THE DEATH OF A LOVED ONE:
IMPACT ON HEALTH AND RELATIONSHIPS
IN VERY OLD AGE*

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ABSTRACT

The death of a significant other is seen as a major life disruption. What are the consequences when such a loss occurs during advanced old age? Based on observation of an octogenarian cohort over a period of five years (1994-1999), this study investigates the impact of losing a significant other (close relative or friend) on the health of elders and on their family and social life. The bereaved are compared with two control groups: one declaring no significant change in their life and the other reporting a loss unrelated to bereavement. Results show that the death of a significant other has no impact on the measures of functional and physical health, nor is it a factor of isolation. However, the loss of a close relative is associated with more depressive symptoms while that of a relative or friend is related to the survivor’s feeling of loneliness.

The loss of a loved one is considered to be a major disruption in a person’s life, having an impact on the relationships, health and morale of the person concerned.

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What is the effect when such an event takes place in advanced old age (over 80 years old)? On the basis of a five-year study (1994-1999) of a cohort of octogenarians, we recorded the deaths of close relatives (spouse, sibling, child) and friends, and analyzed the impact of the loss on health status and relationships.

DEATH AND ITS IMPACT IN LATER LIFE

The further a person advances into old age, the more he or she becomes a survivor, i.e. someone whose close relatives and friends have gradually disappeared. Having already snatched the person’s ascendants, death now claims the spouse, decimates siblings and friends, and increasingly strikes at later generations. In the circle of family and friends, there are soon as many dead as living. Spousal bereavement is, however, more typical among the young-old than the old-old. Beyond the age of 80, women greatly outnumber men and most of them are already widows. The men, who are usually married, are still highly likely to die before their spouse. In Switzerland, according to the 1990 census (Swiss Federal Statistical Office, 1993), there are about twice as many women as men in the 80-and-over age bracket. Only 15% of the women still have their spouse, compared with 60% of the men. Advanced old age thus seems to be punctuated by the loss of contemporaries among siblings and friends, people with whom the survivor had ties derived from years of sharing rhythms of life, activities, memories, and emotions. At the same time, death now seems to strike later generations more frequently than before. According to Moss, Lesher, and Moss (1986-1987), 10% of persons had lost a child when they were over 60, and the risk accentuates with age.

Impact on Health

A good deal has been written about the process of bereavement, the causes of mortality, and the advent and repercussions of widowhood. The literature is scant, however, on the reactions of older people to the death of a child, a sibling or a friend (see Fitzpatrick, 1998).

The excess mortality of the widowed, especially in the year following bereavement, is now well established (Bowling & Windsor, 1995; Carey, 1979-1980; Thierry, 1999, 2000), corroborating the “broken heart” syndrome theory (Parkes, 1972; see also Stroebe & Stroebe, 1993). Spousal bereavement often affects health also: according to Tudiver, Hilditch, Permaul, and McKendree (1992), roughly one person in four incurs problems of physical or psychological health in the first year of widowhood. Nevertheless, as far as the long-term consequences of widowhood on health are concerned, the findings of research do not all concord. Widowhood does not seem to be associated with worsening physical health (Bennett, 1999; Lalive d’Epinay, Bickel, Maystre, & Vollenwyder, 2000). With regard to self-rated health, some authors report no significant difference between
widowed and married persons (Lund, Caserta, & Dimond, 1993), while others report a more negative judgment among the former (Thompson, Breckenridge, Gallagher, & Peterson, 1984). From the psychosomatic point of view, however, there is agreement that, even after the mourning period, the widowed display a greater tendency toward depressive symptoms than their married contemporaries (Delbès & Gaymu, 2000; Gallagher, Breckenridge, Thompson, & Peterson, 1983; Lund, Caserta, & Dimond, 1993; Umberson, Wortman, & Kessler, 1992).

