# Social Support Among Unmarried Childless Elderly Persons

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*Objectives.* This article examines the availability, exchange, and receipt of informal support for unmarried childless elderly persons. These individuals may be at particular risk of lacking social support because they lack the two most important sources: spouses and children.

*Methods.* Using data drawn from the 1991 Canadian Survey on Aging and Independence (*N* = 1,078), ordered-response logistic regression models were employed to assess the availability and exchange of social support. Logistic models for binary variables were used in support-receipt models.

*Results.* The findings suggest that although support was generally available to this elderly population, it was not readily translated into exchanged or received support. Gender differences were found in support exchange, with women generally more advantaged than men. Gender by age interactions were also identified in the exchange and receipt of emotional support. Additionally, greater involvement in support exchange generally corresponded with increased support receipt.

*Discussion.* In light of the correspondence between support exchange and receipt, concerns may be raised about the low levels of support exchange (involving less than one quarter of this population) reported for the unmarried childless elderly persons in this study. Emotional support appears to be the greatest unmet need, with support being provided to only 25% of this group.

NEARLY half (45%) of the 3.2 million people aged 65 and older in Canada were not married in 1991 (Statistics Canada, 1992). Of this fraction, a substantial proportion (between 5% and 10%) was also childless (Statistics Canada, 1993). With the current low fertility trend, the high proportion of people divorcing or remaining single, and increasing longevity, the number of older adults who are both unmarried and childless will continue to rise.

The increasing number of elderly persons who are unmarried and childless raises important concerns about their future well-being, as they lack the two most important sources of informal support: spouses and children (Beggs, Haines, & Hurlbert, 1996; Johnson, 1983; Litwak, 1985; Stoller & Pugliesi, 1991). Exacerbating the need for social support in this population is research indicating that married people enjoy better health than those who are unmarried (e.g., Waite, 1995). Individuals who are childless and unmarried are thus doubly disadvantaged: they may require more help than those who are married, but they lack access to the two main sources of informal support.

Despite the rising numbers in this population, there has been an alarming lack of research attention to their social support needs. Previous research has focused either on the effect of marital status (e.g., Webster, Benson, & Spray, 1994) or childlessness (e.g., Bachrach, 1980; Cicirelli, 1982; Connidis & McMullin, 1992; Keith, 1983; Rempel, 1985). Although a few studies do consider both marital and parental status as separate risk factors (e.g., Connidis & McMullin, 1994; McMullin & Marshall, 1996), they ignore the interactive impact of being both unmarried *and* childless on

social support. Combined, this literature suggests that both the childless and the unmarried elderly populations receive less social support, are more isolated, and rely more on distant kin and friends for emotional and instrumental support than elderly persons who are married or parents. Further, previously married people generally receive less support than their currently or never-married peers.

Although the literature described above does not examine the combined effects of being unmarried and childless, a small number of studies have focused specifically on support among this group of elderly persons. For example, Johnson and Catalano (1981) find that on one hand, these people face an increased risk of institutionalization, but on the other hand, they are also more active than other older people in their social (and potential support) networks. Relatives, usually siblings, are most important for performing instrumental tasks (Choi, 1996), whereas friends mainly provide emotional support (Johnson & Catalano, 1981).

However, research findings become less consistent when it comes to the effect of marital history. For example, Choi (1996) finds that social support varies by marital history; Goldberg, Kantrow, Kremen, and Lauter (1986) do not. Further, prior studies of childless unmarried elderly persons are limited, primarily by small samples or area studies (e.g., Ikels, 1988; Johnson & Catalano, 1981; Perry & Johnson, 1994) or by examining only the availability and not the exchange of support (e.g., Choi, 1996). These early studies also tend to restrict their focus to undifferentiated "unmarried" childless elderly persons (e.g., Johnson & Troll, 1992) or to women only (e.g., Goldberg et al., 1986).

The purpose of this study is to assess the availability, exchange, and receipt of social support among unmarried, childless elderly persons. We focus on three dimensions of social support: availability of support, and exchange and receipt of both emotional and instrumental support. We use recent national data from the 1991 Canadian Survey on Aging and Independence to examine a set of individual-level characteristics that may influence social support among older unmarried childless persons. Although some "network" studies have examined the structure of social support networks (see Wellman, 1992, for a review of this literature), our focus is on their availability and use. We believe that this knowledge will add to researchers' understanding of the present social support needs of unmarried childless elderly people and will assist in anticipating their future needs.

*Background*

Prior research suggests three general models of social support. The first model, based on the principle of substitution (Shanas, 1979), views the immediate family as the primary source of social support. In times of need and crisis, people turn first to their spouses, and then to their children. If these sources are unavailable, then more distant kin, neighbors, and friends substitute for immediate family members. The hierarchical compensatory model (Cantor, 1979) extends the principle of substitution by adding formal organizations as a last resort. Only when family (especially children) are unavailable do friends, neighbors, and formal organizations become important support-network members. The model further contends that individuals who lack the primary ties of spouse and children are at risk of not receiving support, because each of these ties provides a broad range of support. Therefore, according to the hierarchical compensatory substitution model, unmarried childless elderly persons should rely heavily on siblings and should turn to friends only when siblings are unavailable (also see Goldberg et al., 1986, and Johnson & Catalano, 1981).

The second broad model of social support, the task-specific model, argues that there are limits to substitution because some groups are not interchangeable (Litwak & Szelenyi, 1969). Because different tasks may be best handled by different groups of people, support may be best provided when the characteristics of the group correspond to the characteristics of a particular task (Litwak, 1985). For example, neighbors may best handle emergencies due to their proximity, whereas kin with more dedicated ties better supply long-term help. According to this model, if a particular source of support is unavailable, its functions must be forfeited unless a source with similar traits exists. In the case of childless individuals, for example, functions specific to children may only be performed by a tie with a structure similar to that of the parent-child dyad (Litwak, 1985). In line with this reasoning, unmarried childless elderly persons may have relatives and friends who can provide certain types of support and companionship, but relatives and friends cannot substitute fully for spouses and children. For example, although siblings may have a sense of commitment that is similar to that of children and spouses, they may lack the health of the former or the geographic proximity of the latter. Friends may lack both commitment and health. Thus, the importance of both siblings and friends may well be limited to certain types of support.

