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NOT FLOURISHING

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ABSTRACT

We examine evidence on the well-being and ill-being of the young for 22 countries in the Global Flourishing Study (GFS) 2022-2024 with the commonly used 12-component "flourishing" index and a new 4-component "not flourishing" index. Although flourishing is U-shaped in age in the pooled data it rises in age in 13 countries and declines in 7. By contrast, not-flourishing declines in age overall, and in each of its four components, and it declines in age in 15 of the 22 countries. We explore sensitivity of results to survey mode in countries using both computer-assisted telephone interviews (CATI) and computer-assisted web-based interviews (CAWI). When CATI is used, the young are happier than other age groups, but the opposite is the case when data are collected via CAWI. We validate the findings with analyses from two other data sets. First, we construct flourishing and not flourishing indices using different variables for the four European countries in the GFS - Germany, Spain, Sweden and UK - from the interviewer based European Social Survey (ESS) of 2023-2024. As with the GFS, the not-flourishing data shows ill-being declines in age while the flourishing data is more mixed. Second, we examine the internet-based Global Minds (GM) surveys, 2020-2025, on the same group of countries, and find well-being rises in age for all in both flourishing and not-flourishing variables. We argue that trends in youth suicide, self-harm and mental health hospitalizations are consistent with the age patterns in the not-flourishing index and with the internet-based survey evidence from both the flourishing and not-flourishing indexes.

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"Flourishing itself might be understood as a state in which all aspects of a person's life are good" VanderWeele (2017).

"I think my focus would be neither happiness, nor character. It would be misery. And I think that there is a task for society to reduce misery, not to increase happiness. And when you think of reducing misery, you would be led into very different policy directions. You would be led into mental health issues. You would be led into a lot of other problems. So, reducing misery would be my focus. Character and happiness or misery are not substitutes." Daniel Kahneman (2021).

1. Introduction

There are substantial theoretical and empirical literatures emphasizing that how people say they feel is complicated, and that there is value in collecting evidence on both positive, and negative, affect, because, conceptually, they are not simply the flipsides of one another (they are not perfectly negatively correlated) (Blanchflower and Bryson, 2024a). Furthermore, the correlates, of well-being and ill-being are not always the opposite of one another and, even at the individual level, survey respondents can express themselves to be distressed or anxious whilst, at the same time, state that they are reasonably satisfied with life (Blanchflower and Bryson, 2023a). Thus, to obtain a holistic picture of how people are feeling, and to understand the correlates, of both well-being and ill-being better, it is advantageous for surveys to incorporate metrics that capture both. This is a position taken by important well-being scholars, such as Ed Diener (1985; 2010).[1]

From a policy perspective, there has been a long-running debate as to which to focus on – well-being or ill-being? If, as many economists and others do, one equates well-being with utility (Varouxakis and Philp, 2019; Kimball and Willis, 2023), utility maximization translates into a focus on maximizing well-being. This perspective has a long tradition going all the way back to Aristotle's concept of 'flourishing' (Symons and VanderWeele, 2024) which is akin to eudaemonic well-being and, at its core, entails living the life that a virtuous person would live, leading to happiness.

However, there is a second perspective, illustrated in the quote from Daniel Kahneman above, which maintains that the proper focus of policy should be the reduction of mental ill-being, or misery, since this can have profound negative consequences both for the individuals concerned and society more generally. The force of this argument has been underlined recently by the deaths of despair literature (Case and Deaton, 2020).

Growing interest in the idea of flourishing has been given a fillip recently with the advent of the Global Flourishing Study (GFS), conducted in 22 countries, by Gallup (n=202,898). There are no countries from Latin America. These countries are as follows with unweighted sample sizes in parentheses: Argentina (n=6,724); Australia (n=3,844); Brazil (n=13,204); Egypt (n=4,729); Germany (n=9,506); Hong Kong (n=3012); India (n=12,765); Indonesia (n=6,992); Israel (n=3,669); Japan (n=20,543); Kenya (11,389); Mexico (n=5,776); Nigeria (n=6,827); Philippines (n=5,292); Poland (n=10,389); South Africa (n=2,651); Spain (n=6,290); Sweden (n=15,068); Tanzania (n=9,075); Turkey (n=1,473); UK (n=5,368) and USA (n=38,312). Data is available on

[1] As Diener et al (2010) note "*measures of well-being were created to assess psychological flourishing and feelings – positive feelings, negative feelings and the difference between the two*".

request. This has resulted in a number of recent reports[2] many of which have been undertaken by The Human Flourishing Program at Harvard's Institute for Quantitative Social Science.[3] This is important work because the studies have sought to capture flourishing empirically in a more systematic way than hitherto, thus furthering interest in, and knowledge of, its incidence, correlates and implications.