The loss of a spouse is undoubtedly a major event but it is not the only instance in which a person with whom one has close affective ties and memories of shared times of life, activities, and emotions is taken away. Setting aside the loss of an ascendant, which is an unusual event in old age, let us consider the death of contemporaries (among siblings and friends) and offspring. All in all, the negative consequences of these disappearances appear to be as great as for the loss of a spouse (for the loss of a child, see Arbuckle & de Vries, 1995; Goodman, Rubinstein, Alexander, & Luborsky, 1991; Rogers & Reich, 1988; for the loss of a brother or sister, see Brubacker, 1985; Moss et al., 1986-1987; for the loss of a friend, see Fitzpatrick, 1998; Roberto & Stanis, 1994). Some authors have pointed out that, in contrast to the loss of a spouse or close relative, the loss of a friend is not an occasion for any particular recognition or ritual and no specific reaction is organized by those close to the friend in question, which makes coping particularly difficult (Doka, 1989; Sklar & Hartley, 1990). One of the few empirical studies on the subject concluded that those bereft of a friend remained in better health than the control group of non-bereaved (de Vries, Lehman, & Arbuckle, 1995).

Consider for a moment the study by Hays, Gold, and Pieper (1997). Based on a longitudinal survey, the authors compare changes in the health status of four groups of individuals: bereft of a spouse, bereft of a brother or sister, bereft of a friend, and a non-bereaved control group. A comparison of the three bereaved groups shows that it is the loss of a brother or sister that has the greatest impact on the survivors’ health. At the same time, they detect no significant difference between any of the bereaved groups and the non-bereaved group; all suffered from declining health over the period in question, the decline in functional status and self-rated health even being steeper in the control group than in the bereaved groups! According to the authors, these findings may be accounted for by the heterogeneous composition of the non-bereaved group. We shall come back to this later.

Impact on Relationships

Regarding the impact that the death of a loved one has on relational life, we note some measure of agreement that, with advancing age, the number of social relationships dwindles gradually (see Rook, 2000). But does this mean that relational life wanes? Spousal bereavement, for example, does not necessarily lead to social isolation; on the contrary, the surviving spouse is usually not short
of company (Ferraro, Mutran, & Barresi, 1984). Some older people make up for the disappearance of their spouse by strengthening their relationships with friends and their social participation (Gallagher & Gerstel, 1993). Conversely, other studies conclude that isolation is more acute among widows and widowers (see Wenger, Davies, Shahtahmasebi, & Scott, 1996) and that, despite the family’s solicitude, the widowed suffer more from loneliness than those who are married (Delbès & Gaymu, 2000; Wenger et al., 1996). Childless couples are particularly exposed to isolation when one of the spouses dies (Johnson & Catalano, 1981).

From a theoretical standpoint, it is important to make a distinction between family and friends. Ties of blood and marriage engender a network in which all the members are related to one another. The death of a close relative is an event for the whole family, prompting a collective ritual and entailing relational adjustments throughout the network. The friendship network, on the other hand, is premised on elective affinities and shared interests that bind an individual to each friend, which in no way prejudices the relations that the friends may have among themselves (Allan, 1979). Based on reciprocal choice, the network of friends consists principally of contemporaries and, in the case of the elderly, of long-time friends; it therefore atrophies drastically in later life, especially as both the opportunities and the desire to make new friends are said to dwindle (Matthews, 1986; the last-mentioned traits are however disputed by Johnson & Barer, 1997).

At this point, three remarks must be made. First of all, with some quoted exceptions, the empirical studies on the loss of a close relative (other than a spouse) or friend are of a qualitative nature and are based on small samples. Secondly, they deal with the elderly without distinction. According to one hypothesis of the life course theory, however, the likelihood of a given event occurring and the repercussions of the event differ depending on the time of life when the event occurs (Elder, 1998). Johnson and Barer (1997) point out, for example, that one characteristic of the very old is their ability to cope with tragic events. Lastly, most of the studies examine the impact of bereavement a few months or a year after the event. Psychosomatic and relational effects may however come to light much later in the adjustment process. As Fitzpatrick (1998) suggests for morbidity, the analytical plan should be designed to cover both the short and the medium term.

**WORKING HYPOTHESES**

Based on the review of literature, we propose the following hypotheses.

**Differential Incidence of Losses of a Loved One**

*Hypothesis 1:* In old-old age, the source of most bereavements is a sibling or a friend, rather than the spouse or a child.
Impact on Health

Three dimensions of health are separated: physical ailments, functional health, and depressive symptoms (see next section).

Hypothesis 2: The loss of someone close relatives or friends affects negatively the health of the surviving elder.

