

100
SWISS

Étude sur les centenaires en Suisse
Schweizer Hundertjährigen-Studie
Studio sui centenari in Svizzera

PRO
SENECTUTE
PLUS FORTS ENSEMBLE

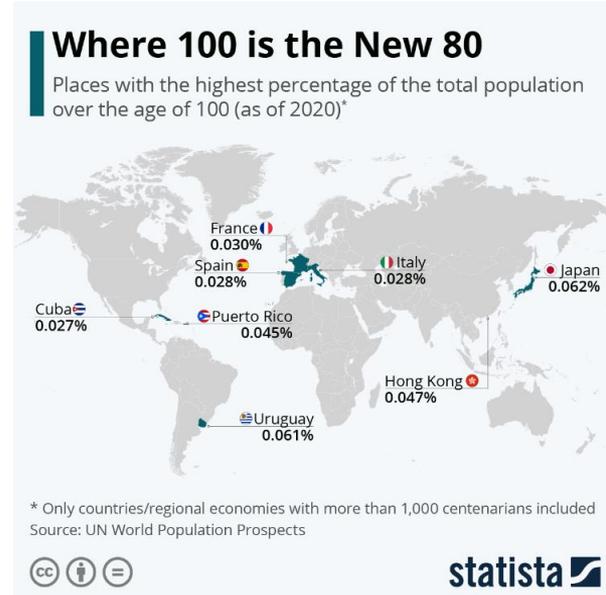
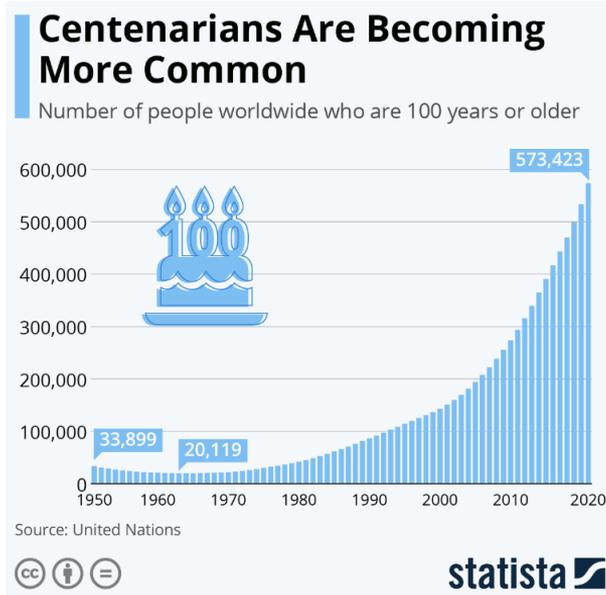
LES CENTENAIRES EN SUISSE: RÉSULTATS DE L'ÉTUDE SWISS100

Justine Falciola

1er Congrès National Focus Vieillesse

Jeudi, 18 janvier 2024

World-wide: Numbers of Centenarians



Maria Branyas Morera - The Oldest Person in the World

Age: 116 years old

Date of Birth: 4 March 1907

Nationality: Spanish

Past Occupation(s): Nurse

Gender: Female

100 Years of Age As Life Perspective

	2000	2001	2002	2003	2004	2005	2006	2007
Canada	102	102	103	103	103	104	104	104
Denmark	99	99	100	100	101	101	101	101
France	102	102	103	103	103	104	104	104
UK	100	101	101	101	102	102	103	103
USA	101	102	102	103	103	103	104	104

Data are ages in years. Baseline data were obtained from the Human Mortality Database and refer to the total population of the respective countries.

Table 1: Oldest age at which at least 50% of a birth cohort is still alive in eight countries

“Very long lives are not the distant privilege of remote future generations—very long lives are the probable destiny of most people alive now in developed countries”

EUROPE IS AGING TOO

- Europe is the oldest continent in the world and its population is getting remarkably older.
- Nowadays the most common age of death is 85 years for women, and 80 years for men (Robine, 2019), which explains why we observe the highest growth rate of the oldest old population ever recorded.
- The number of people aged 100+ is projected to grow from around 106,000 in 2018 to more than half a million by 2050. (European Union, 2019)

EU Centenarians' Evolution and Projections

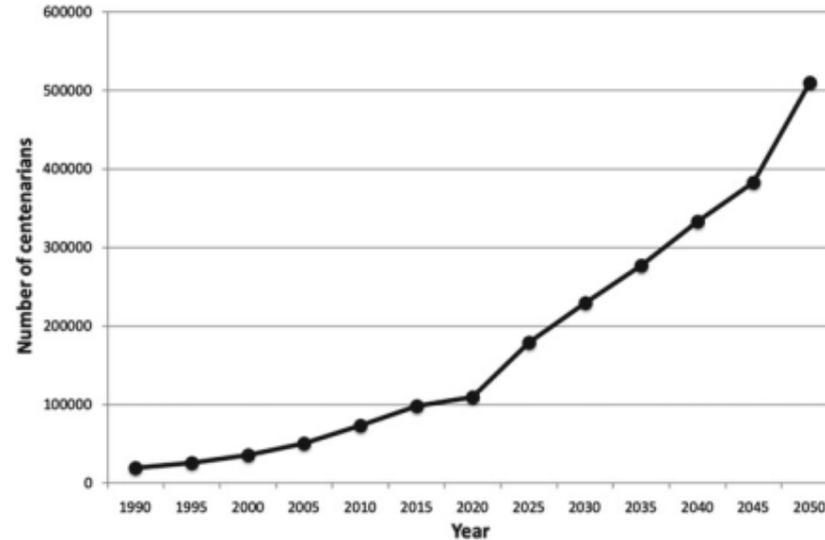


Fig. 1.1 Evolution and projections of the number of centenarians in EU (1990–2050) (Source UNdata | last update: 17 June 2019 | reference years: 1990 to 2050 | download date: 2 January 2020)

Source: Teixeira, Araújo, Paúl, and Ribeiro (2020)