In this paper, we contribute to the literature in four ways. First, we examine the GFS multi-item flourishing index which is at the heart of research undertaken by VanderWeele and co-authors in recent studies and consider its demographic correlates, with a particular focus on its age profile and by sex. We do so because it has become increasingly apparent, across a range of studies and survey metrics, that the young are becoming less happy – and more mentally distressed – relative to those who are middle-aged and older (Blanchflower et al., 2025). The focus on gender is important because recent studies indicate that women tend to have lower well-being than men on most metrics (Blanchflower and Bryson, 2025a), apart from in the case of life satisfaction, happiness and Cantril's Ladder where the evidence is much less clear-cut (Blanchflower and Bryson, 2024a). However, the flourishing index has not appeared in this literature, so it is valuable to see how flourishing is correlated with age and sex.

Second, we construct a second index, which we term the 'not-flourishing' index, based on 4 items in the GFS, which have received much less attention from scholars. As noted above, there is likely important information in ill-being metrics which are not captured in well-being metrics. Indeed, we know from the extant literature on the age-profile of mental ill-health, that the deterioration in the relative position of the young is much clearer with regards to negative affect than it is with respect to positive affect (Twenge and Blanchflower, 2025). This deterioration is reflected in behavioral outcomes which are concerning with regards to young people.

For example, there has been a steady growth in youth suicides in the United States since 2011 for males and somewhat earlier for females (Garnett and Curtin, 2024), consistent with the rise in mental despair among the young. Male suicide rates are still above female rates for ages 15-24.[4] There have also been substantial increases in the prescription of drugs to alleviate youth depression and anxiety (Chua et al, 2024) and in young people's hospital admissions for mental health related reasons (Leyenaar et al, 2025; Arakelyan et al, 2023). For these reasons, utilizing both flourishing and not-flourishing indexes alongside one another is potentially informative with respect to the current age and sex profiles of both around the world.

Third, we draw attention to the need to account for survey mode when examining the age and sex profile of subjective well-being and ill-being. We have shown in some recent papers (Blanchflower, 2025 and Blanchflower and Bryson, 2025a) that survey respondents' answers to questions relating to subjective ill-being and well-being are sensitive to survey mode, and that this sensitivity is most pronounced among the young. Failure to account for survey mode can therefore affect the age profile of well-being and ill-being if not fully accounted for in analyses. Most studies using the GFS have not taken this into account to date.

[2] https://globalflourishingstudy.com/research/
[3] https://hfh.fas.harvard.edu/
[4] Garnett and Curtin (2024) show that in 2022 for age 15-24 female suicide rates/100000 were 5.8 up from 4.0 in 2011 compared with 21.1 and 17.5 respectively for young males.

Finally, we set the GFS results in context by assessing their validity using two other multi-country surveys – the European Social Survey (ESS) and Global Minds (GM) – to examine the age profiles of positive affect and negative affect using similar survey metrics whilst, at the same time, accounting for survey mode effects.

We show that flourishing in the GFS is U-shaped in age in the pooled data, but it rises in age in 13 countries and declines in 7. By contrast, not-flourishing declines in age overall and in each of its four components, and it declines in age in 15 of the 22 countries. We then explore sensitivity of results to survey mode in those countries using both computer-assisted telephone interviews (CATI) and computer-assisted web-based interviews (CAWI). When CATI is used, the young are happier than other age groups, but the opposite is the case when data are collected via CAWI. We validate the findings with analyses from two other data sets. First, we also construct flourishing and not-flourishing indexes using different variables for the four European countries in the GFS - Germany, Spain, Sweden and UK plus Israel - from the interviewer based European Social Survey of 2023-2024. As with the GFS, the "not-flourishing" data shows ill-being declines in age while the flourishing data is more mixed. Second, we examine the internet-based Global Minds surveys, 2020-2025, on the same group of countries, and find well-being *rises* in age for all in both flourishing and not flourishing variables.

