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Care and the capability of living a healthy life
in a gender perspective

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Care and the Capability of Living a Healthy Life in a Gender Perspective

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**Abstract**

This paper deals with the definition of the capability of living a healthy life with special reference to the Italian context. The increasing ageing of Italian population and the higher likelihood for elderly to experience poorer health conditions (Addabbo, Picchio; 2010; Addabbo, Chiarolanza, Fuscaldo, Pirotti, 2010) lead us to focus especially on elderly population and gender differences in the measurement of the development of this capability.

Institutional as well family and individual conversion factors are analysed in their interaction with the observed development of the capability of living a healthy life taking a gender perspective.

To measure the latter we use both self assessed health status and objective gerontological measures of health conditions available in the Italian sample of the Survey of Health, Ageing, Retirement in Europe (SHARE). The self-completion questionaire, that is submitted only to a part of the whole SHARE sample, allows to gain important information on the household characteristics and in particular on the sharing of different responsibilities within the household (doing the cleaning, caring for children and elderlies, earning money etc.). Part of this information is also retrospective. This allows us to extend our analysis on the measurement of individual current achievement in the capability taking into account how conversion factors can interact with the development of the capability since it allows a long term analysis of their effect.

## 1. Introduction[1]

Gender inequalities occur with reference to health achievements as shown by the literature (Egidi & Spizzichino, 2007; Crimmins, Ki Kim and Solé-Auro, 2010). The increasing ageing of the Italian population and the higher likelihood for elderly to experience poorer health conditions (Addabbo, Picchio; 2010; Addabbo, Chiarolanza, Fuscaldo, Pirotti, 2010) lead us to focus especially on elderly population and gender differences in the measurement of the development of this capability. In this paper we aim at analysing the level of health inequalities by gender in Italy and the extent to which institutional and family conversion factors affect them by using multivariate analysis and Survey of Health, Ageing, Retirement in Europe (SHARE) microdata that allows us to get a synthetic measure of global health as well as residual problems. Health is measured using a confirmative nested factor model (Fuscaldo 2012). Such a latent structure is perfectly able to capture both the multidimensionality of a global factor and the particular information enclosed in four residual dimensions of health: mobility, cognition, affection and motivation.

In a gender perspective Italy is an interesting case study since it is characterized by sharp inequalities by gender both in the distribution of paid and unpaid work leading to a higher burden of unpaid care work both in working age (Addabbo, Caiumi, Maccagnan, 2010; Addabbo, 2003) and in elderly couples (Hank and Jurges, 2007). If on one hand the social reproduction role played by women also in elderly couples not only for their elder partner but also for grandchildren care (Aassve, Meroni and Pronzato, 2011) can be connected to a higher loss in case of women's poor global health status (Egidi and Spizzichino, 2007) on the other hand it can negatively affect women's health status due to a higher amount of work provided by women during their life cycle and later on in their life. We will try to investigate the impact of the role played by women in care work by using a proxy on their expressed responsibility towards children in a sample of people aged over 50 and who had children before.

## 2. Data

To measure the impact of individual, family and social environment conversion factors on the development of the capability of living a healthy life in a gender perspective we have used the Italian

sample of the second wave of the Survey of Health, Ageing, Retirement in Europe (SHARE). We have matched the information on the whole sample with the one reported by the respondents of the self-completed dropoff questionaire. This is submitted only to a part of the whole SHARE sample and allows to gain important information on the household characteristics and in particular on the sharing of different responsibilities within the household (doing the cleaning, caring for children and elderly, earning money etc.). Part of this information is also retrospective. This allows us also to extend our analysis on the measurement of the individual current achievements in the capability taking into account how conversion factors can interact with the development of the capability since it allows a long term analysis of their effect. As stated in the introduction adopting the gender perspective should require not only to be aware of the inequalities in achievements but also to account for the inequalities in those factors that can determine the observed lower achievements by women in this crucial dimension of well-being. In this regards women and men in Italy sharply differ in terms of their allocation of total work time with women bearing the most of unpaid work load and showing a higher burden of total work time particularly in double earners households (Addabbo, Caiumi and Maccagnan, 2010; Addabbo, 2003). The available information on the allocation of time are difficult to be found in surveys on health and, when available, they refer only to the current allocation of time. However the amount of time devoted to work (both paid and unpaid) can be endogenous to the individual current health status. The data set used SHARE allows us to recover an information that is related to the individual's life cycle and concerns the degree of responsibility in caring for one's children. We have therefore introduced this variable in our analysis on the factors affecting health by including it as explanatory variable in the different index of health analysed and select a sample of women and men aged over 50 who had children who are not any longer living in the household. The characteristics of the sample are summarized in Table 1. We have included also a variable controlling for the current type of household the dummy single that it is equal to one if the person lives without a partner.