EU Centenarians' Ratios

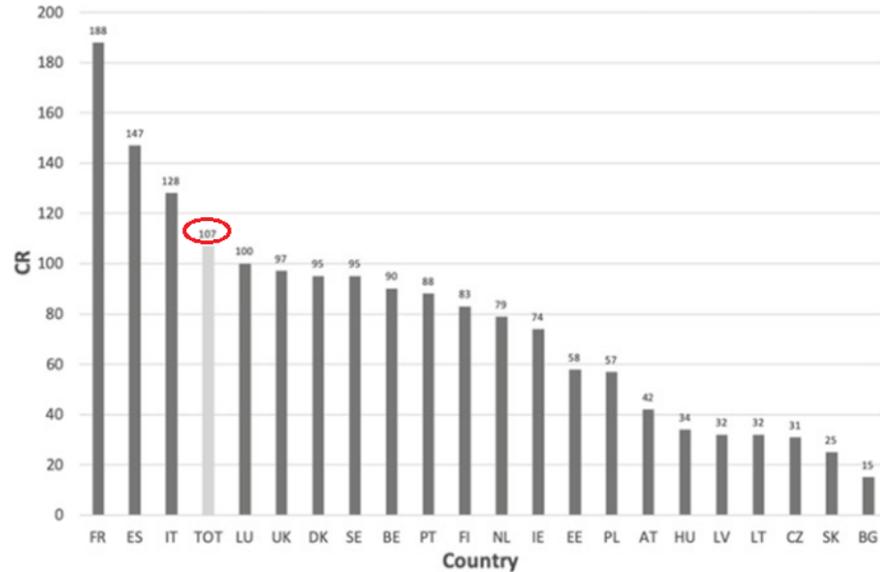
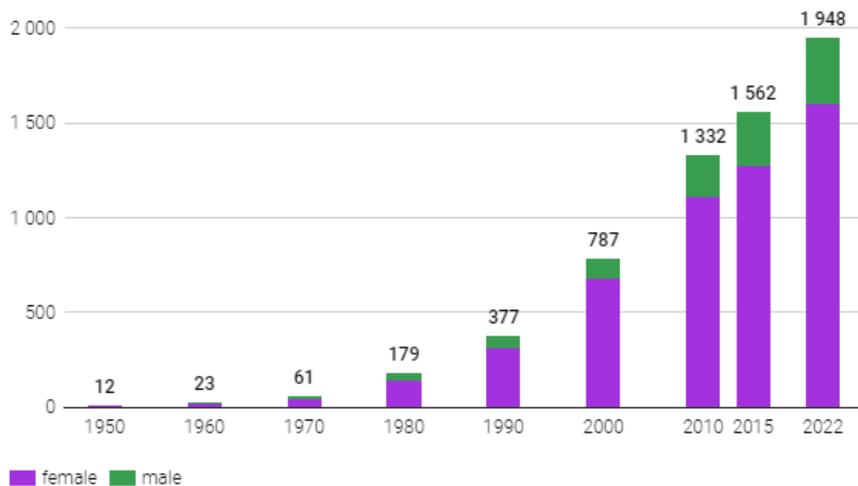


Fig. 3.1 Centenarian ratio by EU country (Source Human Mortality Database and External Sources)

$$CR = \left(\frac{\text{Number of people aged 100 years in 2018}}{\text{Number of people aged 60 years in 1978}} \right) \times 10,000$$

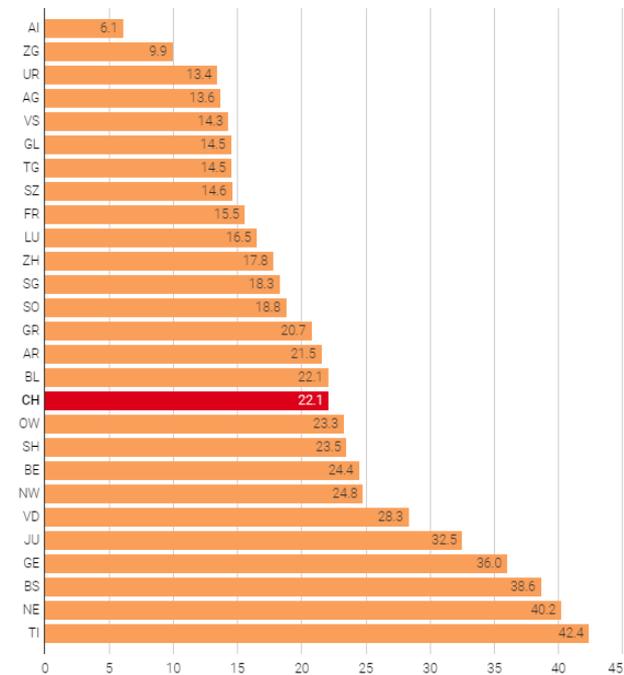
SWISS CENTENARIANS

Number of centenarians by sex



Source: FSO - STATPOP (2023)

Number of centenarians per 100,000 population by canton, on 31.12.2022



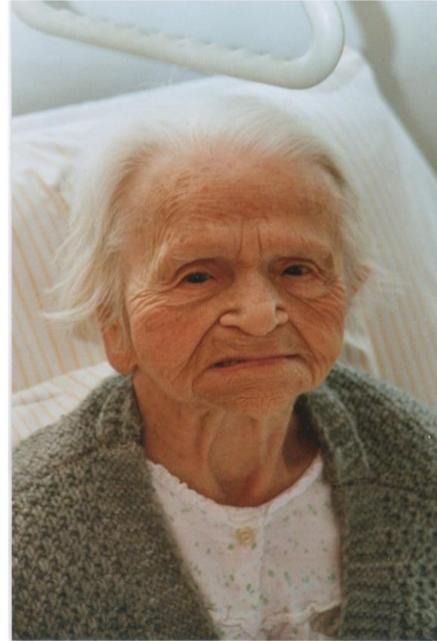
Source: FSO - STATPOP

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Different Faces of Reaching 100 Years



100 Years



100 Years

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SWISS100

The first national study on
centenarians in Switzerland

100
SWISS

Étude sur les centenaires en Suisse
Schweizer Hundertjährige-Studie
Studio sui centenari in Svizzera



THE FIRST
NATIONAL STUDY
ON CENTENARIANS
IN SWITZERLAND

PHONE INTERVIEW INVITATION

SWISS100

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SWISS100 KEYPOINTS

- A collaboration between experts from various disciplines, funded by the Swiss National Science Foundation.



FONDS NATIONAL SUISSE
SCHWEIZERISCHER NATIONALFONDS
FONDO NAZIONALE SVIZERO
SWISS NATIONAL SCIENCE FOUNDATION

- Data collection organized by researchers in Lausanne (UNIL), Zurich (UZH) and Manno (SUPSI).
- Data are stored at the University Hospital in Geneva (HUG).



SWISS100 involves six prominent
Swiss research institutions:



UNIL | Université de Lausanne



Centre hospitalier
universitaire vaudois

Scuola universitaria professionale
della Svizzera italiana

SUPSI



GOALS

GOAL 1

Determine characteristics of centenarians and their life situation in Switzerland

GOAL 2

Identify vulnerability in centenarians, its predictors and consequences in centenarians

GOAL 3

Investigate psychological and social resilience mechanisms in centenarians

GOAL 4

Aging in society and culture – Examining differences between regions and countries

SWISS100: Many Different Projects

Phone Study

2020-2021



Perspective on the challenges of life at 100, implications on the family, and COVID experience.

Main Study

2022-2024



Photo Project

2023-2024



Qualitative life story interviews and photos taken by photographer Jos Schmid.