Third, the functional specificity of relationships model emphasizes the necessity of a diverse social network, as various types of relationships provide different forms of support (Connidis & McMullin, 1992; Simons, 1983–84). This model assumes that certain groups of people are better suited to some tasks than others, and that adequate support requires a diverse range of relationships. However, unlike the task-specific model, it does not equate the unavailability of certain groups with a lack of certain types of support (Connidis, 1994). The task-specific model also downplays the possibility that some people may not receive adequate support even when primary groups are available, which the functional specificity of relationships model acknowledges.

The functional specificity of relationships model is characterized by a continuous renegotiation of relationships. The characteristics of specific ties may vary, depending on how they have been negotiated and developed over time (Connidis & Davies, 1990; Connidis & McMullin, 1992). For example, the nature of friendships developed by childless adults may be characteristically different from the friendships developed by parents. Therefore, unlike the hierarchical compensatory model, different ties may provide similar types of support for different groups of people. In line with this argument, unmarried childless elderly individuals may negotiate different support networks from those of elderly parents or married persons through anticipatory socialization. Over time, never-married and childless individuals may come to realize the diminishing possibility of marriage or children, and may actively cultivate friendships geared toward support in old age (Connidis & McMullin, 1992; Johnson & Catalano, 1981). Widowed or divorced persons, on the other hand, have lost an expected source of support and may be at particular risk of lacking support in old age.

The three models discussed above theorize support sources, but they have relatively little to say about the mobilization, or activation, of support exchange, which has also been modeled in several ways. Pearlin, Menaghan, Lieberman, and Mullan's (1981) stress model, for example, incorporates enduring and basic problems (chronic strains) that life events may create or exacerbate, holding that greater strain mobilizes social support by encouraging people to actively seek it out (also see, e.g., Arling, 1987; Thoits, 1995). A contrasting view maintains that certain chronic stressors increase distrust or lack of faith in others, which may lead to greater isolation (Krause, 1991). A distrusting individual may believe that people primarily seek their own good and that they will exploit others in the pursuit of their own goals (Mirowsky & Ross, 1989). Therefore, distrusting individuals may not seek help, and may even reject offers of support when in need. It follows that available help may not be utilized by some elderly adults because they distrust others' intentions. Thus, rather than leading to greater support mobilization, certain stressors may erode support resources (see Hobfoll, 1985, for evidence of support for this argument).

The support models and prior research suggest three types of determinants that may affect support for unmarried child-

less elderly persons. Sociodemographic factors, such as gender, age, and educational status, may affect the nature of the ties formed and maintained by individuals, subsequently influencing support arrangements, because different social positions provide different structures of opportunity for social contact and social interaction (Blau, 1978; Fischer, 1982). Stress factors, such as negative life events, daily activity impairment, and economic need, may play different roles in the mobilization of support. Some types of stressors may encourage elderly persons to seek out support, whereas other stressors may act to discourage support exchange. Finally, the three models of support sources suggest that siblings may play an important role in social support for unmarried childless elderly persons. This study assesses the impact of these factors on support availability and the nature of support exchange for unmarried childless elderly persons.

## METHODS

### Data

The data used in this study were drawn from the Survey on Aging and Independence (SAI), conducted by Statistics Canada in September 1991. To study a broad range of characteristics contributing to the quality of life and independence of older Canadians, a nationally representative sample of 20,076 people aged 45 and older were interviewed by phone or in person (upon participant's request). The interviews averaged 30 minutes and collected information on economic and physical well-being, health, life events, and exchange of formal and informal social support. The overall response rate was 81%. Residents of the two northern territories (Yukon and the Northwest Territories), those living on Indian reserves, and full-time institutionalized residents were not included. About 8% of Canadians 65 and older were living in institutions in 1991; of those aged 80 and older, 24% were institutionalized. To study social support among unmarried childless elderly persons, we restrict the sample to those who were 65 or older, who were unmarried at the time of the survey, and who had no surviving children (including adopted/stepchildren) of their own. With these restrictions, the study sample includes a total of 1,078 elderly people (678 women, 400 men).

### Measures

*Dependent variables.*—To obtain information on informal support availability, the respondents were asked whether they had any family members or friends with whom they could discuss private matters or upon whom they could call for help. The three models of support sources suggest that people with ties to both family and friends are in a more secure or desirable position than those with ties only to family or only to friends. Thus, support availability was ordinally ranked from least (no one available), to some (only family or only friends available), to most (both family and friends available).

The concept of reciprocity in social-support exchange is important in the conceptualization of support arrangements. Reciprocity, the normative obligation of recipients of help to assist people who have provided help to them (Gouldner,

1960), may involve exact exchanges of goods or services, exchanges of equal value between network members, or even support from one network member reciprocated to another (Wellman & Hall, 1986). The importance of reciprocity in social support is being recognized increasingly (e.g., Hirdes & Strain, 1995; Ikels, 1988; Johnson & Catalano, 1981). Asymmetrical exchanges of support within older populations lead to feelings of loneliness and dissatisfaction with social relationships (Rook, 1987). Additionally, as the amount of support provided to elderly people is strongly associated with the amount of support given by them (Horwitz, Reinhard, & Howell-White, 1996), reciprocity is conducive to security in old age (Wentowski, 1981). Therefore, the best exchange appears to involve both giving and receiving support, rather than participating in a primarily one-sided relationship (Blazer, 1982; Donald & Ware, 1982; Ward, Sherman, & LaGory, 1984).

