**Supplementary material***Details on methods*

***A. Variables***The independent variables in the analysis are age, gender, education, income, the need to control important aspects of one’s life, the appreciation of intergenerational contact and a lack of confidence in daily life. Age, gender, education and income are included as relevant variables to control for socio-economic status in our analysis. These variables were available in our dataset as part of gathered panel data on our participants.

*Individual characteristics: control variables*Because of non-linearity, age was recoded into three different age groups. Gender was recoded into the dummy variables male and female. For education, the level of education was rescaled in three levels, ranging from lower to higher. Those levels were then recoded into dummy variables because of non-linearity. Income was measured in three different categories (low, middle and high) reflecting the respective country’s income classes. These categories were recoded into dummy variables.

*Individual attitudes*
The need to control important aspects of one’s life was aggregated by combining four survey items asking respondents how important is it for them to have control and responsibility concerning: work and finance; home and living environment; finding and maintaining social contacts and health and personal control. Those items were reverse-coded so that a higher score on a 5-point scale indicated a higher need and desire for control, and then combined into a single variable by taking the average mean score of those four items.

Intergenerational contact was aggregated by combining the mean average score on three survey questions that asked respondents if they would like to come into contact with young people during (voluntary) work; if they would like to maintain social contacts with young people; and if they would prefer to live in a neighbourhood where younger as well as older people reside. The mean average scores were reverse-coded so a higher score reflects a higher appreciation of intergenerational contact.

A respondent’s indication of their lack of confidence in daily life was measured by a single item where respondents could indicate on a 5-point scale to which extent they agreed or disagreed with the statement that they lack the confidence to carry out many daily activities. This item was reverse-coded, so a higher score reflects a higher lack of confidence.

The individual attitude variables that were aggregated by taking the mean average score of related survey items were by design intended to measure the same attitude constructs and therefore used similar phrasing and 5-point scales.

*Interactions with country-level indicators*
The interactions in the analysis consist of individual attitudes with country-level indicators: cultural values. The two cultural values hierarchy and intellectual autonomy are based on Schwartz’ sociological theory of basic human values and include the most recent country scores for the respective value orientations (Schwartz, 2008). In Schwartz’ description, intellectual autonomy values indicate the extent to which a society encourages individuals to pursue their own ideas independently and take control of their own directions in life. Hierarchy values indicate the extent to which cultures rely on a hierarchical distribution of prescribed roles and corresponding power, rules and obligations.

***B. Items included in the revised scales, after factor and reliability analysis:***

*KAOP- scale:*

* It would probably be better if most elderly people lived in buildings with people their own age
* Most elderly people are inclined to let their homes become shabby and unattractive.
* Most elderly people are different: it’s hard to understand why they are doing something.
* Most elderly people make you feel uncomfortable.
* Most elderly people interfere in other people’s business too much and often give unsolicited advice.
* If the elderly expect to be liked, their first step should be to lose their annoying flaws.
* Most elderly people get stuck in their habits and can't change.
* With a few exceptions, most elderly people are generally very similar.
* Most elderly people should be more concerned about their appearance: they are too dirty.
* Most elderly people bore others by insisting on talking about the good old days
* Most elderly people have high demands in terms of love and reassurance.
* Most elderly people constantly complain about the behaviour of the younger generation.
* In order to keep a neighbourhood nice, it’s better if not too many elderly people live there
* Most elderly people are irritable, grouchy and unsociable.

*KAOP+ scale:*

* Most elderly people don’t really differ from anybody else: they are as easy to understand as younger adults.
* Most elderly people can adapt if the situation requires it.
* People become wiser with the advent of old age.
* One of the most interesting and entertaining qualities of most of the elderly is recounting stories about their past experiences.
* Most elderly people would rather choose to continue to work for as long as possible, rather than be dependent on someone.
* You can count on being in a nice neighbourhood if a significant number of elderly people live there
* Most elderly people seem to be quite clean and tidy in their appearance.
* Most elderly people are cheerful, pleasant and in a good mood.
* Most elderly people are inclined to keep their homes neat and attractive.
* If you think about it, the elderly actually have the same flaws as everyone else.
* It’s very relaxing to be with the majority of elderly people.