Hypothesis 3: The greatest negative impact of the loss of a loved one is on the psychological dimension of health (depressive symptoms).

Impact of Relationships

Two dimensions are distinguished, interactive and affective, with the latter subdivided into feeling of closeness and feeling of loneliness (see next section).

Hypothesis 4: (Family relationships) considering the systemic reciprocal nature of the family network and the presence of a bereavement ritual, the loss of a close relative affects negatively the affective dimension, not the interactive one.

Hypothesis 5: (Relations with friends) considering the ego-centered organization of the friends network, and the lack of bereavement ritual, it is expected that the loss of a close friend affects negatively both the interactive and the affective dimensions.

With the exception of the first proposition, for which there is ample evidence, these are exploratory hypotheses which will serve as a guide to the analysis of data and interpretation of results. Finally, based on previous evidence, the time span has also to be taken into account. This is the reason why effects will be assessed distinguishing short and longer terms.

METHODS

Sample

This article is based on data compiled under the Swiss Interdisciplinary Longitudinal Study on the Oldest Old (SWILSOO). This study scrutinizes the health trajectories in old-old age with the aim of identifying the individual and environmental factors and processes that are conducive to an older person’s autonomy, physical and mental integrity, and participation in society; conversely, it also aims at pinpointing the factors and processes that impair or diminish that person’s autonomy, integrity, and ability to participate. SWILSOO is conducted in two contrasting regions of Switzerland: the canton of Geneva (a culturally secular, urban area) and the
central Valais region (an Alpine area of small towns and villages, Catholic in tradition). The panel was launched in 1994 and, at the present stage, involves two five-year cohorts (C1, persons born 1910-1914, n = 340, started in 1994; C2, persons born 1915-1919, n = 374, started in 1999). Each cohort was randomly selected among community-living persons aged 80-84 years at baseline, and stratified by region and gender. The information was gathered by means of face-to-face interviews based on a closed-end questionnaire. In cases where the elder was no longer able to take part in the interview personally, a proxy was used (for a more detailed presentation of SWILSOO, see Lalive d’Epinay, Pin, & Spini, 2001).

Analyses were based on the first cohort, using data collected between 1994 and 1999 in the course of five survey waves carried out at intervals of 18, 12, 12, and 18 months. In view of the type of information we needed, we retained only the questionnaires filled in with the older people themselves. The sample was thus made up of 295 individuals at baseline (1994), 132 (44.7%) of whom were still able to participate personally in the fifth wave in 1999. The dropout rate of 55.3% comprised 23.4% deaths, 23.4% withdrawals (refusals and other departures from the study), and 8.5% persons still present at the fifth wave but interviewed through a close relative or friend. Altogether, 1,025 interviews constituted the raw material for our analysis (W1, n = 295; W2, n = 230; W3, n = 197; W4, n = 171; W5, n = 132).

At baseline, among the 295 participants, 48.5% were female and 53.2% were living in the canton of Geneva (these two variables were used to stratify the sample). Mean age was 81.83 years old (SD = 1.39). As the sample at wave 1 was drawn from a representative sample, low social classes (measured by education and last occupation) represented a majority (58.3%).

Measures

Records of Deaths

Spouse, sibling, child—The questionnaire provided an exact record of the civil status of the participant, of the number of siblings and children at each wave. At baseline, 51.4% of participants declared living with their spouse, 71.9% had at least one sibling, and 71.9% had at least one child.

Friend—The recording of deaths of friends started at the second wave (W2) by way of an open question concerning any changes that occurred in the individual’s circle of friends since the previous round. At baseline, 71.3% declared they had a close friend in their network.

Health

Physical ailments—This question listed a number of parts of the body which may cause suffering (see Lalive d’Epinay et al., 1983, pp. 134-137). Eleven items
were proposed: lower limbs, upper limbs, head/face, back, heart, respiratory organs, stomach/abdomen, genital/urinary organs, chest, fever, other. For each part of the body, the respondent reported the degree of his or her suffering on a 3-point scale: no suffering at all, some suffering, great suffering. This measure was similar to what Kane, Bell, Riegler, Wilson, and Kane (1983) used for measuring physical ailments with the difference that they evaluated the frequency of pain. Only the last answer was taken into account across the 11 possible parts of the body and we were thus using here a scale ranging from 0 (no acute suffering) to 11 (11 parts of the body with acute pain). Sample mean at \( W_1 \) (\( SD \)) = 0.82 (1.24).

