

PSC Discussion Papers Series

Volume 20 | Issue 4

Article 1

6-2006

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Zenaida R. Ravanera

University of Western Ontario, ravanera@uwo.ca

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Recommended Citation

Ravanera, Zenaida R. (2006) "Informal Networks Social Capital of Fathers: What Does the Social Engagement Survey Tell Us?," *PSC Discussion Papers Series*: Vol. 20 : Iss. 4 , Article 1.

Available at: <https://ir.lib.uwo.ca/pscpapers/vol20/iss4/1>

ISSN 1183-7284

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Zenaida R. Ravanera

Discussion Paper no. 06-04

June 2006

ravanera@uwo.ca

On the web in PDF format: <http://sociology.uwo.ca/popstudies/dp/dp06-04.pdf>

**Population Studies Centre
University of Western Ontario
London CANADA N6A 5C2**

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What Does the Social Engagement Survey Tell Us?**

Zenaida R. Ravanera
Population Studies Centre
University of Western Ontario
London, Canada N6A 5C2
Tel. (519) 661-2111 Ext. 85151
Fax (519) 661-3200
ravanera@uwo.ca

Abstract

Using the General Social Survey on Social Engagement conducted by Statistics Canada in 2003, this paper examines social capital derived from informal networks and its variation among men categorized as: (1) men with no children, and (2) men living with children in (a) intact, (b) step, and (c) lone parent families. The focus on men stems from a concern that their role in families has not been as extensively studied as that of women. The results show that married men living with children have higher social capital - measured in terms of the number of friends, relatives, and neighbours, and in their level of trust in them - than lone fathers or step fathers in cohabiting unions. Compared to child-free men, married fathers have higher social capital but also tend to have friends who are more similar to themselves in age, education, or income.

June 6, 2006

Paper presented at the 2006 Annual Meeting of the Canadian Population Society
York University, Toronto
June 1-3, 2006

A. Introduction

An often cited explanation for the greater likelihood of developmental problems of children from non-intact families is the lower level of social capital invested on them (McLanahan and Sandefur, 1994; Kerr, 2006). The explanation is used particularly when differences in outcome of children persist even after controlling for human and financial capital. This has been difficult to examine in greater depth because of lack of conceptual clarity and of data to measure social capital. The 2003 General Social Survey (Cycle 17) on Social Engagement provides an opportunity to examine social capital as it gathered such information as relations with family, friends, and neighbors, participation and volunteering in formal institutions, and trusts and norms of reciprocity.

Social capital takes on different forms, has multiple components or dimensions, and can be measured for various units of analysis. This paper examines social capital from informal networks and its variation by fatherhood status. After a theoretical discussion of social capital and the data, the paper focuses on the measurement of individual's social capital engendered by informal networks. The derived measures are then used to analyze social capital and its variation among men and their fatherhood and marital status. Discussion of the results and their implications for further research concludes the paper.

B. Theoretical Background

A number of authors have examined the evolution of the concept of “social capital”, its various meanings, and its use in research (see for example, Portes, 1998; Field, 2003), and thus will only be cursorily discussed here. Coleman (1990), Bourdieu (1985), and Loury (1977, 1981) are often cited as the early proponents of the concept of social capital, although Putnam contributed much to its recent popularity with his claim that social capital has declined in the United States (1995, 2000). Drawing upon the work of the early proponents, Portes (1998: 8) defines social capital as the “ability to secure benefits through membership in networks and other social structures”. A concise definition amenable to social capital's measurement is “networks of social relations characterized by norms of trust and reciprocity” (Stone, Gray, and Hughes, 2003).

Going back to Coleman's (1990) original proposition, “social capital” can be thought of in conjunction with financial and human capital. Table 1 illustrates the types of capital by levels of analysis. Making use of terms used in business, these types of capital are “assets” that become “capital” when invested with the expectations of returns, profit or, certain social outcomes. To illustrate for the individual-level, *financial capital* can be liquid assets (cash, stocks, bonds) and real properties (house, land), *human capital* includes one's skills and talents (usually measured by levels of education), and *social capital* is networks (of family, work-mates, friends, neighbours) with associated internalized norms of trust and reciprocity. These types of capital of individuals have distinct counterparts in the family, community, and country. While Astone and colleagues

(1999), for example, refer to social capital as attributes of individuals, for others such as Coleman (1990) and McLanahan and Sandefur (1994) social capital are possessed by families and communities, which have impact on children's outcome. Putnam's (1993, 2000) conception of social capital is for an even larger group such as regions or nations.