The average level of age of women and men in the sample is around 67. The individuals in the sample are more likely to live in the North of Italy. Women have on average a lower level of education than men and this is in line with the more recent increase in women's level of educational achievements in Italy interesting younger generations. Women's level of wealth is lower on average than men's and this is consistent with the existence of wage differentials at their disadvantages (Addabbo & Favaro, 2010) and their lower participation to paid work. Women in the sample are more likely than men to be affected by mild diseases while men are more likely to be affected by a severe chronic condition. More women than men live without a partner (this is consistent with their higher likelihood to live longer therefore surviving to their partner and to men's higher likelihood to re-marry after separation or widowhood). Women are also more likely to have the major responsibility for childcare (35% against 5% of men).

We expect a higher burden of responsibilities towards one's children to have an ambiguous effect on one's capability of living a healthy life later in one's life:

- on one hand higher responsibilities in care work mean higher burden of work and this can be reflected in a poorer status of health due to the fatigue related to the higher amount of work provided earlier in life by the elderly

- on the other hand the higher responsibility in care work can increase the ties between generations and result in higher affection that can lead to a higher amount of care work by children towards their parents when they are elder therefore showing a better health status for elderly.

## 3. Measuring the capability of living a healthy life

The wide range of questions of the second wave of SHARE allows for an analysis of a large number of health indicators, which are modeled using factor analysis. Each variable is a dichotomous item in which a value of one represents the deprived situation. The indicators are specified in the Appendix. They are grouped into three main dimensions of health (Nagi 1976): physical, emotional and cognitive performance.

A sequence of confirmative factor analyses is used in order to reveal the best representation of the data (Fuscaldo, 2012). The preferred structure turns out to be a *nested model* (Gignac 2007, Hallerod 2009). It identifies five different dimensions: global factor (*Glob*), which relates to all the examined indicators, and four residuals factors that measure the specific experiences of physical limitations (R_*Phys*), cognitive problems (R_*Cogn*), affective suffering symptoms (R_*Affect*) and motivational difficulties (R_*Motiv*). The rationale and psychometric properties of this model are fully explained elsewhere (Fuscaldo, 2012). The pattern of the different CFAs has demonstrated that the relationship among the different indicators of health is independent of gender and age (Fuscaldo 2012).

The interpretation of the nested model is straightforward. The degree to which people simultaneously suffer from all the health problems is measured by *Glob*. People who are exposed to physical limitations but not to cognitive, affective and motivational problems score on R_*Phys*. R_*Cogn* measures to what extent individuals who do not have any physical and psychological trouble have nevertheless some restrictions in the cognitive function. Emotional performance is comprised of two residual factors. People who have usual symptoms of affective suffering (*Sadness/Depression, Suicidal tendency, Guilt, Trouble sleeping, Irritability, Loss of appetite, Fatigue and Tearfulness*), but otherwise do not report difficulties with mobility, cognitive function and motivation, score on R_*Affect*. R_*Motiv* measures to what degree individuals who do not have other health problems are only affected by motivational difficulties (*Pessimism, Lack of enjoyment, Lack of interest and Poor concentration*).