Instrumental support was measured by whether the respondent reported having given or received help with instrumental tasks (e.g., housework, transportation, personal care) during the past 12 months. In line with the concept of reciprocity, instrumental support was ordinally ranked from neither giving nor receiving help (least supportive exchange), to either giving or receiving help, to both giving and receiving help (most involved exchange). Emotional support was measured by whether the respondent reported having given or received "help with emotional support" during the past 12 months, and was ranked similarly to instrumental support. Respondents were able to interpret for themselves what qualified as "emotional support." Finally, in light of the importance of receiving support in later life, in separate analyses, instrumental and emotional support were also measured as dichotomies indicating whether support was received.

*Independent variables.*—We consider a set of individual characteristics, such as gender, age, and life strains, that are known to influence social support (e.g., Eckenrode & Wellington, 1990; Pearlin et al., 1981; Thoits, 1982). Table 1 provides operational definitions and descriptive statistics for the independent variables used in the analyses. Sociodemographic factors include gender, age, marital status, and educational status. Gender was measured as a dummy variable. Age was treated as a set of three dummy indicators—70–74, 75–79, and 80 and over—with 65–69 as the reference group. The substitution and task-specific models predict that aging is associated with a loss of specific types of ties, which limits some kinds of support.

People with different marital histories may be differently isolated, which may affect social support (Keith, 1986). Accordingly, marital status was coded using two dummy indicators to identify differences in marital histories—separated/divorced and widowed—with single/never-married as the reference group. The functional specificity of relationships model suggests that people with different marital histories may negotiate different ties. Married persons may expect to rely on a spouse for support. If the spousal tie is lost, through divorce or widowhood, individuals who expected to receive support from the lost tie may be at particular risk of lacking support compared with those who have built up

Table 1. Definitions and Descriptive Statistics for the Independent Variable Used in Multivariate Models (*N* = 1,078)

| Variable | Definition | *M* or % | *SD* |
|---|---|---|---|
| Female | Dummy indicator (1 = female, 0 = male) | 62.9% | — |
| Age | Coded as three dummy indicators | | |
| 65–69 | Reference group | 27.5% | — |
| 70–74 | Dummy indicator (1 = yes, 0 = all else) | 23.8% | — |
| 75–79 | Dummy indicator (1 = yes, 0 = all else) | 20.3% | — |
| 80 + | Dummy indicator (1 = yes, 0 = all else) | 28.4% | — |
| Marital Status | Coded as two dummy indicators | | |
| Separated/divorced | Dummy indicator (1 = yes, 0 = all else) | 5.4% | — |
| Widowed | Dummy indicator (1 = yes, 0 = all else) | 35.4% | — |
| Single/never married | Reference group | 59.2% | — |
| Educational Status | Educational attainment in 6 levels (1 = elementary school or less to 6 = university degree or higher) | 2.704 | 1.695 |
| Life Events | Number of negative life events experienced in the last 12 months (min = 0, max = 5) | 0.926 | 1.030 |
| ADL Impairment | Number of ADL impairments (min = 0, max = 5) | 1.081 | 1.843 |
| Health Status | Self-reported health status in 4 levels (1 = poor to 4 = excellent) | 2.728 | 0.811 |
| Fear of Crime | Feel unsafe and insecure outdoors in neighborhood (1 = yes, 0 = no) | 13.6% | — |
| Economic Need | Whether income satisfies current and future needs in 9 levels (0 = very well to 9 = totally inadequate) | 3.602 | 1.418 |
| Economic Need Missing | Dummy indicator (1 = missing on economic need variable, 0 = no) | 9.9% | — |
| No. of Siblings | Number of living siblings | 2.660 | 2.570 |

other support resources through anticipatory socialization. Marital status distinctions are especially important with regard to never-married adults, who are often viewed as expressly different from the ever-married population (e.g., Gubrium, 1975; Lawton, Moss, & Kleban, 1984; Rubinstein, 1987; Ward, 1979). Further, separated/divorced individuals may be stigmatized, and divided loyalties may reduce the scope of relatives available, resulting in a smaller informal support network. Widowed individuals, on the other hand, typically have wider kinship systems and more potential support from relatives (Choi, 1996; Wilcox, 1981). Increased socioeconomic status (reflected in educational status) is associated with increased network size and participation, and thus should increase support (Thoits, 1982). Educational status was treated as a continuous variable.

Stress factors include negative life events, activity of daily living (ADL) impairment, health status, fear of crime, and economic need. Life events are acute changes that require major behavioral readjustments within a relatively short period of time, and have traditionally been used as a measure of life stress. Increased stress due to negative life events may provide incentive to exchange support. In this study, the number of negative life events experienced in the last 12 months, from a given set (e.g., the death of a family member or friend, or changing residence), was treated as a continuous variable.

Pearlin and colleagues (1981) argue that life strains are more appropriate than life events in understanding stress among the elderly population because of the chronic nature of many older people's problems. Additionally, although older people may adapt and accept certain life events as normal and expected, they are affected by ongoing strains.

These strains are thought to increase the mobilization of support. To incorporate the stress model, several measures of chronic strain were assessed in this study: ADL impairment, health status, economic need, and fear of crime. ADL impairment and health status are typically the strongest strain predictors (Arling, 1987; Revicki & Mitchell, 1990). ADL impairment was measured as a continuous variable representing the number of impairments. Health status was measured as self-reported health.