Table 1: Illustration of Types of Assets by Levels of Analysis

Level of Analysis	Types of Assets (Resources)		
	Physical Financial	Human	Social
Individual	Liquid assets (cash, stocks, etc) Properties (house, land)	Physical features, skills, talents, abilities	networks (of family, friends, acquaintances, neighbors, contacts); Values (of trust & reciprocity)
Family	Liquid assets (cash, stocks, etc) Properties (house, land)	Family members	Networks, Values
Community	Size and location, Facilities (schools, libraries, community centres)	Residents	Networks, Associations and Organizations, Norms of trust & reciprocity , Order, Cohesion
Country	Natural resources, infrastructures, etc.	Population or citizens	Systems and organizations (economic, social, political), Values, Order, Cohesion

While it is desirable to examine social capital at different levels, given the available data (the 2003 General Social Survey) and the aim of the analysis, this paper focuses on *individuals*. Furthermore, while Stone and Hughes (2002: 2) identify three types of networks - *informal ties* with kin, families, friends, neighbours, and workmates; *generalized relationships* with local people, people in civic groups, and people in general; and *relationships through institutions* – this study focuses on informal ties of individuals on the assumption that this network type would have a greater relevance to father-children relationship.

In the interest of measuring social capital, Stone and Hughes (2002: 2) identified dimensions of networks, which include size and extensiveness (for example, number of neighbors personally known) density and closure (that is, whether network members know each other), and diversity (ethnic, education, and cultural mix of networks). The diversity dimension could be used to distinguish between the “bonding” and “bridging” nature of social capital (Gittell and Vidal, 1998, Woolcock, 2001, Granovetter, 1995); that is, close relationships or strong bonds that engender sense of belonging could be confined to a limited number of individuals, whereas bridging social capital may have a wider outreach that could prove more useful, say, for economic outcomes. The section on methods discusses how dimensions of social capital derived through informal networks are measured using the data provided by the survey.

C. Data and Methods

1. The 2003 General Social Survey

The General Social Survey on Social Engagement was conducted in 2003 by Statistics Canada with a target population of all persons in Canada, who are 15 years and older excluding residents of Yukon, Northwest Territories, and Nunavut, and all-time residents of institutions (Statistics Canada, 2004). There were 24950 respondents to the survey, however, this study is confined to the 6840 men who, as of the survey date, were aged 30 to 64, and living independently; that is, men who are no longer living with their parents.

The survey gathered information on a wide-range of topics including the respondent's civic engagement, social networks, and participation in clubs, associations, and organizations, and voting and volunteering. The survey also asked information about the person's background including education, work status, cultural background, health and well-being and information about his/her parents and partners.

2. Variables to Measure Social Capital

The variables drawn from the following questions were used to derive measures for three dimensions of social capital engendered through informal ties - size, norms of trust and reciprocity, and diversity¹:

Size of networks:

1. How many relatives do you have who you feel close to?
2. How many close friends do you have, that is, people who are not your relatives, but who you feel at ease with, can talk to about what is on your mind, or call on for help?
3. How many other friends do you have who are not relatives or close friends?
4. Would you say that you know: most, many, a few, or nobody else in your neighbourhood?

Trust and Reciprocity

5. How much do you trust: people in your family?
6. ...people in your neighbourhood?
7. ...people in your workplace or school?
8. Would you say that you trust: most, many, a few, or nobody else in your neighbourhood?
9. If you lost a wallet or purse that contained two hundred dollars, how likely is it to be returned with the money in it if it was found by someone who lives close by?
10. Would you say this neighbourhood is a place where neighbours help each other?

¹ There were no questions in the survey (such as whether network members know each other) to measure "density and closure" dimension.

Diversity of Friends:

11. Think of all the friends you had contact with in the past month, whether the contact was in person, by telephone, or by e-mail. Of all these people: how many have roughly the same level of education as you?
12. ...how many are from a similar family income level as you?
13. ...how many are in the same age group as you?
14. ...how many come from an ethnic group that is visibly different from yours?

Answers to the first two sets of questions were coded (or recoded, when necessary) so that the direction of the answer would refer from low to high social capital; that is, for example, from *none* to *several* friends and relatives, or from *cannot be trusted* to *can be trusted a lot*. For the set of questions on diversity, the direction is from least to the most diverse; that is, from *all* are from the same group to *none* is from the same group.

3. Statistical Methods

Reliability Tests and Factor Analysis

Reliability tests were done to find out which variables are correlated such that they can be “reduced” by statistical method in order to get a more parsimonious measure of the dimensions of social capital. The results of the tests showed that the first 3 questions could be combined together to get at a measure of number of friends and relatives; questions 6 to 10 for a measure of trust and reciprocity in friends and neighbors; and questions 11 to 13 for a measure diversity of friends in terms of education, income, and age (see Appendix Table 1). These groups of questions were factor analyzed and factor scores were derived (see Appendix Table 2, Panels A-C), so that the measures for each dimension were reduced to two each as follows:

1. Size of Networks:
 - a. Factor score – Number of Friends and Relatives
 - b. Number of Neighbors Known
2. Trust and Reciprocity
 - a. Trust in Family
 - b. Factor score – Trust in Neighbors
3. Diversity of Friends
 - a. Factor score – Income, Education, and Age Diversity
 - b. Ethnic Diversity of Friends

A reliability test showed that a further reduction of the measures of size of networks and trust and reciprocity provides a reasonably good indicator of social capital (Appendix Table 1). The diversity measures did not fit in well with an overall measure of social capital. Thus, factor scores were derived for a social capital measure of size, and norms of trust and reciprocity as an overall measure of social capital from informal networks (Appendix Table 2, Panel D).