## 4. Capability of living a healthy life in a gender perspective

Descriptive analyses on health achievements[2] by using the indicators described in the previous section allows us to detect a lower achievement of global health for women in our sample this is consistent with the literature on gender and health (Addabbo, Chiarolanza, Fuscaldo, Pirotti, 2010, Abbabbo, Picchio, 2006; Fuscaldo, 2012). Women are more likely than men to suffer from global health problems (the global health problem factor is on average 0.35 for women and 0.25 for men) and residually from mobility and affective problems, while men are more likely to suffer on average from residual cognitive problems (though the latter difference is not statistically significant). The probability of suffering residually from motivational problems is similar for both men and women (Table 1). However this result needs to be analysed controlling for other indvidual, family and social factors that can affect the development of health. As we can see from Table 1, some of these factors show significant gender difference: women are more likely than men to have had the main care responsibility towards children and to be single. A higher proportion of men, instead, lives in a rural area and is highly educated.

Table 1 - Descriptive Statistics on the sample of women and men

| Variables | Men | | Women | | Gender gap | |
|---|---|---|---|---|---|---|
| | Mean | Std. Dev. | Mean | Std. Dev. | M-W | \|t-test\| |
| Age | 67.51 | 9.13 | 66.05 | 8.78 | 1.46 | 1.60 |
| High education | 0.09 | 0.29 | 0.04 | 0.2 | 0.05 | 1.89* |
| Diploma | 0.24 | 0.43 | 0.21 | 0.41 | 0.03 | 0.81 |
| Primary or lower | 0.67 | 0.47 | 0.75 | 0.43 | -0.08 | 1.79* |
| North | 0.46 | 0.50 | 0.46 | 0.50 | 0.00 | 0.04 |
| South | 0.17 | 0.38 | 0.17 | 0.38 | 0.00 | 0.04 |
| Centre | 0.24 | 0.43 | 0.25 | 0.43 | -0.01 | 0.29 |
| Rural | 0.43 | 0.50 | 0.30 | 0.46 | 0.13 | 2.56*** |
| Wealth | 305822.00 | 340191.20 | 287477.20 | 297681.10 | 18344.80 | 0.57 |
| Severe disease | 0.26 | 0.44 | 0.24 | 0.43 | 0.02 | 0.52 |
| Mild disease | 0.50 | 0.50 | 0.53 | 0.50 | -0.03 | 0.72 |
| Main resp.for childcare | 0.05 | 0.23 | 0.35 | 0.48 | -0.30 | 7.88*** |
| Single | 0.06 | 0.25 | 0.16 | 0.36 | -0.10 | 2.95*** |
| Global Health Problems | 0.25 | 0.19 | 0.35 | 0.21 | -0.10 | 4.86*** |
| Mobility Problems | 0.37 | 0.19 | 0.4 | 0.20 | -0.03 | 1.54 |
| Cognitive Problems | 0.32 | 0.16 | 0.30 | 0.16 | 0.02 | 0.96 |
| Affect.Problems | 0.37 | 0.17 | 0.45 | 0.21 | -0.08 | 4.50*** |
| Motivational Problems | 0.20 | 0.07 | 0.21 | 0.09 | -0.01 | 1.09 |
| Obs. | 201 | | 191 | | | |

Source: our elaborations on SHARE data

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[2] In the table the factors related to level of health and to quality of work have been normalized using the following expression: norm_factor=(factor-min(factor))/(max(factor)-min(factor)). The normalized factors ranges between 0 and 1, facilitating making gender comparisons.

We turn then to multivariate analysis whose results are shown in Tables 2 and 3. We have estimated the same model for the different factors (Table 2) and disaggregated the estimation of the different models by gender (Table 3). Also controlling for age, women are more likely to show worse global health than men (Table 2), this is consistent with the results from the descriptive analysis and the literature and made us running separate estimation of the same model to ascertain the different impact by gender of the same factors as in Table 3.

Consistently with the literature ageing decreases global health and, apart from affective problems, increases the emergence of other residual problems.

Apart from motivational problems living in the South of Italy (characterized on average by lower level of health infrastructures) leads to a lower level of health, the effect on global health achievements being higher and significant for women.