Economic need can erode perceptions of personal control and feelings of self-worth in later life, creating embarrassment, stigma, and unwanted dependence on others. It was measured as a continuous variable indicating how adequately the respondents felt their income satisfied current and future needs. Research by Krause (1987) suggests that perceptions of financial strain among elderly individuals remain highly stable over time, and that subjective measures of economic inadequacy relate more strongly to depressive symptoms than objective measures such as income level. Further, like most large surveys, the percentage of missing income responses in our study sample is substantial (10%). To avoid a significant reduction in sample size, the missing values were replaced with the mean income need. A dummy variable for missing responses was included in the regression analyses.

Fear of crime, one of the most common stressors in later life, is also treated as a form of chronic or ongoing strain (e.g., Krause, 1991). This fear, a stressor representing concern over what may happen in the future, can influence the individual's cognitive construction of reality and may negatively affect the behavior and well-being of older adults. Fear of crime was coded as a dummy indicator measuring whether the respondent felt unsafe and insecure outdoors in

the neighborhood. Both economic need and fear of crime may decrease support exchange by increasing distrust.

The social support source models discussed earlier predict that siblings will be of importance to support among the unmarried childless elderly population. The substitution model predicts that siblings are of primary importance to social support for unmarried childless elderly individuals. The task-specific and functional specificity of relationships models predict that siblings are important for some types of support, but not for others. The functional specificity of relationships model further predicts that sibling-group size may affect support availability more than support exchange. Thus, the number of living siblings is used to assess the relative importance of siblings for support availability and exchange.

Finally, to consider the possibility that women may maintain their support systems better in old age than men do (see, e.g., Choi, 1996, and Keith, 1986), we include gender by age interactions in the analysis of social support.

*Statistical analysis.*—Because the dependent variables were coded as ordered-response variables, we used ordered-response logistic regression models to assess the availability and exchange of social support (Maddala, 1983). We used logistic models for binary variables in support-receipt models. Logistic models estimate the log-odds that a value of the independent variable is associated with the dependent variable, all else being equal. Odds ratios can be calculated from logistic models by taking the anti-log ($e^b$) of the parameter estimates. In the case of ordinal variables, using support availability as an example, the anti-log of a positive parameter estimate reflects the odds of improved availability, for *both family and friends available* versus *only family or friends* or *none available*, and for *both family and friends available* or *family or friends available* versus *none available*. A simple transformation, $100(e^b-1)$, can be interpreted as the percentage change (reduction or increase) in the odds of moving to an improved category of support for a one unit increase in a given independent variable, holding other variables constant (Long, 1997).

RESULTS

*Description of Sample*

Table 2 provides percentage distributions for the availability of support, the exchange of instrumental support, and the exchange of emotional support for four selected age groups. Chi-square values for testing statistical independence between age and social support were also calculated. It is clear that the relationships between age and each of the three support measures are highly significant ($p < .001$). First we consider support availability. The percentage of respondents reporting no support available is comparatively low (5.6–12.8%) in all age groups, although this is by no means an insubstantial group when converted to the absolute number in the population. Most older persons identify both family and friends as available to provide support; such responses peak in the 70–74 age group and gradually decline as age increases. It appears that after this point, availability becomes somewhat more specialized, com-

prised either of family or friends, rather than becoming strictly unavailable.

Looking next at the exchange of instrumental support, the 70–74 age group again appears to be the most advantaged. In older categories, the number reporting *receive only* increases sharply, whereas the number reporting *give only* steadily declines. Although active reciprocity of instrumental support declines with age, there does not appear to be an equivalent increase in lack of support. Our results show that only 17.1% of those aged 80+ report *neither giving nor receiving* instrumental support; an additional 10.8% report *giving only*. Both figures are less than half those of the 65–69 age group (which are 38.3% and 23.7%, respectively).

Considering now the exchange of emotional support, the 70–74 age group is again the most advantaged; reciprocation declines to a stable level in older categories. About one quarter of respondents in all age groups report *giving only*, whereas the percentage reporting *receiving only* remains low and relatively stable. Approximately half of the respondents in each age category claim neither to give nor receive emotional support—a striking finding, especially when coupled with those who *give only*. It appears that about three quarters of unmarried childless elderly people receive no emotional support from either family or friends.

Table 3 provides the ordered-response logistic regression results for support availability. Model 1 is a baseline model, which includes only sociodemographic variables. Model 2

Table 2. Percentage Distribution of Social Support Among Childless Unmarried Elderly Persons: Canada, 1991

|  | Age | | | |
| --- | --- | --- | --- | --- |
|  | 65–69 | 70–74 | 75–79 | 80+ |
| Availability of Support | | | | |
| Both family and friends | 60.5 | 70.2 | 55.7 | 48.1 |
| Family only | 16.0 | 13.7 | 18.1 | 24.6 |
| Friends only | 10.7 | 10.5 | 15.8 | 19.3 |
| None | 12.8 | 5.6 | 10.4 | 8.0 |
| Total[a] | 100.0 | 100.0 | 100.0 | 100.0 |
| N[b] | 231 | 222 | 252 | 373 |

$\chi^2 = 42.15$ ($df = 9, p < .001$)

| Instrumental Support | | | | |
| --- | --- | --- | --- | --- |
| Both give and receive | 22.7 | 33.0 | 23.4 | 26.6 |
| Give only | 23.7 | 27.1 | 17.2 | 10.8 |
| Receive only | 15.2 | 15.0 | 25.2 | 45.5 |
| Neither give nor receive | 38.3 | 24.9 | 34.2 | 17.1 |
| Total[a] | 100.0 | 100.0 | 100.0 | 100.0 |
| N[b] | 231 | 222 | 252 | 373 |

$\chi^2 = 127.9$ ($df = 9, p < .001$)

| Emotional Support | | | | |
| --- | --- | --- | --- | --- |
| Both give and receive | 19.9 | 25.8 | 12.3 | 14.3 |
| Give only | 24.9 | 21.9 | 25.6 | 21.4 |
| Receive only | 6.1 | 2.8 | 7.3 | 9.5 |
| Neither give nor receive | 49.1 | 49.5 | 54.7 | 54.8 |
| Total[a] | 100.0 | 100.0 | 100.0 | 100.0 |
| N[b] | 228 | 219 | 249 | 369 |

$\chi^2 = 28.0$ ($df = 9, p < .001$)

[a]Percentages may not add up to 100 due to rounding errors.
[b]Unweighted sample sizes.