02

PHONE STUDY

RECRUITMENT STATISTICS

Conducted between 2020 and 2021 over
the phone

770 centenarians from all over Switzerland
contacted

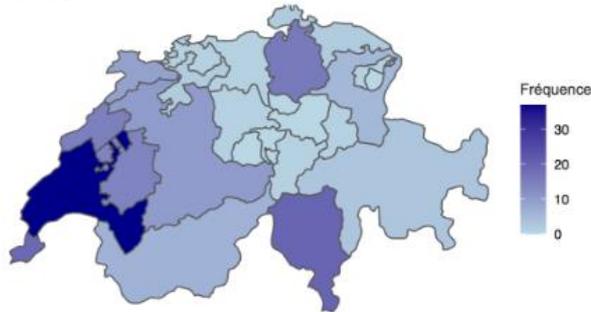
208 interviews, both centenarians and proxies

One of the main reasons for refusing to
participate was issues with health or cognition

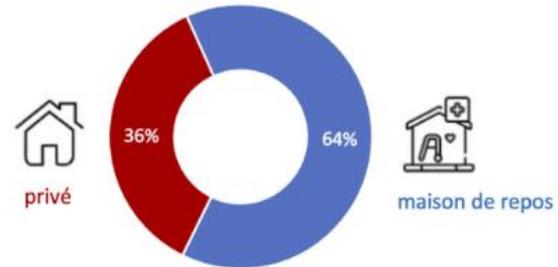
Socio-Demographic Information

- Average age 102 years
- Gender: male 25%, female 75%
- 64% in nursing home, 36% at home
- Marital status: single 11%, married 9%, divorced 4%, widow 76%

Fréquences de participation à l'enquête téléphonique par cantons



Situation de vie des centenaires de l'étude téléphonique : privé ou maison de repos ?

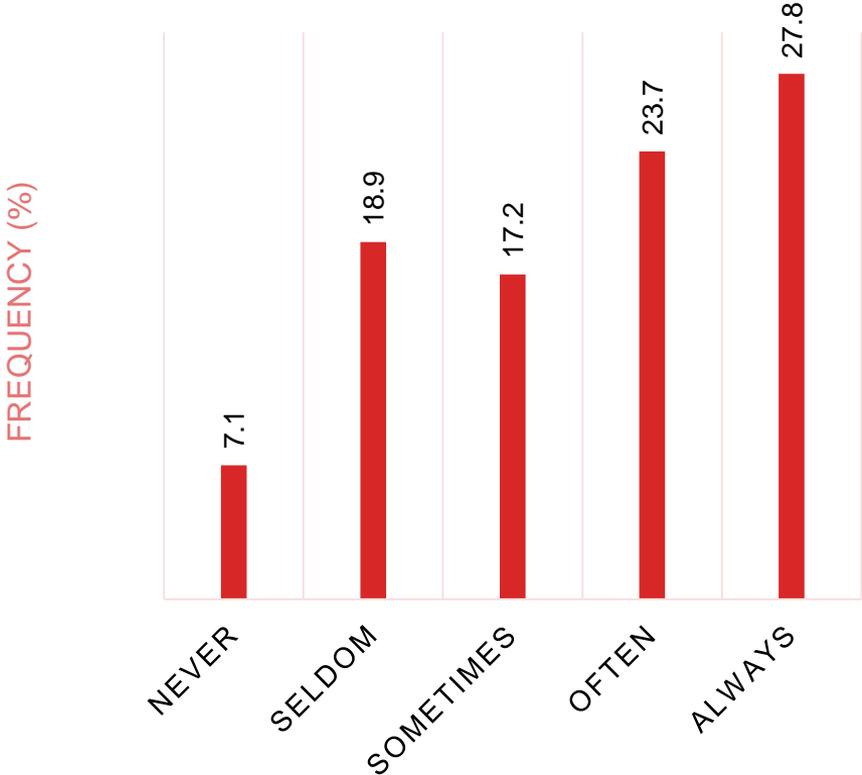


Health in Centenarians

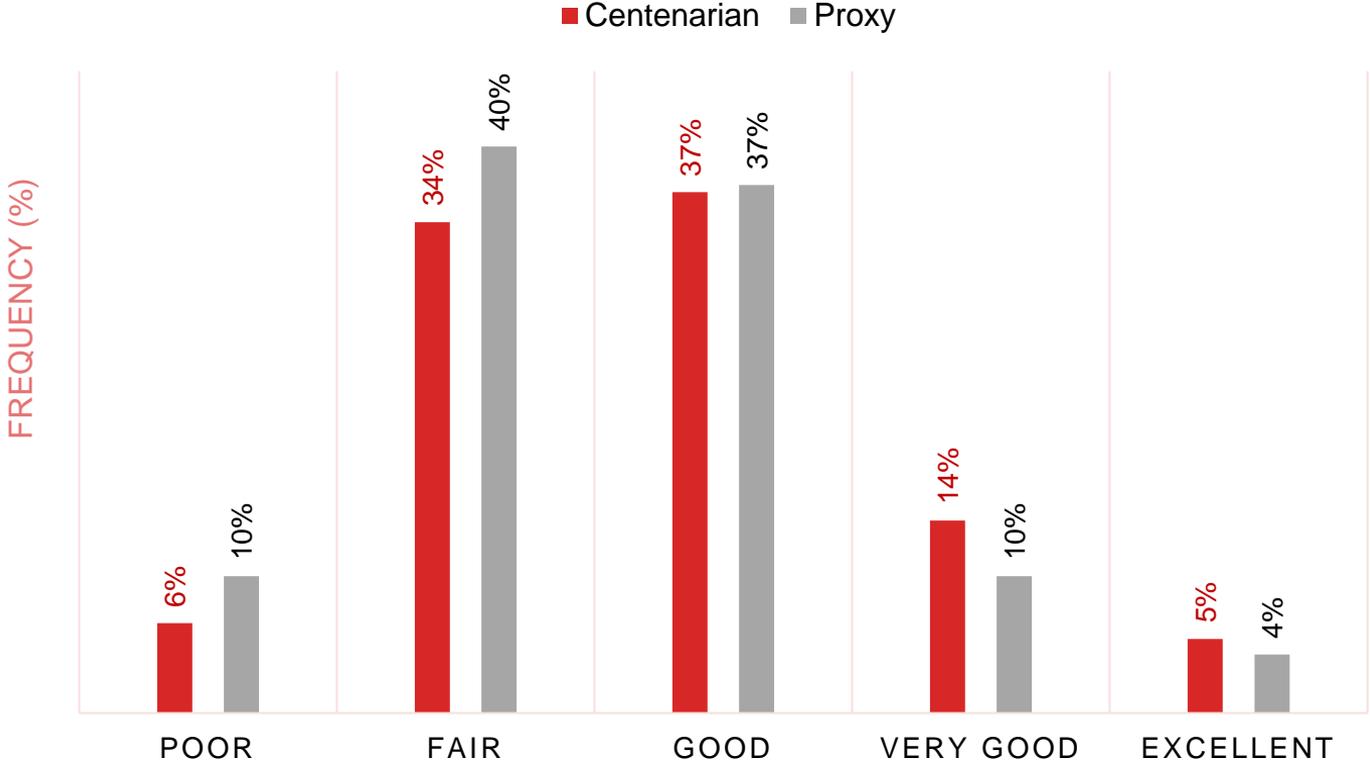


- Centenarians live more years without health issues than normal population (Andersen et al., 2012).
- All centenarians have health issues (Andersen-Rahnberg et al., 2001).
- Health issues limit the capacity to live independently (Richmond et al., 2012).

How often does health limit your activities?



How would you rate your (the centenarian's) health?