Higher wealth reduces the occurrence of global health problems for women (who are also more likely, according to the literature, to suffer for lower access to health services due to lower income) while severe chronic disease conditions and more than mild chronic diseases bear a similar increasing effect on health problems by gender.

Turning to the variable that we have considered as a proxy of the weight in care work we can see how having the major responsibility on childcare increases the probability of having global health problems later in life for women who experience 28% increase in their global health problems if they had the major responsibility in child care whereas it does not play any effect in the recurrence of global health problems for males.

Table 2 - Living a Healthy life - A multivariate analysis

| | Global problems | Mobility problems | Cognitive problems | Affective problems | Motivational problems |
|---|---|---|---|---|---|
| Female | 0.452 | 0.238 | 0.080 | 0.237 | 0.096 |
| | (4.96)*** | (2.24)** | (0.72) | (2.31)** | (0.87) |
| Age | 0.275 | 0.162 | 0.286 | -0.123 | 0.132 |
| | (5.55)*** | (2.81)*** | (4.71)*** | (2.22)** | (2.18)** |
| High education | -0.155 | 0.285 | -0.760 | 0.453 | -0.165 |
| | (0.85) | (1.34) | (3.41)*** | (2.21)** | (0.75) |
| Medium education | -0.070 | 0.199 | -0.471 | 0.190 | -0.024 |
| | (0.65) | (1.59) | (3.59)*** | (1.57) | (0.19) |
| South | 0.202 | 0.308 | 0.083 | 0.270 | -0.266 |
| | (1.76)* | (2.31)** | (0.59) | (2.10)** | (1.91)* |
| Centre | 0.068 | 0.153 | 0.060 | 0.024 | -0.260 |
| | (0.68) | (1.30) | (0.49) | (0.21) | (2.11)** |
| Rural | -0.088 | 0.234 | 0.009 | -0.278 | -0.115 |
| | (0.99) | (2.27)** | (0.09) | (2.80)*** | (1.07) |
| Wealth | -0.101 | -0.115 | 0.024 | 0.023 | -0.018 |
| | (2.53)** | (2.46)** | (0.48) | (0.51) | (0.36) |
| Severe chronic condition | 0.973 | 0.569 | -0.319 | 0.345 | -0.224 |
| | (7.79)*** | (3.92)*** | (2.09)** | (2.46)** | (1.47) |
| Mild chronic condition | 0.348 | 0.132 | -0.128 | 0.196 | -0.184 |
| | (3.28)*** | (1.07) | (0.99) | (1.65) | (1.42) |
| Responsabilities | 0.218 | -0.181 | 0.000 | 0.487 | -0.073 |
| | (1.93)* | (1.37) | (0.00) | (3.84)*** | (0.54) |
| Single | -0.090 | 0.085 | 0.020 | 0.121 | 0.025 |
| | (0.67) | (0.54) | (0.12) | (0.80) | (0.15) |
| Constant | -0.622 | -0.484 | 0.245 | -0.493 | 0.276 |
| | (5.28)*** | (3.53)*** | (1.70)* | (3.73)*** | (1.93)* |
| Observations | 392 | 392 | 392 | 392 | 392 |
| R-squared | 0.35 | 0.12 | 0.14 | 0.15 | 0.04 |

Absolute value of t statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%
Source: our elaborations on SHARE data