Table 3. Parameter Estimates From Ordered-Response Logistic Regression of Support Availability
for Childless Unmarried Elderly Persons: Canada, 1991

| Independent Variable | Model 1 $b$ | Model 2 $b$ | Model 3 $b$ | Model 4 $b$ | Model 5 $b$ |
|---|---|---|---|---|---|
| Female | 0.045 | 0.102 | 0.041 | 0.095 | 0.073 |
| Age | | | | | |
| (65–69) | | | | | |
| 70–74 | 0.057 | 0.025 | 0.108 | 0.073 | 0.010 |
| 75–79 | –0.291 | –0.340 | –0.209 | –0.261 | –0.499 |
| 80+ | –0.301 | –0.363* | –0.155 | –0.230 | –0.001 |
| Marital Status | | | | | |
| Separated/divorced | –0.255 | –0.281 | –0.158 | –0.167 | –0.167 |
| Widowed | –0.049 | –0.052 | –0.037 | –0.032 | –0.039 |
| (Single/never married) | | | | | |
| Educational Status | 0.113** | 0.066 | 0.135*** | 0.085* | 0.085* |
| Life Events | | 0.186** | | 0.178** | 0.176** |
| ADL Impairment | | 0.051 | | 0.055 | 0.057 |
| Health Status | | 0.204* | | 0.213* | 0.207* |
| Economic Need | | –0.095 | | –0.101 | –0.107 |
| Economic Need Missing | | –0.312 | | –0.375 | –0.396 |
| Fear of Crime | | –0.460* | | –0.475* | –0.496* |
| Siblings | | | 0.08** | 0.072** | 0.072** |
| Female × Age (70–74) | | | | | 0.120 |
| Female × Age (75–79) | | | | | 0.388 |
| Female × Age (80+) | | | | | –0.307 |
| Intercept 1 | 0.209 | –0.013 | –0.133 | –0.316 | –0.264 |
| Intercept 2 | 2.463*** | 2.299*** | 2.116*** | 1.993*** | 2.051*** |
| -2 Log Likelihood | 1866.5 | 1772.7 | 1847.3 | 1757.2 | 1753.2 |
| Model $\chi^2$ | 17.6* | 39.0*** | 26.1** | 46.0*** | 50.0*** |
| $df$ | 7 | 13 | 8 | 14 | 17 |

*Note:* Reference groups in parentheses.
$*p < .05; **p < .01; ***p < .001$ (two-tailed test).

adds five stress indicators, such as life events and economic need. Model 3 adds the number of siblings to the baseline model, examining sibling support, and Model 4 combines Models 1 through 3. Judging from chi-square values for model fit, Models 2 through 4 all significantly improve Model 1 ($p < .01$). Model 5 adds interaction terms, but model chi-square values do not indicate a significant improvement upon Model 4 (chi-square difference = 4, $df = 3$, $p > .05$), which becomes our preferred model. Further, in analyses not shown here, interactions between gender and the other independent variables were found to be insignificant.

Table 3 shows that gender differences are not significant in the availability of support (see Model 1). Gender remains insignificant after other variables are added to the model (see Models 2 through 4). Age differences are also not significant when controlling for the effects of other factors. Marital status does not significantly affect support availability. As expected, greater education is associated with improved support availability. Negative life events appear to improve support availability significantly: each negative event is associated with about a 20% ([$e^{.178}$–1] × 100) improvement in support availability (see Model 4). ADL impairment is not significant, although better health status improves availability substantially ($p < .05$). Economic need

is not associated with support availability at the .05 level, although its $p$ value of .07 (not shown) may be suggestive of a weak negative association. As expected, fear of crime has a negative effect; support availability seems to be nearly 40% ([$e^{-.475}$–1] × 100) lower for those who reported a fear of crime than for those who did not. Also as expected, siblings increase available support: each sibling increases the odds of improved support availability by 8%.

Table 4 provides results for instrumental support exchange. Again, five models were considered. It is clear that Models 2 and 4 significantly improve the baseline model ($p < .01$), but Model 3 does not. Model 5 does not significantly improve Model 4, which remains our preferred model. As expected, gender is significant in all models considered. Elderly women clearly engage in greater exchange of instrumental support than elderly men. Age, however, is not significant, nor is marital history. Our results show that educational status is associated with greater involvement in instrumental support exchange, as are negative life events and ADL impairment. However, self-reported health status is not significant. As suggested by Table 3, greater economic need appears to deter instrumental support. However, fear of crime and number of siblings do not appear to affect instrumental support exchange.