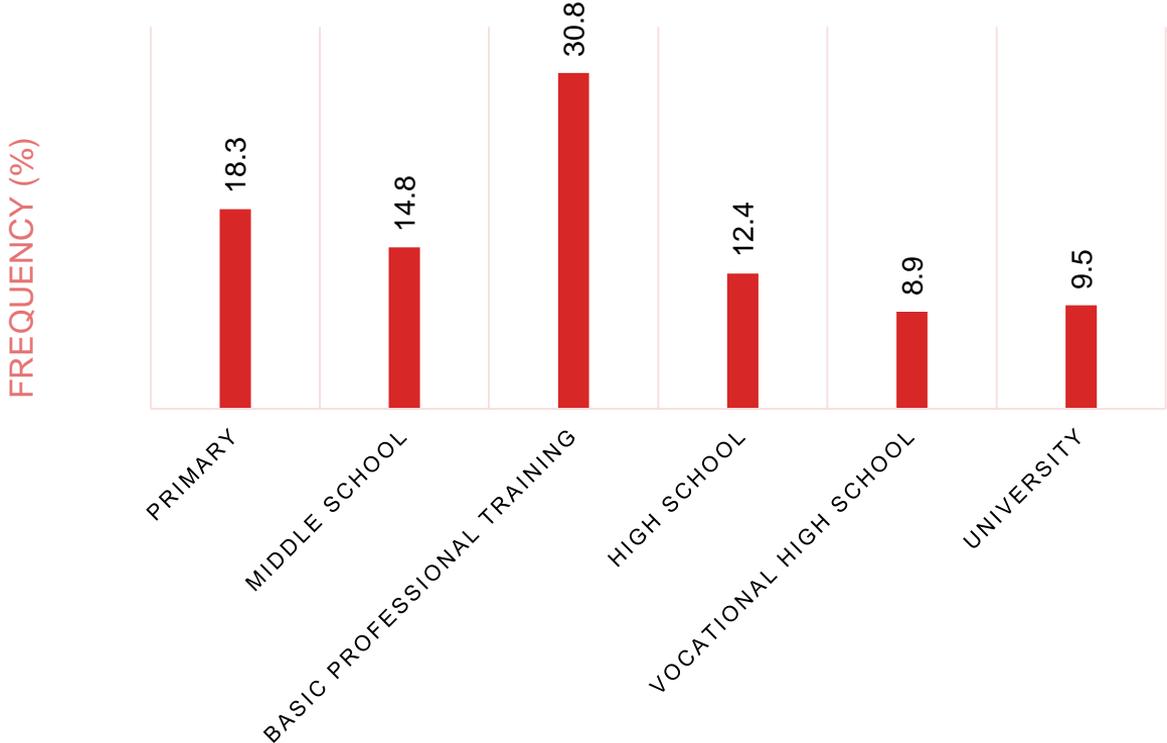


Cognitive Functioning in the Very Old

- Prevalence of dementia increases dramatically after age 65; double every decade of age.
- Rates of cognitive impairment vary substantially across studies, ranging from 34% (Richmond et al., 2011) to 80% (Gondo et al., 2006; Silver et al., 2001).
- Percentage of centenarians with severe cognitive impairment between 10% (Richmond et al., 2012) and 40% (Gondo et al., 2006; Kliegel et al., 2004).



Educational Background



Cognitive Functioning via MMSE

Place of residence (%)

Knows correct canton of residence	97.0
Knows correct city/village	95.0

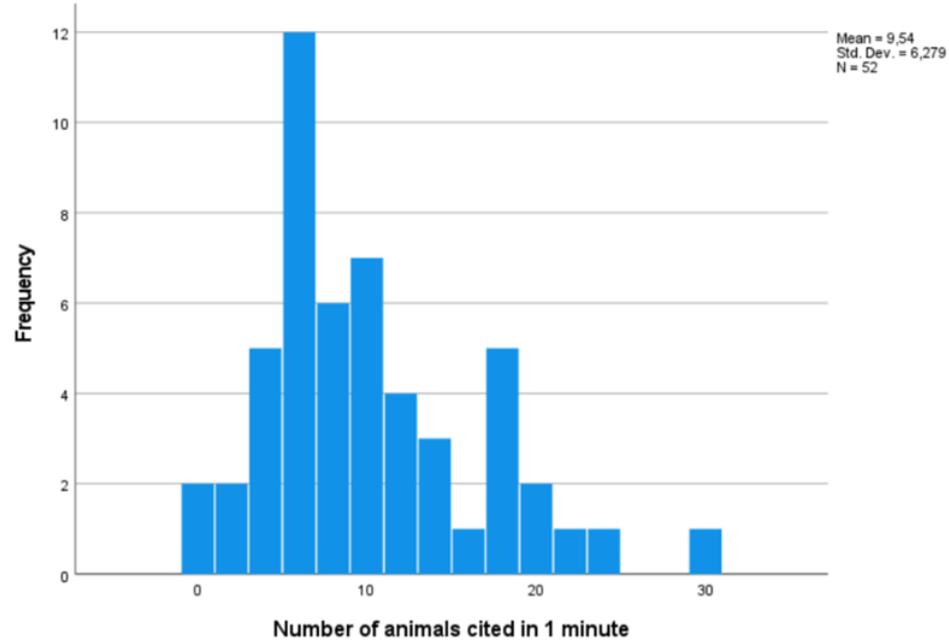
Words correctly repeated

0	5.8
1	17.3
2	34.6
3	65.4

Words memorized

0	21.6
1	39.2
2	58.8
3	41.1

Strong Interindividual Differences in Fluency



Source: Jopp et al. (2023)