*ASD scale:*

* progressive vs. outdated
* consistent vs. inconsistent
* independent vs. dependent
* rich vs. poor
* generous vs. selfish
* productive vs. unproductive
* active vs. inactive
* safe vs. unsafe
* strong vs. weak
* healthy vs. unhealthy
* active vs. passive
* beautiful vs. ugly
* cooperative vs. non-cooperative
* optimistic vs. pessimistic
* satisfied vs. dissatisfied
* expectant vs. resigned
* flexible vs. inflexible
* hopeful vs. discouraged
* organised vs. disorganised
* happy vs. unhappy
* friendly vs. unfriendly
* tidy vs. messy
* trustful vs. distrustful
* independent vs. dependent
* liberal vs. conservative
* confident vs. insecure
* tolerant vs. intolerant
* pleasant vs. unpleasant
* ordinary vs. eccentric
* interesting vs. boring
* resolute vs. indecisive

***C. Country means and Cronbach’s Alpha values per dependent scale***

|  |
| --- |
| *Table 1. Country means per scale* |
| **Country** | **KAOP-** | **KAOP+** | **ASD** |
| **FR (N=604)** | **Mean** | 53,29 | 33,49 | 108,42 |
| **SD** | 11,01 | 7,41 | 31,58 |
| **NL (N=650)** | **Mean** | 46,22 | 33,40 | 106,23 |
| **SD** | 11,11 | 7,00 | 25,90 |
| **PL (N=604)** | **Mean** | 60,23 | 33,12 | 104,85 |
| **SD** | 11,61 | 7,83 | 40,55 |
| **PT (N=636)** | **Mean** | 53,13 | 32,77 | 108,80 |
| **SD** | 12,47 | 8,29 | 36,79 |
| **Total (N=2494)** | **Mean** | 53,09 | 33,19 | 107,08 |
| **SD** | 12,58 | 7,65 | 34,07 |

Note: FR = France, NL = Netherlands, PL = Poland, PT = Portugal.

Source: EIT Health Survey 2013-2016. ASD = Aging Semantic Differential Scale, KAOP: Kogan’s Attitudes towards Older People scale (positive and negative subscales).

*Table 2. Cronbach’s Alpha values per revised scale*

|  |  |
| --- | --- |
| **Scale** | **Cronbach’s Alpha** |
| **KAOP-** |  | **.875** |
| **KAOP+** |  | **.788** |
| **ASD** |  | **.971** |

Note: Source: EIT Health Survey 2013-2016. ASD = Aging Semantic Differential Scale, KAOP: Kogan’s Attitudes towards Older People scale (positive and negative subscales).

**C. *Items excluded from the revised scales, after factor and reliability analysis:***

*ASD scale*:

* aggressive vs. defensive

This item was excluded because it had an insufficient factor loading on the ASD scale in all conducted factor analyses, a very low and insufficient item-total score in the total dataset, a negative item-total score in two countries (NL and FR) and a very low and insufficient item-total score in two other countries (PL and PT) (low being below 0.40).
The Cronbach’s Alpha value of the ASD scale before removal of this item was .968 for the total dataset and ranged from .960 to .972 between countries.

*KAOP- scale:*

* Most elderly people would actually want to have stopped working before the age of retirement if they could have lived off their pension or their children.
* Elderly people have too much power in the world of business and politics.
* It’s foolish to claim that wisdom comes with old age.

These three items were excluded because they all had a low to insufficient factor loading on the scale in all conducted factor analyses and a very low and insufficient item-total score in all four countries (low being below 0.40).
The Cronbach’s Alpha value of the *KAOP-* scale before removal of this item was .774 for the total dataset and ranged from .744 to .800 between countries.

*KAOP+ scale:*

* It would probably be better if most elderly people lived in buildings where younger adults also live.
* Elderly people should have more power in the world of business and politics.
* Most elderly people are inclined to deal with their own affairs and only give advice when prompted.
* It goes without saying that most elderly people are very different from each other.
* We rarely hear elderly people complain about the behaviour of the younger generation
* Most elderly people don’t need any more love and attention than anyone else.

These six items were excluded because they all had a low to insufficient factor loading on the scale in all conducted factor analyses and also had a very low and insufficient item-total score in all four countries, with the exception of “Most elderly people are inclined to deal with their own affairs and only give advice when prompted” which had a very low and insufficient item-total score in two countries (NL and FR) and a low item-total score in two others (PT and PR) (low being below 0.40).
The Cronbach’s Alpha value of the *KAOP+* scale before removal of this item was .869 for the total dataset and ranged from .846 to .858 between countries.