

Social support: can it be too much?

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In contexts of rapid population ageing, the debate about elderly care and support is nowadays of extreme importance. Although it has been argued that the role of the family might face a crisis in modern societies (Popenoe, 1993), “elderly parents still receive a substantial amount of social support from adult children” (Silverstein and Bengtson, 1994: 943). Comparative studies (e.g. Bordone, 2009; Hank, 2007; Tomassini *et al.*, 2004) confirm the high level of intergenerational relationships in Europe. Researchers have shown that closer family ties have a positive effect on health in old age (Antonucci, 2001; Krause, 2001; Ross *et al.*, 1990), most obviously through the provision of several kinds of support (Berkman and Syme, 1979; Putnam *et al.*, 1993). Yet, there might be a limit to the improvement of elderly people’s well-being, due to “too much” social support resulting in feelings of powerlessness and dependency (Wheaton, 1985). Elderly receivers might feel dependent if not able to reciprocate and this may reinforce the family tendency to treat the old person as dependent. Avoiding this cycle should be a priority to couple support and well-being in old age.

In this study I distinguish between informational-appraisal, emotional and instrumental supports exchanged between elderly parents and their adult children. The instrumental dimension is considered in its two aspects of tangible assistance (received aid) and integration (support provided) (Krause, 1987). In contrast to previous studies, I test the impact of social support on a specific personal characteristic, Locus of Control (LOC). Such a psychological construct derived by Rotter’s social learning theory (1954; 1966) refers to individuals’ belief regarding the extent to which they can control or influence outcomes (Skinner, 1996). LOC is not the same as health (Ross *et al.*, 1990). The high interest in LOC is due to its well-established direct effect on a variety of mental and physical health outcomes (Berkman *et al.*, 2000; Krause, 1987). I expect to find backing for the *facilitation perspective* when support

increases from low to middle levels. However, I suggest that the *displacement perspective* might represent a second stage of the association support-control, rather than an alternative to the facilitation perspective. Increasing support (especially informational-appraisal and instrumental) at extremely high levels can detract from control the elderly parent.

In spite of the attention given so far from several disciplines to the study of social support on one side and on LOC on the other, to my knowledge there still is a lack of studies examining the specific pathway from social support to LOC. Moreover, previous research on the relation between social support and locus of control faces some limitations in that it is mainly cross-sectional, thus does not take into account changes over the life course (Oxman *et al.*, 1992). And even some longitudinal studies (e.g. Bosma *et al.*, 2005) do not consider that social support perception varies across individuals. The comparison between different individuals does not exclude the possibility of selection effects of who receives support.

DATA AND METHODS

Mindful of previous studies' limitations, I test my hypotheses on panel data from the *English Longitudinal Study of Ageing* (ELSA). This interdisciplinary data source, representative of the English population aged over 50, investigates over health, economic position and quality of life as people age (Marmot *et al.*, 2010; www.ifs.org.uk/elsa). A longitudinal perspective takes advantage of the availability of four waves. I consider only respondents with at least one child and interviewed at least twice over the follow-up. The used sample consists of 22,249 interviews, related to 7,193 persons aged 50 to 90.

The *dependent variable* is *locus of control*, assessed with a shortened version of the Rotter Internal-External Locus of Control Scale (Rotter, 1966). The indicator ranges from 0 to 10. Higher values represent a more internal control. The *explanatory variables* capture frequency of contact to the children (both phone calls and face to face meetings stand for *Informational-appraisal support*); level of understanding, reliance on, and possibility of opening up to the children (*emotional support*); and exchange of *instrumental* help between children and parents. Any child living with the interviewed parent is not counted. The degree of *conflict* between parent and children is used as a control variable in the following analyses (for a discussion about solidarity, conflict and ambivalence within family relationships, see van Gaalen and Dykstra, 2006). Further *control variables* include *age*, *health*, *marital status*, *friendships*, as well as *employment status* and period effects.