Table 3 - Living a Healthy life - A multivariate analysis by gender

| | Global problems | | Mobility problems | | Cognitive problems | | Affective problems | | Motivational problems | |
|---|---|---|---|---|---|---|---|---|---|---|
| | W | M | W | M | W | M | W | M | W | M |
| Age | 0.261 | 0.27 | 0.126 | 0.192 | 0.307 | 0.234 | -0.177 | -0.043 | 0.137 | 0.12 |
| | (3.40)*** | (4.05)*** | -1.41 | (2.46)** | (3.42)*** | (2.76)*** | (2.01)** | -0.6 | -1.37 | -1.61 |
| High education | -0.472 | 0.026 | 0.808 | 0.106 | -0.712 | -0.91 | 0.214 | 0.605 | -0.701 | 0.142 |
| | -1.41 | -0.12 | (2.08)** | -0.41 | (1.82)* | (3.27)*** | -0.56 | (2.54)** | -1.61 | -0.58 |
| Medium education | -0.067 | -0.11 | 0.235 | 0.194 | -0.422 | -0.539 | 0.232 | 0.148 | -0.175 | 0.123 |
| | -0.41 | -0.76 | -1.24 | -1.15 | (2.20)** | (2.95)*** | -1.23 | -0.95 | -0.82 | -0.77 |
| South | 0.289 | 0.091 | 0.294 | 0.363 | 0.073 | 0.075 | 0.44 | 0.119 | -0.183 | -0.372 |
| | (1.70)* | -0.59 | -1.48 | (1.98)** | -0.36 | -0.38 | (2.25)** | -0.7 | -0.82 | (2.14)** |
| Centre | 0.227 | -0.099 | 0.217 | 0.108 | 0.052 | 0.116 | -0.084 | 0.055 | -0.358 | -0.19 |
| | -1.5 | -0.72 | -1.23 | -0.67 | -0.29 | -0.66 | -0.48 | -0.37 | (1.81)* | -1.23 |
| Rural | -0.114 | -0.072 | 0.36 | 0.144 | 0.036 | 0.004 | -0.254 | -0.3 | -0.063 | -0.179 |
| | -0.83 | -0.62 | (2.24)** | -1.06 | -0.22 | -0.02 | -1.6 | (2.40)** | -0.35 | -1.38 |
| Wealth | -0.125 | -0.078 | -0.101 | -0.126 | -0.1 | 0.111 | 0.12 | -0.039 | 0.046 | -0.063 |
| | (1.98)** | -1.48 | -1.37 | (2.03)** | -1.36 | (1.66)* | -1.65 | -0.68 | -0.56 | -1.07 |
| Severe chronic condition | 0.896 | 1.011 | 0.452 | 0.612 | -0.313 | -0.242 | 0.613 | 0.06 | -0.134 | -0.254 |
| | (4.81)*** | (5.85)*** | (2.08)** | (3.02)*** | -1.43 | -1.1 | (2.86)*** | -0.32 | -0.55 | -1.31 |
| Mild chronic condition | 0.398 | 0.302 | 0.068 | 0.161 | -0.111 | -0.124 | 0.292 | 0.117 | -0.12 | -0.198 |
| | (2.47)** | (2.09)** | -0.36 | -0.95 | -0.59 | -0.68 | -1.57 | -0.75 | -0.57 | -1.23 |
| Responsabilities | 0.279 | -0.165 | -0.082 | -0.374 | -0.213 | 0.752 | 0.606 | -0.001 | -0.031 | -0.446 |
| | (2.09)** | -0.66 | -0.53 | -1.27 | -1.36 | (2.37)** | (3.95)*** | 0 | -0.18 | -1.6 |
| Single | -0.067 | -0.265 | 0.208 | -0.025 | 0.035 | -0.012 | 0.093 | 0.23 | 0.002 | -0.018 |
| | -0.38 | -1.15 | -1.01 | -0.09 | -0.17 | -0.04 | -0.46 | -0.92 | -0.01 | -0.07 |
| Constant | -0.235 | -0.532 | -0.319 | -0.439 | 0.374 | 0.205 | -0.418 | -0.343 | 0.352 | 0.287 |
| | -1.44 | (3.52)*** | (1.68)* | (2.48)** | (1.95)* | -1.07 | (2.22)** | (2.10)** | -1.65 | (1.70)* |
| Observations | 191 | 201 | 191 | 201 | 191 | 201 | 191 | 201 | 191 | 201 |
| R-squared | 0.31 | 0.34 | 0.1 | 0.16 | 0.16 | 0.17 | 0.19 | 0.08 | 0.05 | 0.08 |

Absolute value of t statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Source: our elaborations on SHARE data