Bivariate and Multivariate Analysis

Linear regression is used to detect differences of each of the measures of social capital and diversity of friends by fatherhood and marital social status, which is categorized as follows:

1. Living with Children: (a) Intact – Married; (b) Intact – Cohabiting; (c) Step – Married; (d) Step – Cohabiting; (e) Lone Father
2. Not Living with Children: (a) Married; (b) Cohabiting; (c) Never Married; (d) Divorced or Separated; (e) All Others including widowed and men with other living arrangements.

The bivariate relationship between the measures of social capital and fatherhood-marital status is first examined. Then, to see whether the relationship holds after controlling for other variables, a multiple regression analysis is done, progressively including Fatherhood-Marital Status (Model 1); a demographic variable - Age (Model 2); socio-economic variables - Education, Income, and Work Status (Model 3); cultural variables – Religiosity, and Migration Status (Model 4); geographic variables – Region, and Urban/Rural variables (Model 5); and personal situation – Length of Stay in the Neighbourhood, and Self-perceived Health Status (Model 6).

As Statistics Canada uses complex sampling procedures in its surveys, all statistical analysis is done using (fractional) weights.

D. Results of Analysis

Descriptive and Bivariate Analysis:

Children do seem to make a difference for social capital ...

As can be seen in Table 2, majority of men (55%) aged 30-64 are living with children aged 24 or under. Of the men living with children, 76% are married fathers living in intact families. The rest with about 5% or 6% each are cohabiting fathers in intact families, married fathers in step families, cohabiting fathers in step families, and lone fathers. Of the men who are not living with children, half are married, and about a quarter (23%) has never been married.

	Number	% of Men	% within Categories
Living With Children			
Married Father	2873	42.0	76.2
Cohabiting Father	244	3.6	6.5
Married Step Father	219	3.2	5.8
Cohabiting Step Father	194	2.8	5.1
Lone Father	240	3.5	6.4
Total	3770	55.1	100.0
Not Living with Children			
Married	1522	22.3	49.6
Cohabiting	360	5.3	11.7
Never Married	715	10.5	23.3
Divorced or Separated	373	5.5	12.1
Widowed and All Others	100	1.5	3.3
Total	3070	44.9	100.0
All Men	6840		

Source: 2003 General Social Survey on Social Engagement

Table 3 presents the mean scores of informal network indicators for all men included in the analysis and by categories of Fatherhood-Marital Status. The means of the indicators of variables that were not included in the factor analysis – Number of neighbors known, Trust in people in the family, and Ethnic diversity of friends – have intuitive meaning. For example, the mean of 2.74 for Number of Neighbors known indicates that on the average, men living with children know between “a few people” (2 in the scale) to “many of the people” (3) in the neighborhood. This is statistically higher than the 2.55 average for men not living with children. Similarly, men rate people in the family as “can be trusted a lot” (5) as seen in the average of 4.78 for men with children and 4.69 for men not living with children. For ethnic diversity, the average for fathers of 1.79 indicates that, the number of their friends who belong to different ethnic groups is between “none” (1) and “a few” (2); and, this does not significantly differ from the average for child-free men.