The remainder of this paper is structured as follows. Section Two discusses the concept of flourishing and the role of the GFS in promoting and examining the concept empirically before reflecting on what the age profile of flourishing might look like in the light of the recent literature on the changing age profile of well-being and ill-being based on other global surveys. Section Three introduces the data and briefly describes the empirical methods we use to capture the correlation between age and well-being and ill-being metrics, including accounting for survey mode effects. Section Four reports results, and Section Five concludes.

2. Flourishing and Not-Flourishing

In this section we discuss the concept of flourishing and the recent construction of the flourishing index in the GFS. We then consider what might be the age profile of flourishing based on expectations relating to the recent literature on changes in the age profile of subjective well-being and ill-being.

2.1: Flourishing

A recent empirical literature examines, the incidence and correlates, of 'flourishing'. VanderWeele (2017) who is the main proponent, and co-author of numerous flourishing papers, defines flourishing as *"a state in which all aspects of a person's life are good."* Putting to one side how this definition might align with the Aristotelian concept noted above, or even popular conceptions[5], this turns out, empirically, to be a high well-being bar to reach. There is evidence, for example, that women report that they are happy, so a female variable in a happiness equation is often significantly positive, but a female coefficient in an unhappiness equation is nearly always

[5] For example, the Merriam Webster dictionary says flourishing is "*marked by vigorous and healthy growth: very active and successful or even as 'thriving*'".

significantly positive (Blanchflower and Bryson, 2025a, 2024a, 2023a), so a significant proportion of these women according to VanderWeele's definition would not be 'flourishing'.[6]

To our knowledge, there is little if any direct evidence as to whether people say they are 'flourishing' because the word does not appear in survey questions. More broadly, there has been resistance, in the literature, to the whole idea of studying flourishing. In a recent meta-analysis on adolescent flourishing Witten et al. (2019) argued that "*there is limited empirical work on adolescent flourishing. Further, no single definition or conceptualization of flourishing emerged from the literature*". Likewise, Rule et al (2024: p1.) argued "*flourishing is an evolving well-being construct and outcome of interest across the social and biological sciences. Despite some conceptual advancements, there remains limited consensus on how to measure flourishing, as well as how to distinguish it from closely related well-being constructs such as thriving and life satisfaction*".

Willen (2022: p.1) provides a similar critique suggesting "*no clear consensus exists around what flourishing means or what is needed to promote it… flourishing often is used interchangeably with different but related concepts—including, above all, "happiness" and "well-being" …in ways that sow confusion*". VanderWeele et al (2023: p. 2) do not use flourishing and well-being interchangeably. On the contrary, they see them as somewhat distinct arguing that "*whereas well-being may be best considered the property of human being (or other individual entities) flourishing is a property of human beings and the contexts in which they are situated*."

In operationalizing flourishing using the GFS authors have constructed an index based on the sum of twelve well-being questions – life satisfaction, happiness, worthwhileness, meaning and purpose, character and virtue and close personal relationships plus measures of physical and mental health. VanderWeele et al. (2019: p. 1667) provide the following rationale for the index:

"the flourishing index" divides universally desired factors contributing to flourishing into 6 key domains - happiness and life satisfaction, physical and mental health, meaning and purpose, character and virtue, close social relationships, and financial and material security. In contrast to many previously proposed measures that are not as comprehensive, the flourishing index addresses 5 universally desired domains that constitute ends, as well as a sixth (financial and material security) that constitutes a critical means to securing them"

The flourishing index constructed by these authors appears in a series of papers (Cowden et al 2025, Lomas et al 2025, VanderWeele, 2017, VanderWeele McNeely and Koh HK, 2019, VanderWeele, Johnson et al. 2025, and VanderWeele, Case et al 2023). The index allocates equal weights to all twelve well-being variables outlined above. A couple of issues are worth noting at the outset.

[6] For example, of the 106,240 women in the GFS 2022-2024 survey examined below 17,750 said they were extremely happy giving a 10 to the question how happy do you usually feel? Of these only 9606 also said they were not at all anxious when asked if they had been bothered in the last two weeks by feeling anxious or easily upset? Of these women who scored a 10 on the happiness question only 68% *also* reported a 10 to a life satisfaction question we examine below.