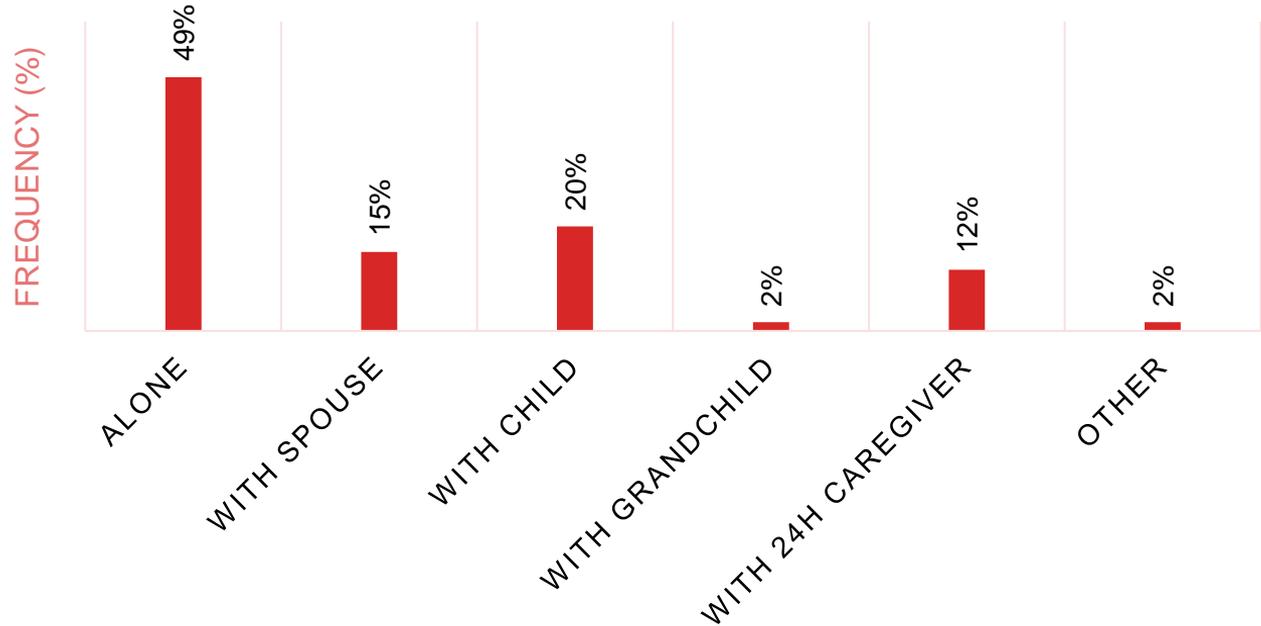
Social Networks and Centenarians

- Centenarians have significant health problems and supports needs (e.g., Andersen-Ranberg et al., 2001).
- Health problems likely to limit ability to initiate and maintain social contacts.
- Very old age is characterized by accumulating losses of close friends and relatives (Boerner et al., 2016; Martin et al., 1992).
- Centenarians experience shrinking social networks at a time of high support need, yet little is known about factual help and living arrangements.



Most Centenarians in Private Household Live Alone!

- **36% at Home**
- 64% in Nursing Home



Combination Isolation & Loneliness

Not lonely, not isolated

(n = 27; 29%)

- more grandchildren
- more help from relatives
- less health issues

Lonely, but not isolated

(n = 19; 20%)

- more education
- poorer subjective health

Isolated, but not lonely

(n = 20; 21%)

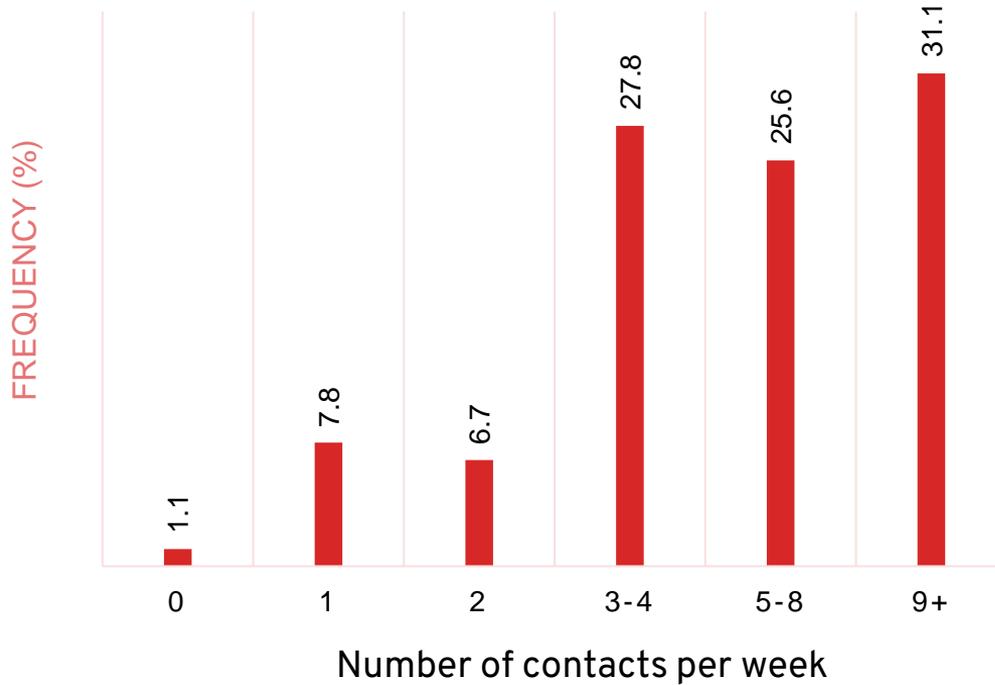
- higher fatigue
- lower openness
- lower neuroticism

Lonely and isolated

(n = 28; 30%)

- poorer education
- poorer health
- more children living close but poorer relationship quality
- higher neuroticism

Social Contacts: More Contacts Than in Other Studies – COVID-19 Effect?