**Table 3: Informal Network Indicators by Combined Fatherhood and Marital Status
Canadian Men Aged 30-64, 2003**

Indicators (overall mean score)	Living with Children											
	Intact				Step				Lone Father		Total	
	Married		Cohabiting		Married		Cohabiting		N	Means	N	Means
	N	Means	N	Means	N	Means	N	Means				
Size of Networks												
FScore - Number of Friends & Relatives (0)	2793	0.022	237	-0.241	214	-0.012	190	-0.019	229	-0.022	3663	-0.002
Number of Neighbors Known (2.654)	2835	2.778	243	2.653	215	2.781	194	2.462	236	2.581	3723	2.741
Trust and Reciprocity												
Trust in Family (4.741)	2787	4.813	240	4.691	212	4.728	192	4.647	232	4.691	3662	4.783
FScore -Trust in Neighbors (0)	2466	0.097	215	-0.179	181	0.203	165	-0.251	195	-0.138	3222	0.053
FS - Social Capital: Size & Norms of Trust (0)	2422	0.126	211	-0.181	179	0.142	164	-0.302	187	-0.189	3163	0.065
Diversity of Friends												
FScore - income, education, age diversity (0)	2419	-0.107	219	0.103	187	0.062	173	0.169	189	0.101	3186	-0.055
Ethnic Diversity of Friends (1.776)	2797	1.819	240	1.583	217	1.802	187	1.718	231	1.671	3672	1.788
Indicators (overall mean score)	Not Living with Children											
	Married		Cohabiting		Never Married		Divorced/ Sep.		Widowed/ Others		Total	
	Married		Cohabiting		Never Married		Divorced/ Sep.		Widowed/ Others		N	Means
	N	Means	N	Means	N	Means	N	Means	N	Means		
Size of Networks												
FScore - Number of Friends & Relatives (0)	1474	0.076	351	-0.097	690	-0.101	365	-0.016	94	0.056	2974	0.002
Number of Neighbors Known (2.654)	1500	2.785	354	2.367	704	2.249	366	2.360	97	2.348	3020	2.546
Trust and Reciprocity												
Trust in Family (4.741)	1476	4.745	351	4.646	689	4.630	360	4.615	92	4.664	2968	4.689
FScore -Trust in Neighbors (0)	1123	0.150	278	-0.134	498	-0.478	256	-0.209	56	-0.169	2211	-0.077
FS- Social Capital: Size & Norms of Trust (0)	1098	0.145	271	-0.253	489	-0.466	248	-0.274	52	-0.046	2159	-0.096
Diversity of Friends												
FScore - income, education, age diversity (0)	1269	-0.023	302	0.100	571	0.121	304	0.308	78	0.152	2525	0.070
Ethnic Diversity of Friends (1.776)	1481	1.693	356	1.707	681	1.882	358	1.844	95	1.864	2972	1.762

Numbers in () are average for all men; italicized numbers indicate that difference by fatherhood status is not statistically significant

The factors scores produced from combining answers to a number of questions – Factor score representing Number of friends and relatives, Trust in neighbors, and Diversity of friends in terms of income, education, or age – are not amenable to easy description. However, each of these factors has an overall mean of zero (0) and thus, a negative mean indicates a lower than overall average, a positive one, higher. Men with or without children do not differ in the number of friends and relatives. However, men with children do tend to have a higher trust in their neighbors and with friends who are more similar to them in terms of age, education, and income.

Table 3 also shows the differences in the averages of the indicators by marital status categories. Married fathers in intact families have, for example, higher scores for Number of friends and relatives than cohabiting and lone fathers. Similarly, married fathers' scores for Trust in family and Trust in neighbors are higher than those of cohabiting or lone fathers. However, some of the differences could be accounted for by other variables, and thus, it is better to discuss the differences by fatherhood-marital status using the results from multivariate regression analysis.

Multivariate Analysis:

... And marital status also matters

As can be seen in Table 4, the variations explained by independent variables differ by indicators, with the highest R^2 (23.5%) for Number of neighbors known, and

lowest for Trust in Family (4.6%). Most people trust their family, and this trust does not differ much with such variables as age, education, religiosity, and geography. In contrast, the Number of neighbors known and the Trust in neighbors differ greatly, with much of the difference accounted by the Region variable. For Number of neighbors known, the R² doubles (from 9% to 18%) from Model 4 to Model 5; that is, with the inclusion of geographic variables, Region and Urban-Rural. The increase for Trust in neighbors is also high, with R² increasing from 10% to 16%.

Table 3: R Squares of Regression Models for Dimensions of Social Capital and Overall Social Capital Measure of Size and Norms of Trust and Reciprocity

Model Summary	Factor score: # of Friends & Relatives	Number of Neighbors Known	Trust in Family	Factor score: Trust in Neighbors	Factor Score: Social Capital Size and Norms	Factor score: Income, educ. & age diversity	Ethnic Diversity of Friends
Model	R Square	R Square	R Square	R Square	R Square	R Square	R Square
1: Fatherhood-Marital Status	0.005	0.044	0.014	0.038	0.044	0.013	0.007
2: M1 and Age	0.011	0.053	0.014	0.058	0.051	0.022	0.008
3: M2, Education, Income, and Work Status	0.030	0.068	0.024	0.074	0.063	0.039	0.020
4: M3, Religiosity and Migration Status	0.048	0.089	0.025	0.098	0.092	0.042	0.058
5: M4, Region and Urban/Rural	0.091	0.180	0.033	0.161	0.185	0.052	0.081
6: M5, Length of stay and Health Status	0.105	0.235	0.046	0.178	0.221	0.057	0.083

Appendix Table 3 shows the coefficients and their levels of significance for the full model; that is, for Model 6 that includes all the independent variables. The differences of social capital indicators for categories of each of the variables will not be discussed as this will distract from the focus of this analysis, the Fatherhood-Marital status. Table 4 displays the coefficients of the Fatherhood-marital status variables from a bivariate (Panel A) and multivariate analysis (Panel B) extracted from Appendix Table 3. Panel A of Table 4 provides the same information as Table 3 but presented in a different way. Table 3 shows the means whereas Table 4 shows the differences of the means for specific category from the means of the reference category, the Married Fathers in Intact Families. Table 4 also indicates the levels of significance of the differences.