**Functional health**—The person's ability to perform unaided the essential acts of everyday living (Katz, Downs, Cash, & Grotz, 1970; Lawton & Brody, 1969) was assessed. Included were five basic activities—toileting, eating and cutting up food, dressing and undressing, rising and going to bed, and moving around within the apartment—and three actions involving mobility—moving around outside, walking at least 200 meters, and going up and down stairs. The overall score, ranging from 0 to 16, was the sum of the responses calculated as follows: unable to do alone (2), can do but with difficulty (1), can do easily (0). Sample mean at \( W_1 \) (\( SD \)) = 1.64 (3.13).

**Depressive symptoms**—These were recorded by means of the Self-Assessing Depression Scale (SADS; see Wang, Treul, & Alverno, 1975), as adapted by Lalive d'Epinay et al. (1983, pp. 127-129). Replies of “often” or “always” were recorded for 10 items: feels tired, has trouble sleeping, feels sad, feels lonely, breaks into tears, feels worried, feels irritable, lacks appetite, lacks self-confidence, has no pleasure in doing things. This scale ranged from 0 (no symptoms) to 10. Sample mean at \( W_1 \) (\( SD \)) = 1.62 (1.83).

**Relations with Family and Friends**

Two dimensions were distinguished:

**The interactive dimension**—Based on a record of the frequency (almost never, at least once a year, once a month, once a week, almost daily) of visits received, visits made, and telephone conversations; range of 0 (no contacts) to 12; sample mean at \( W_1 \) (\( SD \)) = 7.32 (2.55) for family relations and 4.49 (2.86) for social relations.

**The affective dimension**—Here two indicators were used: 1) The feeling of closeness. The absence of anyone who is especially dear is a definition of affective isolation. The subject was therefore asked whether a) in his or her family (apart from the spouse), and b) among friends and relatives, there is anyone to whom he or she feels “personally very close (loves greatly, feels very concerned about that person’s welfare).” Up to two family members and up to three close friends were listed. Sample mean at \( W_1 \) (\( SD \)) = 1.45 (0.75) for family and
The feeling of loneliness. This is a matter that takes us into each person’s inner world (see De Jong Gierveld, 1998). From the SADS (Wang et al., 1975), we selected the item: “I feel rather isolated, rather lonely, even among friends”, using a range of 0 (never) to 3 (always); sample mean at $W_1 (SD) = 0.52 (0.82)$.

**RESULTS**

**Description of Analyses**

Two difficulties of theory and methodology have to be solved. One concerns the time span over which the impact of bereavement is to be measured and the other relates to the definition of the group or groups used for purposes of comparison.

**Time Span**

Two temporal measures of the impact of bereavement were introduced, short term with two waves intervals, and medium term with three waves intervals. More technically, for the short term, the impact on the dependent variable of a death occurring between two successive waves (i.e., occurring after $W_{n-1}$ and registered at $W_n$) was measured at $W_n$ taking into account the value of the dependent variable established at $W_{n-1}$. For the medium term, the death was recorded in the same way (at $W_n$) but its impact on the dependent variable was measured during the following wave, at $W_{n+1}$ (with reference to the value of the dependent variable at $W_{n-1}$). Comparisons among different groups were computed using analyses of covariance (ANCOVA), taking as covariant factors the age of the respondent and the health or relationships indicator adopted, the value used being that established during the previous wave in the case of short-term analyses, and that established during the last-but-one wave in the case of medium-term analyses.