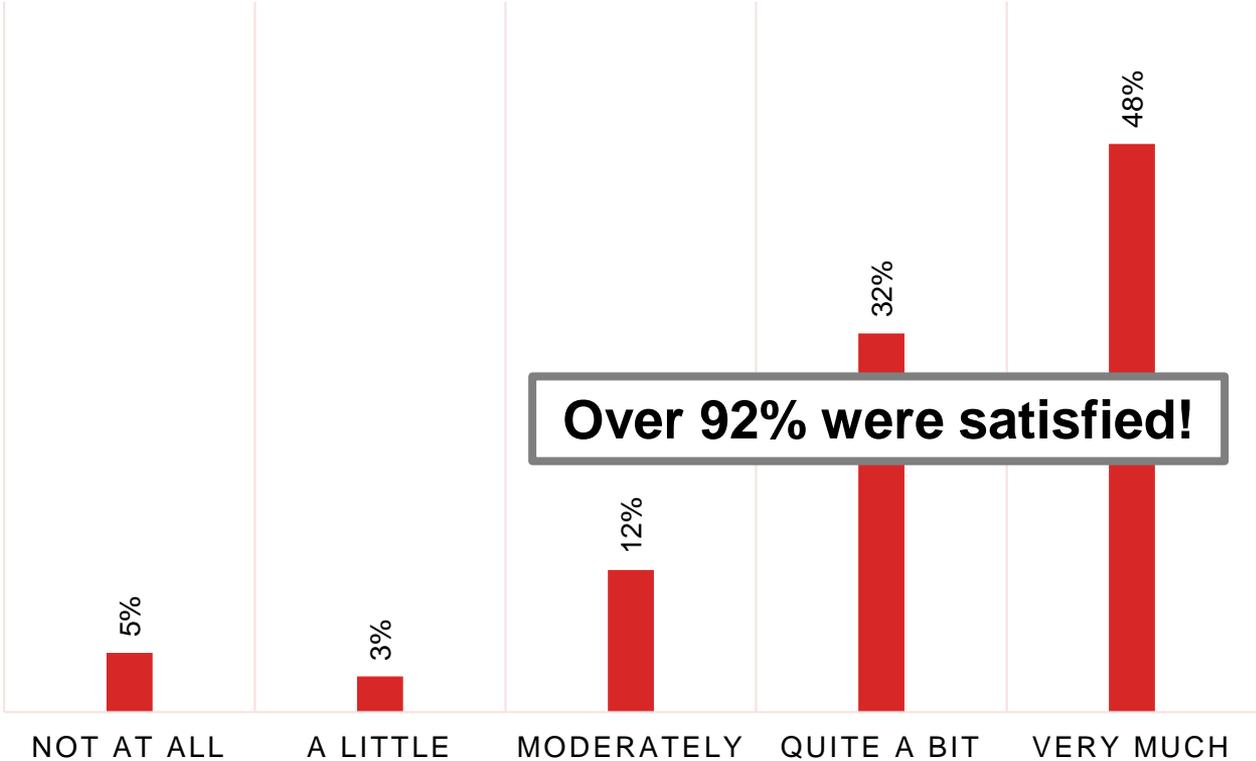


Psychological Characteristics



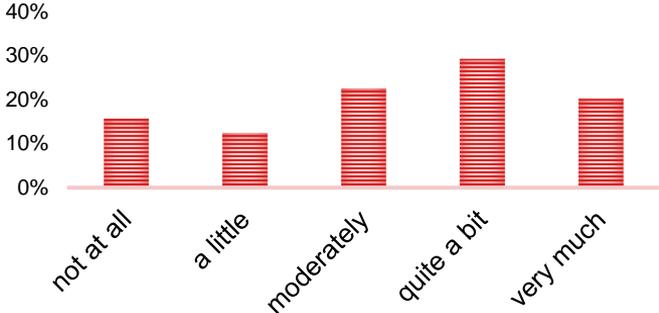
- Well-being paradox: Loss have only limited impact on well-being in old age.
- Well-being is higher than expected (Cheng, Leung & Brodaty, 2021; Jopp et al., 2016)
- Psychological strengths play an important role (Jopp & Rott, 2006).
- Coping strategies are poorly investigated (Martin et al., 1992; 2001).

Life Satisfaction in Swiss Centenarians: Very high !

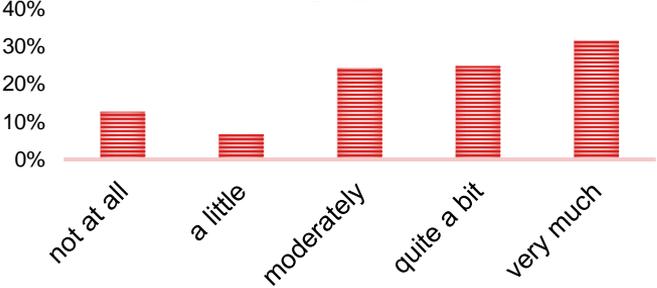


Psychological Strengths: High Levels

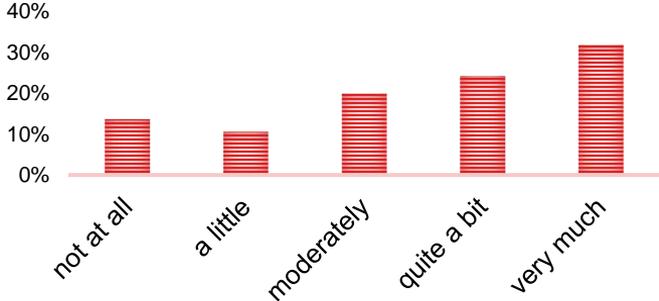
DO YOU FEEL HOPEFUL RIGHT NOW?



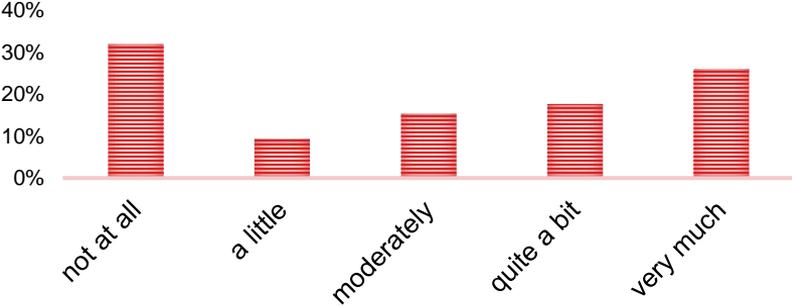
DO YOU HAVE A STRONG WILL TO LIVE?



DOES LIFE HAVE MEANING FOR YOU?



IS YOUR LIFE GUIDED BY STRONG RELIGIOUS OR OTHER BELIEFS?



What Contributes to Life Satisfaction?

- Person factors: health, cognition?
- Social networks: children, social support?
- Life circumstances: to live independently, care institution?
- Psychological assets: self-efficacy, optimistic outlook, will to live, meaning?



01

Swiss centenarians show vulnerability and resilience

02

Important vulnerability

- Many live in institutional settings
- Notable health limitations, more than in prior studies
- High variability in cognitive functioning

SWISS100 PHONE STUDY SUMMARY

03

Notable psychological resilience

- High level of psychological strengths
- High well-being, higher than in prior work

04

Social context

More social resources?

03

MAIN STUDY

RECRUITMENT ONGOING

Started face-to-face interviews in 2022
and still ongoing

Around 1000 centenarians contacted in
BE, BS, GE, TI, VD, and ZH

Focus on centenarians but also
on proxies



192 centenarians and 233 family members
interviewed for the baseline

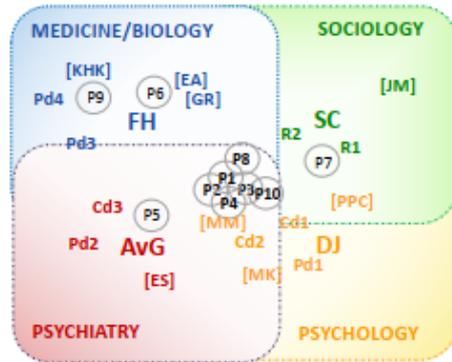
179 centenarians agreed to follow-up interviews

SWISS100: Main study by numbers

SWISS100 study represents **23** researchers belonging to **5** disciplines, across **8** collaborating institutions (Universities, Hautes écoles and Hospitals).

Interdisciplinary Analyses & Publications: Positioning of Topics/Themes Across Disciplines

P1-4, 8, 10: interdisciplinary publication projects
P5-7, 9: more disciplinary publication projects (Table 1)
Postdocs, Candocs, and Researchers: positioning expresses
home discipline and envisioned research projects (Table 3)



Note: DJ = D. Jopp; FH = F. Herrmann; AvG = A. von Gunten; SC = S. Cavalli; KHK = Karl-Heinz Krause; MM = M. Martin; ES = E. Savaskan; PPC = P. Perrig-Chiello; JM = J. Maurer; MK = M. Kliegel; EA = E. Albanese; GR = G. Ruggieri; Pd = Postdoc; Cd = Candoc; R = Researcher; Ss = Student assistants; I = Interviewer; T = Technician.
Project partners (depicted in parenthesis [x]; right panel) are invited to contribute to the publications.



Scuola universitaria professionale
della Svizzera italiana



SWISS100: Main study by numbers

- **62** men and **213** women centenarians participated.
- **53%** of them live in institutions and **47%** live in private homes.
- **3** language areas are covered; **96** German, **99** French, and **81** Italian speakers.
- The mean age of centenarians at the start of the study is close to **102** years. All together, we cover **27,992** years of life !
- The study includes **1061** precious details about the lives of centenarians and their family members, which were shared with **29** dedicated interviewers.