Panel A of Table 4 differs from Panel B in that the latter presents the results of regression analysis that also includes of the other variables in addition to the Fatherhood-marital status variable. The differences in the coefficients of the Fatherhood-marital status arise from the correlation of the Fatherhood-marital status variable with the added variables. For example, the bivariate analysis (Panel A) shows that cohabiting fathers with children significantly differ from married fathers in intact families for all indicators of informal network social capital. In the results of the multivariate analysis (Panel B), the differences are greatly reduced such that certain indicators no longer show a difference between the two types of fathers. This is mainly because majority (62%) of cohabiting couples with children lives in Quebec and the inclusion of the Region variable attenuates the differences between married and cohabiting fathers. Men (whether cohabiting or not) in Quebec have significantly lower social capital measured in terms of size and norms of trust and reciprocity, but have friends that are more diverse in terms of age, education, and income, when compared to men in the Atlantic region, the reference category (see Appendix Table 3). Similarly, the inclusion of Age variables alters the magnitude of the differences between married men living with children and married men not living with children as the latter are much more likely to be older - their children would have grown up and have left to live independently. The differences shown in Panel

B of Table 4 are net of the effects of all the other variables. In other words, these would be the differences in fatherhood-marital status had age, education, income, etc. of the men been the same.

**Table 4: Results of Regression of Informal Network Indicators on Fatherhood-Marital Status
Canadian Men Aged 30-64, 2003**

	Panel A													
	Size of Networks				Trust and Reciprocity				Overall		Diversity of Friends			
	Factor score: # of Friends & Relatives		Number of Neighbors Known		Trust in Family		Factor score: Trust in Neighbors		Social Capital Size & Norms		Factor score: Income, educ. & age diversity		Ethnic Diversity of Friends	
	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.
Living with Children														
Intact - Married (Ref/Constant)	0.022		2.778 ***		4.813 ***		0.097 ***		0.126 ***		-0.107 ***		1.819 ***	
Intact - Cohabiting	-0.263 ***		-0.125 **		-0.121 ***		-0.276 ***		-0.307 ***		0.210 ***		-0.236 ***	
Step - Married	-0.033		0.002		-0.085 **		0.105		0.016		0.168 **		-0.016	
Step - Cohabiting	-0.041		-0.317 ***		-0.165 ***		-0.349 ***		-0.428 ***		0.275 ***		-0.101	
Lone Father	-0.044		-0.197 ***		-0.122 ***		-0.235 ***		-0.315 ***		0.207 ***		-0.148 **	
Not Living with Children														
Married	0.054 *		0.006		-0.068 ***		0.053		0.020		0.084 **		-0.126 **	
Cohabiting	-0.119 **		-0.411 ***		-0.167 ***		-0.232 ***		-0.379 ***		0.207 ***		-0.112	
Never Married	-0.123 ***		-0.530 ***		-0.182 ***		-0.576 ***		-0.591 ***		0.228 ***		0.064	
Divorced/ Sep.	-0.038		-0.419 ***		-0.197 ***		-0.307 ***		-0.400 ***		0.414 ***		0.025	
Widowed/ Others	0.034		-0.430 ***		-0.149 **		-0.267 **		-0.172		0.259 ***		0.045	
	Panel B													
	Size of Networks				Trust and Reciprocity				Overall		Diversity of Friends			
	Factor score: # of Friends & Relatives		Number of Neighbors Known		Trust in Family		Factor score: Trust in Neighbors		Social Capital Size & Norms		Factor score: Income, educ. & age diversity		Ethnic Diversity of Friends	
	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.
Constant	0.249 ***		2.713 ***		4.837 ***		0.266 ***		0.599 ***		-0.013		1.659 ***	
Fatherhood -Marital Status (Married with children, ref.)														
Living with Children														
Intact - Cohabiting	-0.033		-0.117 **		-0.029		-0.069		-0.086		0.117 *		0.031	
Step - Married	-0.052		0.014		-0.034		0.099		0.003		0.203 ***		0.022	
Step - Cohabiting	0.136 *		-0.279 ***		-0.083 *		-0.187 **		-0.231 ***		0.193 ***		0.083	
Lone Father	0.094		-0.145 ***		-0.075 *		-0.181 ***		-0.207 ***		0.137 *		-0.026	
Not Living with Children														
Married	0.110 ***		-0.069 **		-0.050 **		-0.035		-0.032		-0.010		-0.035	
Cohabiting	0.080		-0.297 ***		-0.105 ***		-0.115 **		-0.185 ***		0.140 **		0.085	
Never Married	0.027		-0.382 ***		-0.116 ***		-0.409 ***		-0.390 ***		0.168 ***		0.134 ***	
Divorced/ Sep.	0.128 **		-0.321 ***		-0.130 ***		-0.271 ***		-0.285 ***		0.306 ***		0.081	
Widowed/ Others	0.190 *		-0.258 ***		-0.088		-0.142		0.016		0.123		0.013	