First, it is not uncommon for those examining subjective well-being and ill-being to use multi-item composite scales. Those that are common, in the literature, tend to be validated scales relating to mental health/not-flourishing such as those based on the General Health Questionnaire, and the Patient Health Questionnaire (PHQ) and Generalized Anxiety Disorder (GAD) scales. These have all been shown to be correlated with adverse health outcomes (see for example Kroenke, Spitzer and Williams, 2001, Sapra et al, 2020, Tennant et al, 2007) and some, such as the GHQ-12, PHQ and GAD are used by clinical psychologists for diagnostic purposes. In the literature, a cut-off is frequently used with these measures to identify degrees of poor mental health. For example, Manea et al. (2012), suggest that 10 is an appropriate cut-off point for the aggregate PHQ-9 score for distinguishing with those who do or do not have depression.

Multi-item scales relating to subjective well-being are perhaps less common, an exception being the Warwick and Edinburgh Mental Well-being Scale (WEMWBS, https://warwick.ac.uk/services/innovations/wemwbs). Again, it is a statistically validated scale. Nevertheless, it does not purport to capture flourishing.

Second, the flourishing index draws on a set of survey items that are absent from most of the well-being surveys in the world such as the Latinobarometers, the Asiabarometers, the Arab Barometer, the Afrobarometers, the Eurobarometers, the World Values Surveys etc. Consequently, this index could not be widely implemented. Nevertheless, there is one survey - the European Social Survey – which contains a set of plausible alternative metrics to construct a flourishing index. We present analyses using these data, comparing and contrasting the analyses with those undertaken using the GFS for a subset of countries that appear in both surveys.

Third, there is a debate about the value of indexes. Some organizations have established experience in collecting data on various aspects of flourishing. For instance, the OECD publishes its **Better Life Index** across many countries with multiple well-being variables, covering housing, income and wealth, work and job quality, knowledge and skills, health, safety and work-life-balance, but it never produces a single index and invites the reader to experiment.[7] When faced with rich data containing multiple metrics the issue is which variables to include and what weight to give them. Do you weight health the same as civic engagement? If not, why not? The reader is invited by the OECD to adjust the weights to create your own **Better Life Index** and watch how the country rankings change, as the weights are changed. For instance, the United States ranks highly if income and wealth are heavily weighted and much lower if health and work-life balance, say, are given bigger weights. For this reason, the OECD doesn't actually produce an index itself at all as there is no clear evidence on what the weights '*should*' be.

One might make a similar argument regarding a composite flourishing variable. Alternatively, one may take an atheoretical approach, using statistical methods based on iter-item correlation matrixes, to uncover items that appear to load onto the same underlying factor or factors, using the methodology to help identify which items should be incorporated in the index. One may go further and use the loadings from these statistical analyses to construct a weighted index of those factors deemed to be part of the same construct. In cases where this is done, analysts may choose to deploy the unweighted index, or its factor-weighted equivalent, and may label their construct post hoc, based on their interpretation of what the statistical analysis has uncovered.

[7] https://www.oecd.org/en/data/tools/oecd-better-life-index.html

In this spirit, we undertook a factor analysis of the twenty well-being and ill-being metrics available in the GFS to establish how many factors with an eigen value greater than one emerged from the analysis, and to see if the flourishing index was one of them. Full details are presented in Appendix 1. Five factors emerge. One of these is similar to the flourishing index but consists of fewer items because some of the variables in the 12-item scale loaded onto other factors. A second factor captures mental ill-being and consists of anxiety, depression, worry and having little interest of pleasure in doing things. This factor, which we term the 'not-flourishing' index, has a Cronbach's Alpha reliability coefficient of 0.85. A third factor is happiness-oriented and includes life satisfaction, happiness, Cantril's Ladder, Cantril's Ladder in five years, and feelings of life being worthwhile. The fourth factor consists of three items (two of which are household expenses related, plus loneliness). The fifth factor is a residual category containing the frequency of bodily pain and self-rated physical health.

In what follows we concentrate on the GFS 12-item flourishing scale, plus our 4-item 'not-flourishing' scale.[8]

2.2: What does the age profile of 'flourishing' look like and what might it add to the literature?

A recent literature shows a collapse in the hump-shape in age in ill-being and the U-shape in well-being due to what appears to be a decline in the well-being and rise in the ill-being of young people – particularly young women - relative to older people which began in the early 2010s. Now across many countries ill-being declines in age and well-being rises in age (Blanchflower, 2025; Blanchflower and Bryson, 2025a, 2025b, 2025d Blanchflower, Bryson and Xu, 2025, Twenge and Blanchflower, 2025). It is especially apparent in internet surveys as shown in Blanchflower (2025).