## 5. Conclusions

The literature on the socio-economic determinants of health shows that health status significantly differs across gender. This contribution confirms also for Italian women older than 50 a poorer global health status by means of descripitive and multivariate analysis. We have used a sample of individuals living in Italy aged over 50 selected from the Survey of Health, Ageing, Retirement in Europe (SHARE) that allows us to obtain several indicators on the current health status and retrospective information that we have used as explanatory factors on the current level of health. We have used a sequence of confirmative factor analyses (Fuscaldo, 2012) to identify the following different dimensions of health: global factor, which relates to all the examined indicators, and four residuals factors that measure the specific experiences of physical limitations, cognitive problems, affective suffering symptoms and motivational difficulties.

In the multivariate analysis on global health problems we can see how the individual factor of ageing plays the same role in worsening men and women's global health status. A higher educational level improves (but it is not statistically significant) the level of global health. Women's global health is significantly affected by the region where they live. In particular women living in the South of Italy show a poorer result in terms of global health status. This can be related to poorer health services infrastructures in the South and calls for a deeper analysis that will focus on specific indicators on the Health Services and its access disaggregated by gender.

Higher wealth, consistently with the literature (Fuscaldo, 2012; Martikainen et al. 2003), improves global health status but when one disaggregates by gender the effect is found to be significant only for women. The latter are also more likely to be affected by problems of access to health services due to lack of income resources and are more likely to suffer from wage differentials and lower retirement income.

Higher involvement in childcare responsibility may be related to better social relations later in life and, if contacts with children and relatives are conducive to better social relations and health (Melchior et al., 2003) this can improve one's health later in life. Italian couples are characterized by a higher gender inequality in the distribution of unpaid work with women bearing the most of it and often showing a higher total working load than their partners. This if on one hand can improve their members of the family's health status on the other hand can lead to women's higher fatigue and stress

(especially when it matches also paid work and leads to high total work load)[3] that can result in lower health status later in life. Moreover if men's social role appears to be more connected to their employment status, women still play a significant role in the economy of the family and in the building of extended family well-being also after retirement, therefore in case of illness they can show a low self reported health status due to the difficulties in carrying out their role (Egidi and Spizzichino, 2007). We do find evidence of a poorer global health status and residual affective problems for those women who had children and define themselves as having the main responsibilities in care work that show a prevalence of the latter effects of the main carer role for women's health.

Significant gender differences and inequalities in health achievement in Italy have been detected by our study and call for further research on the impact of institutional factors and for the collection of more data on care work and its impact on other capabilities. Women show a higher development of the care capability in Italy, however the observed gender inequality in child and elderly care is bound to lead to different status of health later in life for the main carer. This effect on a crucial dimension of one's well-being should not be neglected in a country like Italy that is characterized by a familist welfare state that places to the family and inside them to women the responsibility of caring for their members and generates sharp gender inequalities.

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[3] On the relevance of domestic work and family size on women's health status see also Artazcoz et al. (2004); Artazcoz et al. (2001), Hunt and Annandale (1993) and Walters (1993). An increase in anxiety problems rather than depression has been found to be associated with difficulties in balancing paid and unpaid work (Artazcoz et al., 2004).

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Appendix

## *Indicators of health*

### *Physical Performance*

Walking 100

Sitting for about 2 h

Getting up from a chair after sitting for long periods

Climbing several flights of stairs without resting

Climbing one flight of stairs without resting

Stooping, kneeling, or crouching

Reaching or extending your arms above shoulder level (either arm)

Pulling or pushing large objects like a living room chair

Lifting or carrying weights over 5 kilos, like a heavy bag of groceries

Picking up a small coin from a table

### *Emotional Performance*

Sadness—Depression

Suicidal tendency

Guilt

Trouble sleeping

Irritability

Loss of appetite

Fatigue

Tearfulness

Lack of Interest

Pessimism

Lack of enjoyment

Poor concentration

### *Cognitive Performance*

Memory

Recall

Verbal fluency

Orientation

Numeracy