As can be seen in Panel B of Table 4, married men with children have the highest social capital indicated by the number of friends, relatives, and neighbors known, and the levels of trust in their own family and neighbors, *ceteris paribus*. They are also the most likely to have friends who are similar to them in education, income, or age. Married men living with step children do not differ much from married men in intact families, with the exception of their friends being more diverse in education, income, and age. Likewise, cohabiting men with children are somewhat more likely to have fewer neighbors whom they know and their friends are somewhat more diverse, but on the whole, their overall social capital is not significantly different from the married men with children. In contrast, cohabiting men living with step children and lone fathers significantly differ from the other men living with children – they know fewer neighbors and have lower level of trust in them. And, in comparison to married fathers, lone and step-fathers in cohabiting unions are likely to have friends more diverse in education, income, or age.

As noted from the results of bivariate analysis, men not living with children have, in general, lower social capital and have diverse friends than those living with children. This seems to hold true even after controlling for other variables but with certain exceptions. Married and widowed men are similar to married men living with children in terms of the overall measure of social capital and by measures of diversity of friends. They have more relatives and friends but fewer neighbors known and lower levels of trust in family and neighbors, resulting in about the same level of social capital as the married men. In contrast, cohabiting, divorced or separated, and never married men - all not living with children - have smaller social capital than married men living with children. Their number of friends and relatives do not differ very much, but the number of neighbors known, and their levels of trust in family and in the neighbors are significantly lower than those of married men. Furthermore, their friends are more diverse. This is particularly true for never married men whose friends are diverse, not only in terms of income, education, and age but also in ethnicity.

E. Discussion of Results

Children, whether biological or step, are positively related to men's informal networks social capital. Children facilitate knowing and trusting one's neighbors. The type of relationship with one's partner seems to matter as well. Marriage seems to be a factor positively related to social capital; however, cohabiting men living with their own children have social capital not much lower than that of married men. This could be an indication that it is not marriage *per se* but an attribute associated with it that is conducive to forming social capital. One possible attribute is implied "stability" of a partnership or "settling down" which could be attributed to marriage but also to cohabiting relationship that includes children. When there are step-children, that stability could also be implied when couples marry, which may not be the case when they are cohabiting. That implied stability is probably a reason as well for why married and widowed men, many of whom may have had children at one point in their lives, also have about the same level of social capital as married men with children.

However, settling down could be associated with homogeneity of friends. Those without children (and with lower informal network social capital) are also more likely to have friends that differ in education, age, income, or in the case of never married, ethnic groups. Informal network captures a bonding type of social capital; that is, having close relationship with relatives, friends and neighbors, which from this analysis seems to be negatively related to diversity that could be associated with bridging social capital. But, this does not definitely imply that those who have stronger bonding social capital have lower bridging social capital or vice versa. We will need to examine social capital engendered by generalized relationship (that is, people in general who are not one's friends, relatives, or neighbors) and relationship with institutions.

As the data used are cross-sectional rather than longitudinal, the results showing relation between fatherhood-marital status and informal network social capital could not be taken as evidence of causality. It is possible that the association is not because of the

presence of children or the marital relationship but that those who get to have children and to have more stable relationship have values or orientation pre-disposing them to also have greater number of friends and neighbors and to have higher levels of trust in them.

F. Conclusion and Implications for further research

Social capital has often been invoked for the differences in children's well-being by family structure; that is, developmental outcome for children in lone parent or step family is not at par with that of children from intact family because parental investments on children may be lower not only in financial and human capital but also in social capital. This analysis partly provides support for this contention as lone fathers and cohabiting step-fathers do seem to have lower social capital derived from informal networks. That married step-fathers and cohabiting fathers living with their biological children have social capital not much different from married fathers indicate the need for more research on other forms of social capital, in particular, the social capital within families themselves. It could be that social capital brought about by relationships within the family, say, between father and child or between partners may have greater impact than the informal network social capital examined here.

This analysis has focused on informal networks but there are other forms of social capital such as those arising from networks and trusts in relationships beyond friends, relatives, or neighbors, and in institutions. These can be examined using the same data set. Further, with the available data and statistical techniques such as structural equations modeling, the *links* among these forms of social capital could also be analyzed for a better understanding of the concept. The effects of social capital on various outcomes such as sense of belonging, health conditions, and economic outcomes could also be looked into. Finally, while the available data from the survey is best fitted for individual-level analysis, merging the data with other data sets (such as data from the census for different levels of aggregation – dissemination areas, CMAs, etc.) could allow analysis at other levels such as communities or cities.