Table 4. Parameter Estimates From Ordered-Response Logistic Regression of Exchange of Instrumental
Support for Childless Unmarried Elderly Persons: Canada, 1991

| Independent Variable | Model 1 b | Model 2 b | Model 3 b | Model 4 b | Model 5 b |
|---|---|---|---|---|---|
| Female | 0.093*** | 0.488*** | 0.090*** | 0.484*** | 0.683** |
| Age | | | | | |
| (65–69) | | | | | |
| 70–74 | 0.144 | 0.068 | 0.176 | 0.098 | 0.339 |
| 75–79 | 0.002 | –0.09 | 0.060 | –0.043 | –0.155 |
| 80+ | 0.126 | –0.051• | 0.203 | –0.117 | 0.332 |
| Marital Status | | | | | |
| Separated/divorced | –0.293 | –0.303 | –0.292 | –0.306 | –0.309 |
| Widowed | –0.006 | –0.038 | –0.002 | –0.027 | –0.020 |
| (Single/never married) | | | | | |
| Educational Status | 0.121*** | 0.084* | 0.135*** | 0.094* | 0.093* |
| Life Events | | 0.374*** | | 0.376*** | 0.379*** |
| ADL Impairment | | 0.080* | | 0.083* | 0.082* |
| Health Status | | 0.084 | | 0.087 | 0.080 |
| Economic Need | | –0.148** | | –0.150** | –0.151** |
| Economic Need Missing | | –0.098 | | –0.121 | –0.139 |
| Fear of Crime | | 0.158 | | 0.154 | 0.132 |
| Siblings | | | 0.037 | 0.027 | 0.027 |
| Female × Age (70–74) | | | | | –0.485 |
| Female × Age (75–79) | | | | | 0.119 |
| Female × Age (80+) | | | | | –0.373 |
| Intercept 1 | –1.600*** | –1.612*** | –1.781*** | –1.757*** | –1.826*** |
| Intercept 2 | 0.657*** | 0.720 | 0.479* | 0.580 | 0.517 |
| -2 Log Likelihood | 2197.5 | 2083.1 | 2184.6 | 2072.2 | 2068.2 |
| Model $\chi^2$ | 40.3*** | 97.6*** | 43.5*** | 100.2*** | 104.1*** |
| df | 7 | 13 | 8 | 14 | 17 |

Note: Reference groups in parentheses.
$*p < .05; **p < .01; ***p < .001$ (two-tailed test).

Table 5 presents results for emotional support. The estimates, although generally similar to those for instrumental support exchange, show somewhat stronger effects in each case. Models 2 through 4 all significantly improve the baseline model. It is noted that Model 5 also improves Model 4 ($p < .01$) and therefore becomes our preferred model. Model 5 shows that all three gender by age interaction terms are significant. To extrapolate the function over the estimates for gender, age, and their cross-product terms, we find that emotional support exchange declines in the following order: women aged 65–69, 70–74, 75–79, and 80+, then men aged 70–74, 80+, 75–79, and, finally, men aged 65–69. (Ignoring the intercepts and holding other variables constant, the corresponding numerical values are 1.589, 1.098, .950, .895, .717, .442, .167, and 0). Gender differences are apparent in emotional support, with women in any age group participating more in emotional support exchange than men. The strength of women's advantage in emotional support exchange declines gradually over the age groups considered, yet even the oldest (and relatively least advantaged) women enjoy greater emotional support exchange than the most advantaged men (aged 70–74). Men aged 65–69 are the least advantaged of all the age/gender groups. Again, marital status is not a significant determi-

nant. Educational status is positively related to emotional support exchange, as are negative life events. However, none of the stress factors are significant, nor are siblings.

Does a greater involvement in support exchange also mean more support received in later life? In Table 6, we reestimated Models 4 and 5 from Tables 4 and 5 using logistic models for binary variables (support received vs not received). Consistent with Tables 4 and 5, we find that the gender by age interactions do not significantly improve the model of instrumental support, but do improve the model of emotional support ($p < .05$). Overall, parameter estimates in Models 1 and 4 in Table 6 (our preferred models) are similar to the corresponding models in Tables 4 and 5, indicating that improved support exchange generally corresponds with increased support receipt. However, there are a few notable differences. For example, those who are aged 80 and older are more likely to receive instrumental support than their younger counterparts, although they are not necessarily more involved in support exchanges. Further, although educational status and economic need may affect instrumental support exchange, they do not affect instrumental support receipt. Health status does not affect instrumental support exchange, but is negatively related to instrumental support receipt, possibly reflecting a decreased need for support when in good health.

Table 5. Parameter Estimates From Ordered-Response Logistic Regression of Exchange of Emotional
Support for the Childless Unmarried Elderly Population: Canada, 1991

| Independent Variable | Model 1 $b$ | Model 2 $b$ | Model 3 $b$ | Model 4 $b$ | Model 5 $b$ |
|---|---|---|---|---|---|
| Female | 0.737*** | 0.798*** | 0.735*** | 0.791*** | 1.589*** |
| Age | | | | | |
| (65–69) | | | | | |
| 70–74 | 0.021 | 0.039 | 0.060 | 0.064 | 0.717* |
| 75–79 | 0.220 | –0.279 | –0.167 | –0.250 | –0.167 |
| 80+ | 0.304 | –0.299 | –0.204 | –0.234 | 0.442 |
| Marital Status | | | | | |
| Separated/divorced | –0.193 | –0.352 | –0.109 | –0.292 | –0.394 |
| Widowed | –0.101 | 0.021 | 0.105 | –0.036 | –0.043 |
| (Single/never married) | | | | | |
| Educational Status | 0.190*** | 0.174*** | 0.204*** | 0.182*** | 0.188*** |
| Life Events | | 0.559*** | | 0.555*** | 0.561*** |
| ADL Impairment | | 0.054 | | 0.056 | 0.057 |
| Health Status | | 0.086 | | 0.089 | 0.071 |
| Economic Need | | 0.040 | | 0.037 | 0.044 |
| Economic Need Missing | | 0.306 | | 0.274 | 0.281 |
| Fear of Crime | | –0.011 | | –0.007 | –0.015 |
| Siblings | | | 0.056* | 0.036 | 0.038 |
| Female × Age (70–74) | | | | | –0.208** |
| Female × Age (75–79) | | | | | 0.806* |
| Female × Age (80+) | | | | | –1.136** |
| Intercept 1 | –2.602*** | –3.678*** | –2.843*** | –3.820*** | –4.249*** |
| Intercept 2 | 1.043*** | –2.004*** | –1.285*** | –2.152*** | –2.565*** |
| -2 Log Likelihood | 1993.3 | 1849.9 | 1981.2 | 1843.0 | 1831.0 |
| Model $\chi^2$ | 81.6*** | 172.8*** | 85.2*** | 172.4*** | 184.3*** |
| $df$ | 7 | 13 | 8 | 14 | 17 |

*Note:* Reference groups in parentheses.
*$p < .05$; **$p < .01$; ***$p < .001$ (two-tailed test).