04

PHOTO PROJECT

Documentary part: the photo project

- The aim is to find out more about the lives, events and insights of selected centenarians.
- We ask only a few questions in an open discussion where the person can talk freely.
- Our photographer **Jos Schmid** will represent the individuals with beautiful professional pictures.
- In total, 25 to 30 centenarians from different regions of Switzerland will be depicted.
- The photos and short life descriptions will be compiled into a book.
- An exhibition at various locations in Switzerland will close this project. Stay posted!





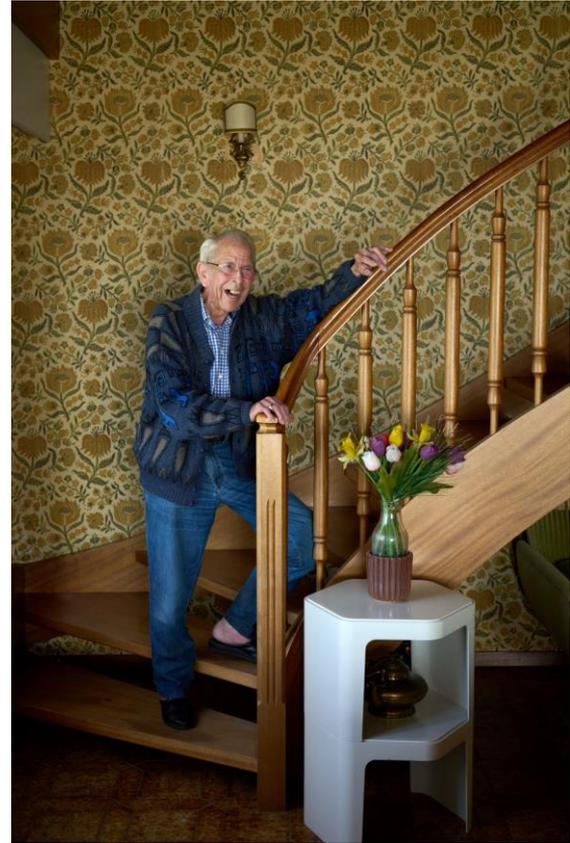
Sevgi and Germaine

GERMAINE GRAF, 104 YEARS OLD

- Mrs. Graf attributes her longevity to her strong family relationships, particularly with her children and her husband, as well as to the positive environment that surrounds her.
- She always displayed a positive attitude in life, never complaining. Her motto has been "love of one's neighbor", and she does not fear death.
- If she could give one piece of advice to her younger self, she would encourage the passing on of her parents' life stories, which she would have liked to know in more detail.
- Her last words are valuable advice: "Enjoy yourself."

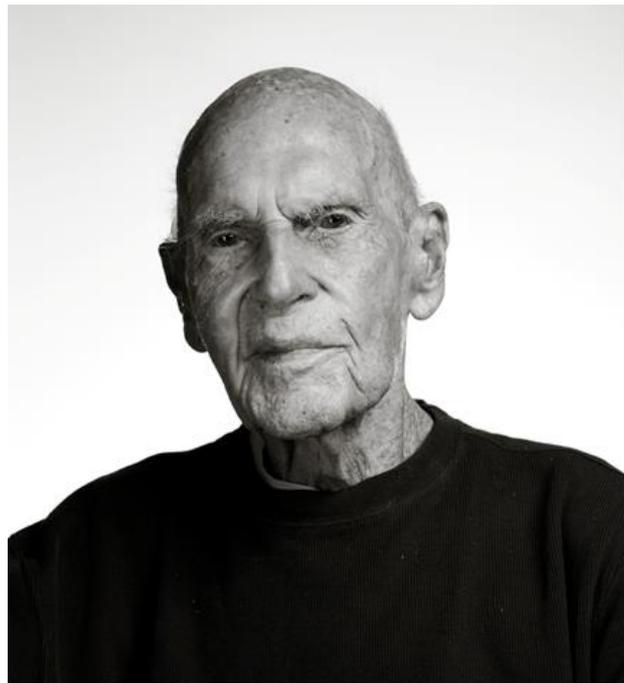
« Aux jeunes je dirais : Profitez de tous les choix qui s'offrent à vous ! Aventurier, journaliste, archéologue, ou même mécanicien, lancez-vous ! Mais jamais à crédit. Cela vous détruira. Oui, les jeunes ont du choix, et c'est merveilleux. »

Jean-Jacques Sollberger, 101 ans de vie



«Je m'appelle César, comme mon père.

Je suis centenaire sans l'avoir rêvé, c'est arrivé petit à petit !
Ma vie a coulé comme un fleuve tranquille. Je me suis
trompé aussi, j'ai été rattrapé par la vie, comme tout le monde.
Mais j'ai repris le dessus.



César Cornaz, 101 ans

Aujourd'hui je regarde les étourneaux se regrouper avant la migration depuis ma baie vitrée. Les oiseaux, la nature, les insectes ! Quelle tristesse de les voir disparaître. Je voudrais dire aux jeunes de prendre soin de la nature, de la préserver.»

SUMMARY AND OUTLOOK I

- Centenarians are vulnerable AND resilient:
 - Health and social domains show more vulnerability.
 - Strong resilience in the psychological domain.
- Complex picture, requiring consideration of different domains of functioning
 - Maintaining psychological strengths related to higher life satisfaction; objective conditions play less of a role.
 - More complex analysis needed to increase understanding of interplay.

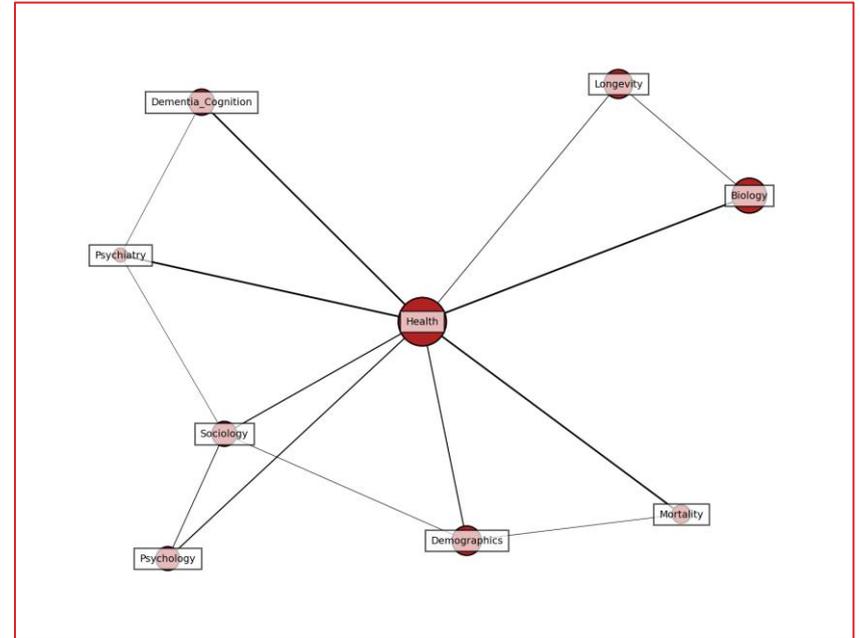
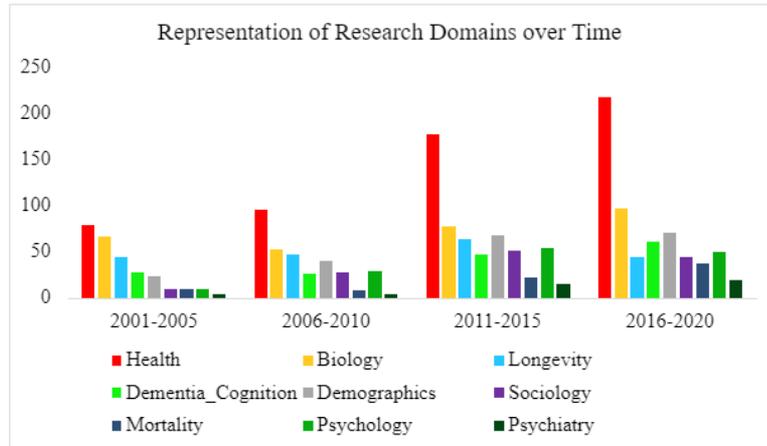
SUMMARY AND OUTLOOK II