**Categorization**

If we assume that there is a negative effect on health, for example, a decline among bereaved subjects has to be observed but it is also necessary to demonstrate that the decline is attributable to the bereavement. This is the stumbling-block encountered by Hays et al. (1997) in the above-mentioned study; in comparing the bereaved with the non-bereaved, the authors observed a similar change in health in the two groups. They cited the heterogeneous composition of the control group but did not offer any solution. In order to test this explanation of heterogeneity, the non-bereaved must be subdivided into more homogeneous subgroups. To that end, we took advantage of a question aimed at studying the oldest old’s perception of significant changes in their own life. From the second wave of our survey, the interview started with the question, “Since our last visit, have there been any important changes in your life?” Affirmative answers were classified by field and in terms of gains or losses. An overview of the results follows.
Losses and Gains

At each wave, about 40% of respondents reported an “important change.” Of the survivors in the fifth wave, 19% mentioned no important change, but 81% reported a mean number of 2.3 changes. In 8 cases out of 10 the change took the form of a loss, and 1 of a gain, the remaining one being neither a loss nor a gain. Of these loss changes, 60% were related directly to the elder’s health, 8% to the health of someone close, 21% to the decease of a close relative or (but rarely) friend, and 5% to his/her move into a nursing home. Most gain changes referred to family events (weddings, births, shared travel, and holidays), and one quarter to health improvement of the elders or of someone close (Lalive d’Epinay, Cavalli, & Vascotto Karkin, 2000). On the basis of the answers to this question, we split the “non-bereaved category” of the oldest old into three groups: those stating that their lives have undergone an important negative change other than a death (“loss change”), those reporting no significant change during the period in question (“no change”), and those indicating a positive or neutral change (“gain or neutral change”). Table 1 shows the results of this operation. Because of its negligible statistical weight, the third category was not taken into account. The bereaved could thus be compared: a) with the group reporting no significant disruption, which should provide a measure of the effect attributable to the bereavement; and b) with those reporting a different important loss, which should highlight the impact of the bereavement as opposed to that of other negative changes.

Death Ever-Present

From the second to the fifth waves, 157 deaths of close relatives and friends were mentioned. Note that we list here all the deaths of a spouse, sibling, offspring, or close friend, and not only those deaths mentioned in the opening question about the important changes in life since the last interview. On average, a death was

<table>
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<tr>
<th>Table 1. Bereaved and Non-Bereaved, with Classification of Non-Bereaved by Perception of an Important Change in Life</th>
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<tr>
<td>Bereaved</td>
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<tr>
<td>Non-bereaved</td>
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<tr>
<td>No change</td>
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<tr>
<td>Loss change</td>
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<tr>
<td>Gain or neutral change</td>
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<tr>
<td>Total</td>
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mentioned in one interview in five. Over the period of five years, 61% of the survivors lost a close relative, a dear friend, or both. Table 2 provides a means of testing our first hypothesis. It confirms that the losses most commonly involved siblings and friends and that the tragic death of a child was no longer an exception at that age. At this stage of our research, the data available were sufficient to distinguish the impact of the death of a friend from that of a close relative but not to differentiate between the three categories of relatives. Thus, the loss of a relative referred in nearly three cases out of four to a brother or sister.

Loss of a Loved One and Health

In order to evaluate the impact of the loss of a close relative or friend (considered together) on the three dimensions of health (physical disorders, functional status, and depressive symptoms), two series of analyses were performed. The first series of analyses replicates parts of the analyses conducted by Hays et al. (1997) and compared the health status of the bereaved with those who experienced another loss or no change. In the second series, these last two groups (other losses and no change) were distinguished and the comparisons were thus based on three groups. Tables 3 and 4 present the results for the cases in which there was loss of a relative or a friend. The two kinds of losses (relative or friend) were not reported separately as there were no difference with the results presented here.

Functional Health and Physical Ailments

Comparison of the bereaved and non-bereaved groups (see Table 3) detected no difference in functional health or physical ailments, either short-term or medium-term. These are important results, since they replicated the findings of Hays et al. (1997) drawing on data collected in a totally different context. However, when

<table>
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<tr>
<th>Table 2. Deaths of Close Relatives and Friends Recorded During the Five Years of the Study</th>
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<tr>
<td>Spouse</td>
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<td>Child</td>
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<td>Sibling</td>
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<td>Friend</td>
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<tr>
<td><strong>Total</strong></td>
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Table 3. Adjusted Means, Standard Errors, and Analysis of Covariance (ANCOVA). Results for the Three Dimensions of Health by Two Groups (Bereaved versus Non-Bereaved), Short and Medium Term