There appears to be a greater correspondence between exchange and receipt of emotional support. Extrapolating the function over the main and interaction effects suggests that emotional support receipt declines in the following order: women aged 65–69, women 80+, women 70–74, men aged 80+, women 75–79, men 70–74, men 75–79, and finally men aged 65–69. (The corresponding numerical values are 1.594, 1.400, 1.218, 1.092, 1.033, .813, .755, and 0). Women are more likely than men to receive emotional support in each age group, with receipt gradually declining with age for women until age 80, when it increases again. For men, the likelihood of emotional support receipt gradually increases throughout old age, eventually approximating that of women aged 75–79 (the least advantaged group of women). Educational status and negative life events are both associated with improved exchange and increased receipt of emotional support. Additionally, better health status is associated with less emotional support receipt, perhaps reflecting a lack of need rather than a more problematic lack of availability.

DISCUSSION

This article has focused on the availability, exchange, and receipt of informal support for unmarried childless el-

derly persons using several theories of support sources and exchange. Our empirical analysis suggests several important conclusions. First, our results suggest higher levels of support availability for single childless elderly people than those reported in the literature (e.g., Choi, 1996). Support was most often identified as available from both family and friends for all groups of single childless elderly persons, followed by family only, then friends only, with approximately 10% of each age group reporting no support available from either source. Although high support availability among this population eases the concern about lack of support for single childless elderly persons, consistent with the functional specificity of relationships model we found that availability may not equate with actual support exchange and receipt, a relationship that some studies tacitly assume (e.g., Choi, 1996; McMullin & Marshall, 1996).

Second, in contrast to Goldberg and colleagues' (1986) finding that nearly two thirds of the spouseless childless elderly population in the northeastern region of the United States participates in reciprocal support relationships, reciprocation appears to be considerably less prevalent in Canada. We found that only about one quarter of the equivalent Canadian population participates in reciprocal instrumental support exchanges, and that even fewer are involved in emotional

Table 6. Parameter Estimates From Logistic Regression of Receipt of Instrumental and
Emotional Support for Childless Unmarried Elderly Persons: Canada, 1991

| | Instrumental Support | | Emotional Support | |
| | Model 1 | Model 2 | Model 3 | Model 4 |
| Independent Variable | $b$ | $b$ | $b$ | $b$ |
|---|---|---|---|---|
| Female | 0.636*** | 0.477 | 0.610** | 1.594*** |
| Age | | | | |
|   (65–69) | | | | |
|   70–74 | –0.087 | –0.084 | 0.094 | 0.813* |
|   75–79 | 0.258 | –0.060 | –0.065 | 0.755 |
|   80+ | 1.008*** | 1.002*** | 0.259 | 1.092** |
| Marital Status | | | | |
|   Separated/divorced | –0.348 | –0.326 | –0.237 | –0.315 |
|   Widowed | 0.065 | 0.068 | 0.156 | 0.147 |
|   (Single/never married) | | | | |
| Educational Status | 0.012 | 0.011 | 0.133** | 0.139** |
| Life Events | 0.229** | 0.229** | 0.396*** | 0.398*** |
| ADL Impairment | 0.097* | 0.096* | 0.078 | 0.078 |
| Health Status | –0.390*** | –0.392*** | –0.220* | –0.238* |
| Economic Need | –0.078 | –0.081 | 0.030 | 0.040 |
| Economic Need Missing | –0.105 | –0.120 | 0.144 | 0.159 |
| Fear of Crime | 0.016 | –0.004 | –0.279 | –0.285 |
| Siblings | –0.006 | –0.006 | 0.047 | 0.051 |
| Female × Age (70–74) | | 0.022 | | –1.189* |
| Female × Age (75–79) | | 0.564 | | –1.316* |
| Female × Age (80+) | | 0.061 | | –1.286** |
| Intercept | 0.626 | 0.720 | –2.269*** | –2.871*** |
| -2 Log Likelihood | 1279.1 | 1276.4 | 1034.3 | 1024.9 |
| Model $\chi^2$ | 133.4*** | 136.2*** | 82.7*** | 92.1*** |
| $df$ | 14 | 17 | 14 | 17 |

*Note:* Reference groups in parentheses.
$*p < .05$; $**p < .01$; $***p < .001$ (two-tailed test).

support reciprocation. The low level of reciprocal exchange may be cause for concern, as reciprocal support arrangements have been shown to be beneficial for older persons.

Third, our findings regarding instrumental support exchange (see Table 2) concur with Hirdes and Strain's (1995) results, which indicate that older individuals increasingly lack the resources to give or reciprocate support. However, as shown in Table 6, this inability to reciprocate instrumental support may not preclude the receipt of support. Contrary to Johnson and Troll's (1992) finding that 86% of the oldest old population (85+) lacks any instrumental support, our results show that those aged 80+ are the least likely to lack instrumental support. Only 17% of people 80+ reported *neither giving nor receiving* support, with an additional 11% reporting *giving only*. Morgan, Schuster, and Butler (1991) report that a "role reversal" occurs for the oldest old (85+) population in general, in which elderly adults convert from net senders of support to net receivers. Hirdes and Strain (1995) report that this same role reversal occurs some time before age 65. In our study sample the role reversal seems to occur at ages 75–79 for single childless elderly persons, somewhere between the ages of the two prior findings.