Some argue that the increased availability of the internet and smartphones are important contributory factors (Haidt, 2024). Twenge (2023b) has gone as far as to say that other explanations do not fit the facts.[9] Others point to other contributory factors such as the nature of the labor market (Blanchflower and Bryson, 2025d, 2025e). Nevertheless, Pugno (2025) surveys a series of papers using natural experiments that show that the relationship between screentime and young people's mental ill-health is causal, running from internet access to poor youth mental health. This is based on examining what happens to mental health of the young with the random spread of fast broadband and even on the spread of Facebook in a number of countries.

Although evidence of the change in the age profile of affect is perhaps stronger in negative affect than it is for positive affect metrics, as noted earlier, it seems plausible that flourishing is likely to be upward sloping in age in the GFS which, of course, is a survey conducted at the end of this period of change. A potential caveat relates to the fact that, as we document below, the GFS uses

[8] We wouldn't argue that Not-Flourishing itself might be understood as a state in which all aspects of a person's life are bad.

[9] Twenge (2023b) dismisses thirteen other explanations 1) people are more willing to seek help 2) more teens are ok saying they are not OK 3) COVID-19 4) the economy 5) Social media's effect is too small 6) children have less independence 7) school shootings 8) climate change 9) academic pressure 10) suicide rates higher in 90s so part of a cycle 11) teens don't have places to hang out 12) opioids 13) parents are more depressed and troubled.

both CATI and CAWI survey methods. As noted above, there are age-specific survey mode effects when people respond to well-being and ill-being questions which means we must be mindful of these effects in the GFS, despite the fact that few analysts using the data have examined this particular facet of the survey.

3. Data and Estimation

3.1: Data

We begin with a description of the Global Flourishing Study (GFS), followed by brief descriptions of two other surveys (the European Social Survey (ESS) and Global Minds (GM) which we use to compare with the GFS.

3.1.1: The Global Flourishing Study 2022-2024 (https://globalflourishingstudy.com)

The GFS collects data for 22 countries across all five continents (Africa (5), Asia (10), America (3), Australasia (1), Europe (5)). There is a total of 202,898 observations. Other papers that have evaluated well-being measures with these data include Lomas, Koga et al (2025) and Lomas, Padgett et al (2025). Others have examined GFS data in papers which also include analyses of other surveys (Blanchflower, 2025; Blanchflower and Bryson, 2025b; Twenge and Blanchflower, 2025).

Table 1 reports on the survey modes used in the GFS to collect data. Out of 202,898 observations, 70% used computer-assisted web interviews (CAWI). Seven countries were CAWI-only - Australia; Germany; Hong Kong; Spain; Sweden; UK and USA - but fifteen used both CAWI and computer assisted telephone interviews (CATI). Japan had almost all CAWI, a total of 20,001/20,543 and Poland 9,764/10,389 observations via the internet. We go on to show that accounting for survey mode really matters because results look rather different across survey modes.

The table also illustrates how much sample sizes differ by country, ranging from a low of 3,012 for Hong Kong to a high of 38,312 for the USA. Small sample sizes are a particular problem when one wants to assess the age profile of flourishing and other well-being related outcomes. The first column of Table 2 reports the number of unweighted observations relating to young people aged 18-24 – henceforth the 'young'. The survey includes very few young people in Australia (n=175), the UK (n=245) and the USA (n=296).[10] This is especially notable in the case of the USA, with a total of 38,312 observations, there are only 296 aged under 25 or 0.77% of the total. The imposing of weights raises the representation of the young, for example in these four countries the proportions unweighted and weighted in parentheses are as follows Australia 4.6% (9.0%), UK 4.6% (9.1%) and USA 0.8% (7.0%).

Of relevance here is the proportion of respondents that are young. Furthermore, the percentage of respondents who are young varies according to the survey mode, as shown in columns 2 and 3. When weights are imposed using the annual-weight variable included with the data file, the proportion that is young is roughly stable across pooled countries, but differs quite a lot within country (compare columns 5 and 4). Column 6 refers to the percentage of the young, expressed as a percentage of those age 18+, taken from the Census Bureau's International Database for

[10] This will limit the potential for panel analysis to subsequent 4 sweeps of the GFS which are planned.

