# Elderly people of yesterday and today: strengths and critical points

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## Extended abstract

### Background

Ageing process, in Italy, is fairly recent. Indeed, in the last century, life expectancy increased quickly and fertility had a plummet. These phenomena caused a radical change within the age structure of the Italian population.

In 2023, the population pyramid exhibits distinct changes compared to 1997: the base of the pyramid has significantly narrowed, while the top has expanded.

Notably, the younger population (0-14 years old) has decreased by almost 1 million individuals, comprising 12.5% of the total population as of January 1st 2023. Conversely, the elderly population (aged 65 years and over) has surged, comprising 24% of the total population as of January 1st 2023, representing an increase of 4.4 million individuals since 1997. The *ageing ratio*, the best indicators of the demographic balance between the elderly and the young, reveals a significant imbalance destined to increase. In 1997, there were 118.7 elderly individuals for every one hundred young people, whereas in 2023, this ratio has climbed to 193.3.

Clearly, population aging poses substantial challenges to society, and these challenges are meant to intensify in the coming years. In fact, although today's elderly live in better conditions than in the past, it is inevitable that vulnerable and non-self-sufficient people will increasingly weigh down our social and health care system.

### Data and methods

To gain a deeper understanding of the major changes that have occurred over the last 25 years with respect to the elderly population, a set of indicators calculated from two Istat multipurpose surveys[1] was compared.

Indicators calculated for this study are based on data with a time series that allows for comparison between 1997 (or around that time) and 2022 and cover various aspects of life, including health, lifestyles, cultural and social participation, satisfaction with different areas of life, and concern for the environment.

For each indicator the ratio between the values for the two groups have been computed (elderly of today/elderly of the past). If the indicator has a negative polarity (i.e., an increase in value implies a worsening in well-being) the inverse ratio has been considered. We adopted an adjusted parity index (OECD 2019), in which ratios that exceed 1 are inverted and subtracted from 2. The further from 1 the adjusted parity index lies, the greater the disparity between the elderly of today and the elderly of the past. We also tested the null hypothesis of no clear difference between the two groups with a standard two-sample t-test for the equality of means, with a 5% significance level (Snedecor and Cochran 1989). Since samples are usually way larger than 30, a normal approximation has been applied.

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[1] The main source of the data presented in this paper is the "Aspects of daily life" Istat survey, with the exception of the data referring to 2000, which comes from "Citizens and leisure time" Istat survey.

*Findings*

Comparing the "elderly of today" with respect to the "elderly of the past", the results show a gradual spread of active and proactive behaviours, accompanied by an improvement in lifestyles.

In the area of social, cultural, civic and political participation, women show more marked improvements than men. Nevertheless, they still have not reached men's levels of participation, so the gender gap persists.

With regard to territorial disparities, distances between northern and southern regions remained relatively stable for most indicators.

On the other hand, today's elderly are less satisfied with friends and family relations, and with leisure time than their peers 25 years ago. This trend has only been accentuated by the Covid-19 pandemic, but the decline was evident even before the health emergency.

Finally, the analysis confirms that over time the use of the internet among people aged 65 and older has strongly increased (while remaining lower than in younger age groups) with a significant impact on everyday life, due to the myriad of opportunities that the internet offers.

*Further developments*

The work revealed how some aspects of life have changed over time. The next step is to adopt a multivariate approach in order to highlight the determinants of these changes.

In particular, we aim to investigate the area of satisfaction, which, in some spheres, shows a decline probably related to several factors that may not be clearly identifiable without a multivariate analysis. So we will estimate different logistic models for different areas of satisfaction and focus on the average marginal effects that show the change in probability when the predictor or independent variable increases by one unit.

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