- Historical, life-span and cultural insight on development
 - Actual factors need to be complemented by life-span factors.
 - Cultural differences may highlight potential societal factors.
- Centenarians offer important outlook on human function
 - Allows investigation of adaptation mechanisms in extreme situation.
 - Notable interindividual differences and subgroups, necessitating supplementary individual perspective.

05

PUBLICATIONS

Scoping review of available research on centenarians



SWISS100 Team's Publication Output

Written publications (*indicating peer review)

2023

Jopp, D. S. (2023). Zufriedenheit im Alter von 100 Jahren? *Publik-Forum EXTRA Alt und Glücklich? Noch immer mit dem Leben flirten (pp. Xx-xx)*.

*Uittenhove, K., Jopp, D. S., Lampraki, C., & Boerner, K. (2023). Coping patterns in advanced old age: findings from the Fordham Centenarian Study. *Gerontology, 69* (7), 888-898. <https://10.1159/000529896>.

2022

*Zaccaria, D., Cavalli, S., Masotti, B., Gomes da Rocha, C., von Gunten, A., & Jopp, D. S. (2022). Social isolation and loneliness among near-centenarians and centenarians: results from the Fordham Centenarian Study. *International Journal of Environmental Research and Public Health, 19*, 5940. <https://doi.org/10.3390/ijerph19105940>.

2021

Cavalli, S., Cereghetti, S., Pusterla, E. R. G., & Zaccaria, D. (2021). Isolamento sociale e solitudine nell'anzianità [Social isolation and loneliness in old age]. *Iride. Rivista di economia, sanità e sociale, 11*, 11-13. SUPSI.

*Gomes da Rocha, C., von Gunten, A., Jopp, D. S., Ribeiro, O., & Verloo, H. (2021). Why centenarians' depressive symptoms must become a priority for nurses. *Journal of the American Medical Directors Association, 22*, 1118-1122. <https://doi.org/10.1016/j.jamda.2021.02.002>.

Under Review

- *Masotti, B., Zaccaria, D., Jopp, D. S., & Cavalli, S. (submitted). *The interplay of health and age determines the receipt of different types of home care. Findings from a cross-sectional study on older adults in Switzerland*. Manuscript submitted for publication.
- *Gomes da Rocha, C., von Gunten, A., Rosselet Amoussou, J., Fernandes, S., Uittenhove, K., Jopp, D. S., Ribeiro, O., & Verloo, H. *Depressive symptoms and functional dependence in near-centenarians and centenarians: a scoping review*. Manuscript submitted for publication.
- *Uittenhove, K., Lampraki, C., Gomes da Rocha, C., Rott, C., von Gunten, A., & Jopp, D. S. *Profiles of centenarians' functioning: linking functional and cognitive capacity with depressive symptoms*. University of Lausanne.
- *Uittenhove, K., Rohner, S. L., Falciola, J., Gomes da Rocha, C., Roecke, C., Cavalli, S., Herrmann, F., Jopp, D. S. & von Gunten, A. (under review). *Mental health issues among centenarians living in Switzerland*. University of Lausanne.

In preparation

- Jopp, D. S., Cavalli, S., von Gunten, A., Herrmann, F., Gomes da Rocha, C., Ziade, G., & Uittenhove, K. (in preparation). *Centenarians' experience of the COVID-19 pandemic in Switzerland*. University of Lausanne.
- Jopp, D. S., Lampraki, C., Uittenhove, K., Delhaes, F., Zaccaria, D., Gomes da Rocha, C., Ziade, G., Stahlmann, M., Cavalli, S., von Gunten, A., Herrmann, F., & Krause, K.-H. (in preparation). *Topics of centenarian research - a scoping review of publications since 2000*. University of Lausanne.
- Masotti, B., Zaccaria, D., von Gunten, A., Herrmann, F., Jopp, D.S., & Cavalli S. (in preparation). *Exploring care receipt among centenarians*.

In preparation

- Polet, D., Falciola, J., Cavalli, S., von Gunten, A., Martin, M., Jopp, D.S, Graf, C., Herrmann, F. *Are swiss centenarians resistant to excess covid-19 mortality?*
- Gomes da Rocha, C., von Gunten, A., Vandel, P., Ribeiro, O., Jopp, D. S., & Verloo, H. *An e-Delphi study to build consensus on the relevant criteria to screen for depressive symptomatology among near-centenarians and centenarians.*
- Stahlmann, M., Jopp, D. S., Lampraki, C. (in preparation). *Active at 100: American and German's leisure activities and their associations to well-being.* Universities of Zurich and Lausanne.
- Zaccaria, D., Masotti, B., Falciola, J., von Gunten, A., Herrmann, F., Jopp, D.S., Cavalli, S.. (in preparation). *Does the relationship between proxy and centenarian affect data quality? The issue of item nonresponse in the SWISS100 phone study.* University of Applied Sciences and Arts of Southern Switzerland (SUPSI).
- Zaccaria, D., Masotti, B., von Gunten, A., Herrmann, F., Jopp, D.S., Cavalli, S. (in preparation). *Does the place of living have an independent effect on the level of loneliness at very old age? Results among home-dwelling and institutionalized centenarians in Switzerland.* University of Applied Sciences and Arts of Southern Switzerland (SUPSI).
- Ziade, G. G., Jopp, D. S., & Uittenhove, K., (in preparation). *Personality and health in the oldest-old: A comprehensive literature review.* University of Lausanne.
- Ziade, G. G., Jopp, D. S., Uittenhove, K., & Spini, D., (in preparation). *The relationship between personality and health in Fordham centenarians.* University of Lausanne.

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Jasmin Schilling



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Tenzin Rigdaktshang



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Noah Rischert



Nino Vögeli



Sina Schuler

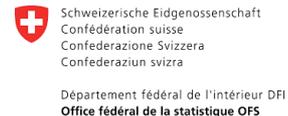
to the SNF for financially supporting the project



THANKS

to the centenarians and their families
for their participation !

to the FSO for sharing centenarians' contact info





Do you have any questions?

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