A major problem of the traditional “between-individuals” approach is in the limited knowledge of social support selection. The “optimal” level of social support varies between

individuals (Adams and Blieszner, 1995; Krause *et al.*, 1990). My approach specifies a statistical model that yields consistent estimates of the parameters in the presence of unobserved heterogeneity and does not rely on theoretical assumptions about the relationship of observed and unobserved variables. I therefore use fixed-effects models for panel data to analyse the probability of holding a more internal locus of control.

The linear regression model with fixed-effects is (Greene, 2001):

$$y_{it} = \beta' x_{it} + \alpha_i + \delta_t + \varepsilon_{it} \quad \square$$

$$E[\varepsilon_{it} | x_{i1}, x_{i2}, \dots, x_{iT(i)}] = 0$$

$$Var[\varepsilon_{it} | x_{i1}, x_{i2}, \dots, x_{iT(i)}] = \sigma^2$$

where $t = 1, \dots, T(i)$ refers to the time and $i = 1, \dots, N$ refers to the person; the vector β is a set of parameters of primary interest; and α_i is the group specific heterogeneity and varies across individuals (see Wooldridge, 1995). α_i represents the combined effect on y of all unobserved variables that are constant over time (Allison, 2005). We include time specific effects (δ_t). Such intercept may be different for each point in time. Since the number of periods is fairly small, these can usually be accommodated simply by adding a set of time specific dummy variables to the model (Greene, 2001). The error term ε_{it} is different for each individual at each point in time and represents purely random variation at each point in time.

The use of fixed-effects models is theoretically justified by the fact that when dealing with the human psychological dimension, it is hardly possible to compare different persons. From an econometric point of view, the Hausman test applied to the data used for the following analyses (Hausman, 1978) suggests that unit-specific effects are correlated with some of the independent variables in the models and it is therefore necessary to use fixed-effects.

RESULTS AND DISCUSSION

LOC over time is characterized by a decreasing pattern. A clear age effect prevails in the interpretation of Figure 1, which draws a non-parametric estimate of LOC between 50 and 80 years old for males and females in the sample under study. As suggested by the literature, women maintain a more external sense of control (lower LOC over the continuum of the scale) over their lives than men. The difference does not appear to be statistically significant.

[Figure 1 about here].

Fixed-effects regressions are performed on the full sample under study, including one support variable at a time (Figure 2), to analyse the association between a change in the support provided by adult-children to elderly-parents and the locus of control of these latter. Both changes to lowest-low and high frequencies of parent-child contact (informational-

appraisal support) from medium levels are associated with significant lower levels of parental locus of control. A reversed-U-shaped relationship exists between informational-appraisal support and LOC even after controlling for the relevant other time-varying variables, as shown in Figure 2(a). This result holds also controlling for intergenerational conflict, which is associated with lower levels of parent's LOC. Additional analyses performed on the two subsamples (of child-parent dyads in conflict and those not experiencing conflict over the follow-up period) show a very similar reversed U-shape pattern.

The multivariate analysis confirms a linear and positive association between emotional support and sense of control. Figure 2(b) shows that LOC gets more internal with the development of intimacy and trust with children. This association is statistically significant.

When the parent receives help and does not provide any instrumental support, the own sense of control is reduced compared to when he neither receives nor provides help. As seen in Figure 2(c), this reduction is significant at 90% level. Probably due to the greater sense of purpose coming with the adoption of a productive social role, elderly parents hold a higher sense of control when they are able to reciprocate. Whether the parent provides small amounts of instrumental support, the LOC does not significantly change. Small amounts here is below 9 hours per week of looking after a person outside the own household. Still, once this rises close to 20 hours per week, the sense of control tends to decline. A change to both giving and receiving from neither giving nor receiving is associated with a decrease in the sense of control. However, this result is likely to find an explanation in the data construction.

[Figure 2 about here].

The post-estimation F-test on a model considering all the types of support together suggests that these covariates are jointly significant. Multiple support dimensions act in a cumulative way and produce a larger effect when combined together. These results raise some critical implications on current social policy. Independently of whether elderly-care belongs to public or private sources, it is important to take into account the psychological well-being of the fragile elderly population to give them support, without undermining their autonomy.