<table>
<thead>
<tr>
<th>Health</th>
<th>Bereaved</th>
<th>Non-bereaved</th>
<th>ANCOVA</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SE</td>
<td>M</td>
</tr>
<tr>
<td><strong>Short term</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical ailments</td>
<td>0.83_a</td>
<td>0.08</td>
<td>0.83_a</td>
</tr>
<tr>
<td>Functional health</td>
<td>1.70_a</td>
<td>0.19</td>
<td>1.73_a</td>
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<tr>
<td>Depressive symptoms</td>
<td>1.65_a</td>
<td>0.12</td>
<td>1.50_a</td>
</tr>
<tr>
<td><strong>Medium term</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Physical ailments</td>
<td>0.73_a</td>
<td>0.11</td>
<td>0.92_a</td>
</tr>
<tr>
<td>Functional health</td>
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<td>0.30</td>
<td>2.22_a</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>1.87_a</td>
<td>0.15</td>
<td>1.66_a</td>
</tr>
</tbody>
</table>

Note: Means in the same row that do not share subscripts differ at p < .05.

those who did report and did not report changes other than bereavement were distinguished, the results were very different (see Table 4).

The comparison prompts two main remarks. First, it is the “loss change” group that scored worst in terms of physical disorders and functional status; this is no surprise because the losses mentioned in this group mainly concerned health. Second, and more surprisingly, on these two indicators there was no difference between the bereaved and the “no change” group.

Depressive Symptoms

The two-group comparison (of bereaved versus others) over the short or medium term on depressive symptoms again showed no effect (see Table 3). In Table 4, there was no difference among the three groups at medium term, but a significant effect at short term of the type of loss on depressive symptoms. Contrary to our expectations (Hypothesis 3), it was not the bereaved group which was most affected by loss, but the “loss change” group which expressed more depressive symptoms than the “no change” group. The bereaved group did not distinguish itself from the two others groups.

Loss of a Loved One, Relations with Family and Friends, Closeness, and Loneliness

Turning to the repercussions that the loss of someone close may have on the relationships of the elderly, we considered here three aspects: the interactive
Table 4. Adjusted Means, Standard Errors, and Analysis of Covariance (ANCOVA). Results for the Three Dimensions of Health by Two Groups (Bereaved Loss Change and No Change), Short and Medium Term

<table>
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<tr>
<th>Health</th>
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<tr>
<td><strong>Short term</strong></td>
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</tr>
<tr>
<td>Physical ailments</td>
<td>0.83ₐ</td>
<td>0.08</td>
<td>1.06ₐ</td>
</tr>
<tr>
<td>Functional health</td>
<td>1.71ₐ</td>
<td>0.19</td>
<td>2.65ₐ</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>1.65ₐₐ</td>
<td>0.11</td>
<td>1.74ₐ</td>
</tr>
<tr>
<td><strong>Medium term</strong></td>
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<tr>
<td>Physical ailments</td>
<td>0.73ₐ</td>
<td>0.11</td>
<td>1.25ₐ</td>
</tr>
<tr>
<td>Functional health</td>
<td>2.17ₐ</td>
<td>0.29</td>
<td>3.01ₐ</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>1.88ₐ</td>
<td>0.15</td>
<td>1.80ₐ</td>
</tr>
</tbody>
</table>

Note: Means in the same row that do not share subscripts differ at p < .05.
* p < .05. ** p < .01. *** p < .001.
dimension (contacts) and the affective dimension (the feeling of closeness and the feeling of loneliness). This time, we do not report comparisons between two groups (bereaved versus others), as there was no available comparison with any other study and we proceeded directly to the three-group analysis (bereaved, “loss change”, “no change”). However, in considering relational life, from the outset we subdivided the bereaved according to the decedent involved, and analyzed the impact of the loss of a close relative on family life (contacts with family members) (Table 5), and that of the death of a friend on social, extrafamilial, life (contacts with friends) (Table 6).

Losses in the family network had two main effects. From Table 5 we could observe that, in the short term, there was an increase in interactions following the loss, while in the medium term the difference among the groups disappeared. This effect was indeed specific to family bereavement as there was no such trend when the loss is that of a friend (see Table 6). This finding was a good illustration of the systemic nature of the family network, where the survivors reacted in a spirit of mutual support to the death of one of their members, whereas the demise of a friend was more an individual affair. This was the only observed effect of the loss of a close relative or friend on the interactive dimension. In other words, neither in the context of family (which is in line with Hypothesis 4) nor in the context of friends (which conversely is in contradiction with part of Hypothesis 5) did the loss of someone close weaken exchanges among the elderly.