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Appendix Table 1: Reliability Test - Fianl Results

Scale and Scale Itmes	Chronbach's Alpha (Standardized)	Item-Total Correlation
Number of Relatives and Friends	0.61	
Close relatives		0.34
Close friends		0.50
Other friends		0.41
Trust in Neighbors	0.72	
Trust in people in neighborhood		0.69
Trust in people in workplace or school		0.45
Number of neighbors trusted		0.55
Trust neighbor will return lost wallet		0.48
Neighbours help each other		0.32
Diversity of Friends - Educ, Income, Age	0.54	
Friends same level of education		0.38
Friends similar level of income		0.38
Friends same age group		0.31
Overall Measure of Social Capital Size and Trust	0.52	
Factor S - Number of Relatives and Friends		0.28
Number of Neighbors Known		0.48
Factor S - Trust in Neighbors		0.29
Trust in Family		0.23

Appendix Table 2: Results of Factor Analysis

Panel A: Number of Relatives and Friends

Total Variance Explained Component	Initial Eigenvalues		Cumulative Extraction		Sums of Squared Loadings	
	Total	% of Var.	%	Total	% of Var.	Cumulative %
1	1.690	56.340	56.340	1.690	56.340	56.340
2	0.761	25.365	81.705			
3	0.549	18.295	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix(a)	Component	
	1	
How many relatives do you have who you feel close to	0.678	
How many close friends do you have	0.812	
How many other friends (neither relatives or close friends)	0.755	

Panel B: Trust in Neighbors

Total Variance Explained Component	Initial Eigenvalues		Cumulative Extraction		Sums of Squared Loadings	
	Total	% of Var.	%	Total	% of Var.	Cumulative %
1	2.424	48.472	48.472	2.424	48.472	48.472
2	0.920	18.391	66.863			
3	0.697	13.938	80.801			
4	0.577	11.536	92.337			
5	0.383	7.663	100.000			

Component Matrix(a)	Component	
	1	
How trustworthy: people in your neighbourhood	0.844	
How trustworthy: people in your workplace or school	0.635	
Trust lost wallet returned by neighbor	0.690	
Number neighbors trusted	0.754	
Neighbourhood, place where people help each other	0.514	

Panel C: Diversity of Education, Income, and Age

Total Variance Explained Component	Initial Eigenvalues		Cumulative Extraction		Sums of Squared Loadings	
	Total	% of Var.	%	Total	% of Var.	Cumulative %
1	1.571	52.365	52.365	1.571	52.365	52.365
2	0.771	25.714	78.079			
3	0.658	21.921	100.000			

Component Matrix(a)	Component	
	1	
Friends contacted past month: same level of education	0.751	
Friends contacted past month: similar family income level	0.747	
Friends contacted past month: same age group	0.670	

Panel D: Overall Indicator of Social Capital - Size and Norms of Trust and Reciprocity

Total Variance Explained Component	Initial Eigenvalues		Cumulative Extraction		Sums of Squared Loadings	
	Total	% of Var.	%	Total	% of Var.	Cumulative %
1	1.663	41.587	41.587	1.663	41.587	41.587
2	0.968	24.191	65.778			
3	0.826	20.654	86.432			
4	0.543	13.568	100.000			

Component Matrix(a)	Component	
	1	
Factor score - number of relatives and friends	0.595	
Factor score - neighbors can be trusted, help others	0.812	
Number of neighbors known	0.601	
How trustworthy: people in your family	0.537	