Fourth, our results suggest a much greater unmet need for emotional support than previously assessed. For example, Johnson and Troll (1992) estimate that 56% of the unmarried

childless elderly population in the San Francisco area receives no emotional support from family, whereas our study indicates that 75% of unmarried and childless elderly persons receive no emotional support from either family or friends (see Table 2). Further, a role reversal in emotional support exchange does not seem to occur. Those unmarried childless elderly individuals involved in emotional support exchanges remain net givers of support, even at the oldest ages.

Fifth, our multivariate analyses suggest that improved availability does not necessarily correspond with greater involvement in exchange, although greater exchange generally corresponds with increased support receipt. The analyses also identified several important variables influencing social support among this elderly population. For example, we found that gender is significant in the exchange of instrumental support, which accords with the general social support literature (e.g., Antonucci, 1990). The finding of women's greater involvement in emotional support exchange is also consistent with that of Horwitz and colleagues (1996).

However, the effect of age is clearly less consistent. For example, unmarried childless persons aged 70–74 appear to be the most advantaged group (Table 2), but the age differences become less apparent after other variables are taken into consideration. Age is generally insignificant in the

models of support availability and instrumental support exchange, but the importance of age reemerges in the models of support receipt. We found that those aged 80 and older are most likely to receive instrumental support (Table 6). Further, the effect of age also varies with gender when it comes to emotional support. For example, women appear to maintain emotional support networks better over time than men, with involvement in emotional support exchange gradually declining with age (Table 5). For men, emotional support exchange peaks for ages 70–74, then declines, although it never matches women's advantage. The receipt of emotional support is also higher for women and is greatest for women aged 65–69, gradually declining until age 80 when receipt increases (Table 6). Men's emotional support receipt gradually increases with age, with men aged 80+ receiving the greatest emotional support among men.

Contrary to the predictions of the functional specificity of relationships model, marital history was insignificant in all aspects of support availability and exchange for unmarried childless elderly persons. Greater educational attainment was associated with significantly improved odds of support availability and exchange, possibly because increased socioeconomic status is associated with increased network size and participation, and because of increased resources and ability to reciprocate.

Although the chronic stress model of support mobilization has become increasingly popular at the expense of life event models, negative life events still appear to play an important role in support availability and exchange. It is possible that these life events alert network members to the need for social support. Aneshensel (1992) suggests that life events affect support only when they result in persistent and recurrent emotional strains, which may also be partially responsible for the importance of life events reported in this study. Particular strains were also found to affect support availability and exchange. ADL impairment was associated with increased instrumental support exchange and receipt. Consistent with McMullin and Marshall's (1996) findings, better health was associated with improved support availability, although health status was negatively related to the receipt of both instrumental and emotional support.

Our results also suggest that certain stressors, such as economic need and fear of crime, appear to erode support resources rather than mobilize them. For example, economic need was negatively associated with instrumental support exchange, perhaps reflecting a lack of resources or ability to reciprocate. Fear of crime lowered support availability, which is consistent with Krause's (1991) findings, perhaps because these individuals are more reluctant to establish potential sources. Our findings are consistent with the view that certain chronic stressors increase both distrust in others and social isolation, eroding support resources (Krause, 1991). However, the finding that elderly persons with poor health tend to receive more support (Table 6) provides some support to Pearlin and associates' (1981) stress model, which suggests that some stressors may mobilize social support.

Finally, we found that siblings are an important determinant of support availability, which is consistent with Choi's (1996) finding for the unmarried childless elderly population. The insignificance of siblings in instrumental support

agrees with Johnson and Troll's (1992) finding that the oldest-old unmarried childless population receives little instrumental support from family members. Further, in keeping with Johnson and Catalano's (1981) finding that unmarried childless elderly persons receive emotional support primarily from friends, we found that siblings are not associated with emotional support exchange. It is clear that the insignificant effect of siblings on the exchange and receipt of support contradicts the hierarchical compensatory (substitution) model, which suggests that single childless elderly people will rely primarily on siblings for support. However, this finding is in line with the task-specific and functional specificity of relationships models, which contend that siblings may not necessarily form the primary support source.

Although our analysis provides a fairly detailed picture of social support among this group of the elderly population, several important aspects of social support are not addressed in this study. First, our data are limited by their cross-sectional nature. Data regarding the provision and receipt of support are subject to a recall bias, because elderly respondents may not be able to remember all support exchanges over the last 12 months. Second, some causal orderings assumed in our analysis could be reversed. For example, rather than fear of crime limiting support availability, the reverse may well be the case (i.e., lack of available support could increase fear of crime). Because reciprocity is an inherently dynamic process, an empirical test of the causal assumptions embedded in this model requires prospective data on social support. Third, our measurement of support is confined to exchanges within the last 12 months. This restriction may underestimate the prevalence of reciprocation in light of the "support bank" concept, in which people build up "credits" for support they have provided in the past (Antonucci, 1990; Ingersoll-Dayton & Antonucci, 1988).

In conclusion, the results of this study suggest that the effects of certain factors on unmarried childless elderly people's informal support systems are similar to the effects of the same factors on the unmarried or childless elderly population in general; however, the extent of support needed may differ substantially by group. It appears that emotional support is the most substantial unmet need that these elderly adults face. The current tendency to consider policies that promote increasing reliance on partners and children for support does so at the risk of disregarding the significant number of elderly adults who have neither and who thus must rely on broader networks. Future support availability for this group of elderly people may be particularly critical, as the reduced fertility of the baby boom generation has limited the number of siblings in future elderly cohorts, thus lessening future access to a primary source of support as older individuals. However, it is also essential to realize that the mere availability of support does not translate into mobilized or received support. Although availability of support is a prerequisite, exchange of support must be actively encouraged to improve the quality of life for both the giver and the recipient.

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