The second effect concerned the feeling of loneliness in the medium term after the loss of a family member (Table 5) or a friend (Table 6). In both cases, the individuals who lost someone close reported more feelings of loneliness than those who do not report any change. Those who reported other losses reported intermediate levels of loneliness and did not distinguish themselves from the other two groups. There was also an effect of the loss of friends on the feeling of loneliness in the short term which replicated the contrasts observed in the medium term, but this effect was marginal.

Finally, the covariance analyses indicated that losses had no effect on the feeling of closeness in the short or medium term. This means that, for most individuals, a loss of someone close or of health did not impair the most privileged affective relationships with family members or friends.

DISCUSSION AND CONCLUSIONS

As a first step, we verified that the loss of a close relative or friend is a fairly common occurrence for the elderly and that in old age, which is most likely to be a time of widowhood (especially for women), the deceased is usually either a sibling or a friend (cf. Hypothesis 1). We then attempted to measure the impact of this loss on the health of the elderly. For that purpose, we compared two groups: the bereaved and the “others”; we failed to detect any significant difference between these two groups as far as physical ailments, functional health, or depressive
Table 5. Adjusted Means, Standard Errors, and Analysis of Covariance (ANCOVA). Results for the Three Family Relationship Dimensions by Three Groups (Bereft of a Close Relative, Loss Change, and No Change), Short and Medium Term

<table>
<thead>
<tr>
<th>Family relationships</th>
<th>Bereaved Loss in the family</th>
<th>Bereaved Loss change</th>
<th>Bereaved No change</th>
<th>ANCOVA</th>
<th>Non-bereaved Loss in the family</th>
<th>Non-bereaved Loss change</th>
<th>Non-bereaved No change</th>
<th>ANCOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short term</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive dimension</td>
<td>7.97_a 0.20</td>
<td>7.45_b 0.15</td>
<td>7.42_b 0.10</td>
<td>$F(2, 581) = 3.12^*$</td>
<td>1.56_a 0.07</td>
<td>1.49_a 0.06</td>
<td>1.50_a 0.04</td>
<td>$F(2, 616) = 0.30$</td>
</tr>
<tr>
<td>Feeling of closeness</td>
<td>1.56_a 0.07</td>
<td>0.55_a 0.06</td>
<td>0.46_a 0.04</td>
<td>$F(2, 600) = 1.20$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling of loneliness</td>
<td>0.54_a 0.07</td>
<td>0.64_a,b 0.07</td>
<td>0.48_b 0.05</td>
<td>$F(2, 434) = 4.70^{**}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium term</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive dimension</td>
<td>7.67_a 0.26</td>
<td>7.36_a 0.21</td>
<td>7.41_a 0.13</td>
<td>$F(2, 391) = 0.48$</td>
<td>1.65_a 0.09</td>
<td>1.56_a 0.07</td>
<td>1.55_a 0.05</td>
<td>$F(2, 412) = 0.52$</td>
</tr>
<tr>
<td>Feeling of closeness</td>
<td>1.65_a 0.09</td>
<td>0.64_a,b 0.07</td>
<td>0.48_b 0.05</td>
<td>$F(2, 434) = 4.70^{**}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling of loneliness</td>
<td>0.78_a 0.09</td>
<td>0.64_a,b 0.07</td>
<td>0.48_b 0.05</td>
<td>$F(2, 434) = 4.70^{**}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Means in the same row that do not share subscripts differ at $p < .05$. $^*p < .05$. $^{**}p < .01$. 
Table 6. Adjusted Means, Standard Errors, and Analysis of Covariance (ANCOVA). Results for the Dimensions of Relations with Friends by Three Groups (Bereft of a Close Friend, Loss Change, and No Change), Short and Medium Term

