." *American Journal of Sociology*. Vol. 78, no. 6;

   Lévesque, Maurice and Deena White. 2001. "Capital social, capital humain et sortie de l'aide sociale pour des prestataires de longue durée." *Canadian Journal of Sociology/Cahiers canadiens de sociologie*. Vol. 26, no. 2.
6. Lin, N.. 1999. "Social networks and status attainment." *Annual Review of Sociology*. Vol. 25;

   Thomas, Derrick. 2011. "Personal networks and the economic adjustment of immigrants." *Canadian Social Trends*. No. 92. Statistics Canada Catalogue no. 11-008-X.
7. Franke, Sandra. 2005. *The Measurement of Social Capital: Reference Document for Public Policy Research, Development, and Evaluation*. PRI Project: Social Capital as a Public Policy Tool. Canada, Policy Research Initiative;

   Stiglitz, Joseph E., Amartya Sen and Jean-Paul Fitoussi. 2009. *Report by the Commission on the Measurement of Economic Performance and Social Progress*. www.stiglitz-sen-fitoussi.fr. (accessed November 17, 2011).
8. Waite, Linda J. and Maggie Gallagher. 2000. *The Case for Marriage: Why Married People are Happier, Healthier, and Better Off Financially*. New York: Doubleday.
9. In 2009, of those under 65 living alone, 30% of men and 33% of women had low income. By contrast, only 5% of those married and without children had low income (Survey of Consumer Finances, no. 3502; Survey of Labour and Income Dynamics, no. 3889; "Families in low income, by economic family type, 2006 constant dollars, annual," CANSIM table 202-0804).
10. The nature of the ties with people in someone's personal network and how they were introduced to those people cannot be determined from the GSS data. Therefore, the number of ties created through the personal network of someone's spouse or partner cannot be determined.
11. Information on neighbours was not considered because neighbours who were also friends would be counted twice.
12. Green, B. L. and A. Rodgers. 2001. "Determinants of social support among low-income mothers: a longitudinal analysis." *American Journal of Community Psychology*. Vol. 29, no. 3.