**Appendix Table 3: Results of Full Model Regression of Informal Network Indicators
Canadian Men Aged 30-64, 2003**

	Size of Networks		Trust and Reciprocity		Overall		Diversity of Friends							
	Factor score: # of Friends & Relatives	Number of Neighbors Known	Trust in Family	Factor score: Trust in Neighbors	Social Capital Size & Norms	Factor score: Income, educ & age diversit	Ethnic Diversity of Friends							
	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.						
Constant	0.249 ***		2.713 ***		4.837 ***		0.266 ***		0.599 ***		-0.013		1.659 ***	
Fatherhood -Marital Status (Married with children)														
Living with Children														
Intact - Cohabiting	-0.033		-0.117 **		-0.029		-0.069		-0.086		0.117 *		0.031	
Step - Married	-0.052		0.014		-0.034		0.099		0.003		0.203 ***		0.022	
Step - Cohabiting	0.136 *		-0.279 ***		-0.083 *		-0.187 **		-0.231 ***		0.193 ***		0.083	
Lone Father	0.094		-0.145 ***		-0.075 *		-0.181 ***		-0.207 ***		0.137 *		-0.026	
Not Living with Children														
Married	0.110 ***		-0.069 **		-0.050 **		-0.035		-0.032		-0.010		-0.035	
Cohabiting	0.080		-0.297 ***		-0.105 ***		-0.115 **		-0.185 ***		0.140 **		0.085	
Never Married	0.027		-0.382 ***		-0.116 ***		-0.409 ***		-0.390 ***		0.168 ***		0.134 ***	
Divorced/ Sep.	0.128 **		-0.321 ***		-0.130 ***		-0.271 ***		-0.285 ***		0.306 ***		0.081	
Widowed/ Others	0.190 *		-0.258 ***		-0.088		-0.142		0.016		0.123		0.013	
Age Groups (Age 30-39)														
Age 40-49	-0.113 ***		-0.004		0.010		0.166 ***		0.054 *		0.087 ***		-0.024	
Age 50-59	-0.154 ***		-0.010		0.030		0.323 ***		0.123 ***		0.180 ***		-0.019	
Age 60-64	-0.172 ***		0.062		0.009		0.307 ***		0.125 **		0.252 ***		-0.134 ***	
Resp. Education (Less than HS)														
High school diploma	0.078 *		-0.019		0.020		0.005		-0.021		-0.188 ***		0.000	
Some university or college	0.115 ***		-0.028		-0.031		0.042		-0.010		-0.107 **		0.007	
College, technical graduate	0.151 ***		-0.027		0.009		0.105 **		0.048		-0.234 ***		0.004	
Bachelors or higher graduate	0.248 ***		-0.096 ***		0.046 *		0.256 ***		0.153 ***		-0.144 ***		0.113 ***	
Personal Income (Less than \$20000)														
\$20000-\$39999	0.022		-0.081 **		0.068 **		-0.029		-0.057		-0.200 ***		-0.114 ***	
\$40000-\$59999	0.059		-0.087 **		0.095 ***		-0.013		-0.010		-0.241 ***		-0.136 ***	
\$60000 and higher	0.112 **		-0.012		0.105 ***		0.100 *		0.097 *		-0.216 ***		-0.167 ***	
Missing	0.078		-0.044		0.013		-0.149 **		-0.101 *		-0.137 **		-0.127 ***	
Work Status														
Employed or in business	0.054		-0.028		-0.049 **		-0.031		-0.082 *		0.039		0.035	
Religiosity (High religiosity)														
Moderate religiosity	-0.121 ***		-0.026		0.018		-0.025		-0.059 *		-0.078 **		-0.122 ***	
Low religiosity	-0.274 ***		-0.096 ***		-0.008		-0.101 ***		-0.175 ***		0.019		-0.102 ***	
No religion	-0.242 ***		-0.148 ***		-0.032		-0.084 **		-0.192 ***		0.019		-0.119 ***	
Migration Status (Born in Canada)														
Before 1980	-0.131 ***		-0.029		0.026		-0.092 **		-0.081 *		0.049		0.312 ***	
Between 1980 and 2003	-0.169 ***		-0.116 ***		-0.010		-0.362 ***		-0.301 ***		0.160 ***		0.416 ***	
Region (Atlantic provinces)														
Quebec	-0.514 ***		-0.380 ***		-0.127 ***		-0.591 ***		-0.687 ***		0.224 ***		0.011	
Ontario	-0.080 *		-0.266 ***		0.022		-0.185 ***		-0.208 ***		-0.040		0.334 ***	
Prairies	0.025		-0.286 ***		0.008		-0.121 **		-0.140 ***		0.046		0.305 ***	
British Columbia	0.014		-0.224 ***		0.029		-0.138 **		-0.130 **		0.020		0.277 ***	
Urban-Rural (Urban)														
Rural including PEI	0.128 ***		0.618 ***		-0.003		0.396 ***		0.493 ***		0.070 **		-0.118 ***	
Length of Stay in Neighborhood (5 years or more)														
Less than one year	-0.151 ***		-0.718 ***		-0.061 **		-0.246 ***		-0.459 ***		0.017		-0.068 *	
One year to less than 3	-0.087 ***		-0.394 ***		-0.037 *		-0.196 ***		-0.268 ***		0.050		-0.062 *	
Three years to less than 5	-0.039		-0.281 ***		-0.001		-0.050		-0.120 ***		0.065		0.008	
Self-rated Health Status (Excellent Health)														
Very good	-0.017		-0.050 *		-0.047 **		-0.086 ***		-0.082 ***		0.048		0.012	
Good	-0.183 ***		-0.097 ***		-0.110 ***		-0.194 ***		-0.244 ***		0.083 **		-0.018	
Fair or poor	-0.361 ***		-0.136 ***		-0.245 ***		-0.381 ***		-0.497 ***		0.261 ***		0.125 ***	