<table>
<thead>
<tr>
<th>Relations with friends</th>
<th>Bereaved</th>
<th>Non-bereaved</th>
<th>ANCOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Friend loss</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SE</td>
<td>Loss change</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SE</td>
<td>M</td>
</tr>
<tr>
<td>Short term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive dimension</td>
<td>4.13</td>
<td>0.31</td>
<td>4.36</td>
</tr>
<tr>
<td>Feeling of closeness</td>
<td>1.28</td>
<td>0.15</td>
<td>1.43</td>
</tr>
<tr>
<td>Feeling of loneliness</td>
<td>0.67</td>
<td>0.09</td>
<td>0.54</td>
</tr>
<tr>
<td>Medium term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive dimension</td>
<td>4.32</td>
<td>0.38</td>
<td>4.51</td>
</tr>
<tr>
<td>Feeling of closeness</td>
<td>1.25</td>
<td>0.18</td>
<td>1.47</td>
</tr>
<tr>
<td>Feeling of loneliness</td>
<td>0.75</td>
<td>0.11</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Note: Means in the same row that do not share subscripts differ at $p < .05$. $^*p < .10$. $^p < .05$. 

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symptoms are concerned. Taking up the question of the composite nature of the control group (Hays et al., 1997), we split the latter into two subgroups. This enabled us to compare the bereaved with two clearly defined groups of contemporaries, one of which had followed a trajectory perceived as negative (other loss changes, mainly health-related changes) and the other one of stability (no change reported). We were thus able to test the hypothesis that bereavement has an impact on health. As it happens, the results obtained largely ran counter to Hypothesis 2; in advanced old age, according to our findings, the loss of someone close has no particular effect on the older person’s health, which continues to evolve in a way indistinguishable from that of the “no change” group.

A look at the relational and affective picture also produces a number of surprises. As predicted in Hypothesis 4, there is found to be no weakening of relationships when a close relative dies. On the contrary, the shared bereavement stimulates exchanges in the short term, a phenomenon that does not occur when it is a friend who dies. This lends weight to the argument that, in contrast to the loss of a relative, that of a friend is not an occasion for any specific ritual or action on the part of those close (see Doka, 1989; Sklar & Hartley, 1990). Nonetheless, the loss of a friend does not significantly weaken the relationships or the feeling of closeness, which is at variance with Hypothesis 5. With increasing age, affective ties between friends fall off gradually, but this is true for the three groups, not just the bereaved. This suggests that other factors may be at work, such as a change of domicile or a serious chronic illness (see Pin, Guilley, Lalive d’Epinay, & Vascotto Karkin, 2001). The principal impact of losing someone close is thus felt, not in terms of relations (interactive or affective) but in the symbolic representation created by the older person, whose feeling of loneliness is exacerbated by the absence of the loved one. In this respect, Lang and Carstensen (1994) showed that, while the relational fabric shrinks with age, this is accompanied by a strategy of fostering and preserving the core of close friends. Johnson and Barer (1997) went a step further in demonstrating older people’s ability to recreate ties of friendship in order to compensate for what death has destroyed. Like Pearlin (1994), the same authors note the resilience of older people in coping with the various misfortunes that afflict old age. The fact that the death of a loved one does not have any particular effect on the older person’s health in no way implies that the older person remains unmoved; the elderly themselves say that such an event is the second most frequent change (after health-related changes) affecting their lives. These events are engraved in their memories; despite the family’s solicitude and the presence of dear friends, their feeling of loneliness deepens, and with it the growing awareness of being a survivor.

Let us close by pointing out two limitations and suggesting some directions for future work. The first limitation is that our study focused on the morbidity, not the mortality, ensuing from bereavement; the second is that it dealt with the oldest old and that the findings can definitely not be extrapolated to the other stages of life. The suggestions are as follows: a) A more complete picture could be obtained by
widening the list of deaths in the family (to include at least in-laws and grandchildren); a comparative analysis of the impact of bereavement by type of kinship tie with the deceased person would be worth while but would require large samples; b) The importance of clearly defining the control group or groups has rightly been stressed; the approach we adopted could be improved, for example, by making a systematic listing of the principal disruptions; c) The flexibility of the family system stems mainly from its multigenerational nature. This being so, what is the situation when the older person who loses a brother or sister has no offspring (i.e., is part of a one-generation family)? Our sample was too small to elucidate this point; d) Future studies should be extended to other periods of the life course and should take gender difference into account.

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REFERENCES


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