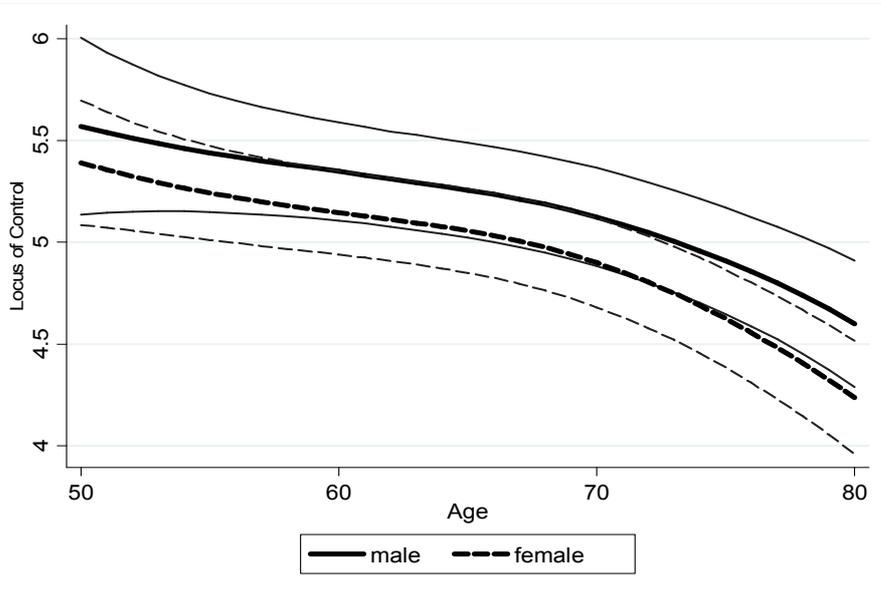
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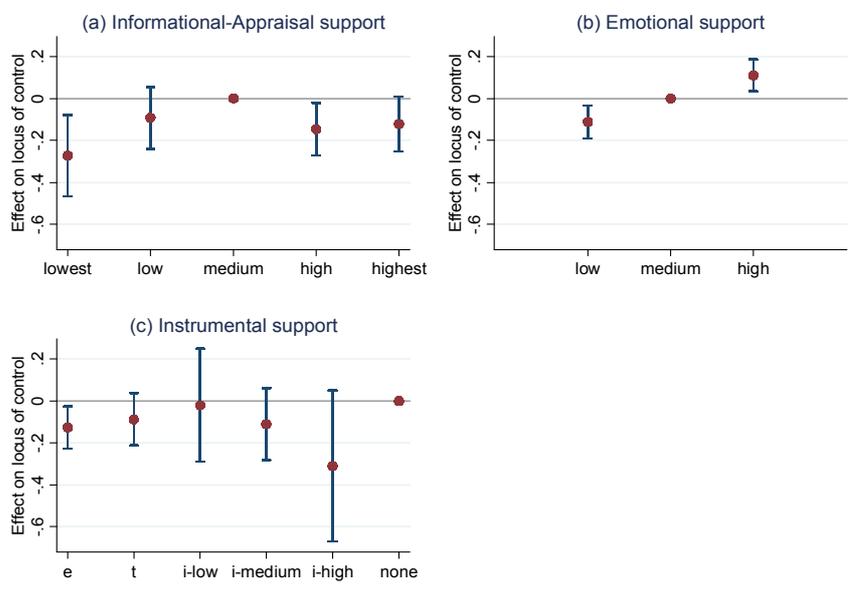
FIGURES

Figure 1. Descriptive behaviour of LOC over age, by gender. Non-parametric estimate of LOC using Locally Weighted Scatterplot Smoother (LOWESS) and respective 95% Confidence Intervals (thinner lines).



Source: ELSA, Author’s calculations.

Figure 2. Association between social supports and locus of control.



Note: (c) “e = exchange” here means either giving and receiving or not giving and not receiving instrumental support; t = tangible; 95% Confidence Intervals.

Source: ELSA, Author’s calculations.