2025.[11] This seems broadly in line with the overall weighted estimates in column 5 although there are some exceptions. For example, in the USA the weighted estimate of 7% in the GFS is well below the Census estimate of 12%.[12] In general, although the weights provided in the survey restore much of the representativeness of the survey in terms of the percentage of young people in the sample, the total unweighted sample is small for individual countries, and the percentage of young people responding to CAWI and CATI varies by country.

Let us turn from survey design to survey content. Table 3 reports the 22 questions that appear in GFS eliciting responses on well-being and ill-being. The first twelve 11-step questions, which are coded from 0 to 10, are taken from Table 5 of VanderWeele et al. (2025), henceforth VJB.[13] These are the components used to construct their 'flourishing' variable (Q13 in the table), which is just the average of the twelve variables Q1-Q12. The rationale for their index is described in VanderWeele et al. (2025).

The next three variables Q14-Q16 are additional 11-step questions that are available in the data file but were not used by VanderWeele and colleagues to calculate the flourishing variable. These are: 1) Cantril's life evaluation for today and 2) life evaluation relating to five years in the future – that Graham (2024) calls 'hope' and 3) not being lonely. Q17 is a four-step pain variable used in Macchia, Okafor, Breedlove *et al.* (2025).

The remaining questions Q18-Q21 are 4-step negative affect variables which we use to construct our 'not flourishing' index, using the same approach of summing the scores and taking the average. These variables load together based on the principal components factor analysis described in Appendix 1, with a Cronbach's Alpha reliability index of 0.85.

Of note is that when there is missing data VJB imputed results using multivariate imputation by chained equations, separately in each country. The authors argued that "*this within-country imputation approach ensured that the imputation models accurately reflected country- specific contexts and assessment methods. Sampling weights were included in the imputation models to account for specific-variable missingness that may have been related to probability of inclusion in the study*" (p.649). The authors do not show the impact of these imputations and what differences they made. They do not justify their imputation scheme or justify it in comparison with the infinite number of alternatives. They also do not test whether the weighted and unweighted outcomes are different from each other and by how much. It is unclear either the extent to which any of their results are driven by the imputation procedure.

In contrast, we drop observations with missing data. We do not impute any missing values to ensure we don't report findings driven by the imputation procedure itself. Our factor analysis in Appendix 1 is run on weighted data, but we run unweighted regressions in our analyses.[14]

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[11] https://www.census.gov/data-tools/demo/idb/#/dashboard?dashboard_page=country&COUNTRY_YR_ANIM=2025

[12] This matters when the panel estimates from the survey are used as in Lomas et al (2025).

[13] See also Vander Weele (2017) and Vander Weele, McNeely and Koh (2019).

[14] We also ran the factor analyses on unweighted data. There are some differences – for example, pain loads onto the 'not flourishing' factor - but the results are quite similar. The analyses are available on request.

3.1.2: The European Social Survey, 2023-2024 (ESS)[15]

This cross-national survey has been conducted across Europe since its establishment in 2002. Every two years face-to-face interviews are conducted with newly selected, cross-sectional samples.[16] We examine data from the most recent sweep #11 conducted in 2023 and 2024. We restrict our analysis to four European countries used in the GFS – Germany, Spain, Sweden and the UK, plus a fifth - Israel. The survey contains multiple variables on both well-being and ill-being that we use to construct both a flourishing and a not-flourishing index. There are seven 11-step, positive affect variables for life satisfaction, happiness and five 10-step satisfaction variables referring to the economy, democracy, national government, education and health. In addition, there are five 4-step negative affect variables relating to feeling depressed, sad, lonely, 'couldn't get going' and 'everything is an effort'. The full set of questions used (Q23-Q36) are reported below.

We construct an ESS *Flourishing* index as the average of the seven variables Q23-Q29.

Q23. *Life* - all things considered how satisfied are you with your life as a whole nowadays? 0 =extremely dissatisfied…10=extremely satisfied.
Q24. *Happy* - taking all things together asking how happy would you say you are? 0=extremely unhappy…10=extremely happy
Q25. *State of the economy* - On the whole how satisfied are you with the present state of the economy in [country]? 0 =extremely dissatisfied…10=extremely satisfied.
Q26. *National government* - Now thinking about the [country} government, how satisfied are you with the way it is doing its job? 0 =extremely dissatisfied…10=extremely satisfied.
Q27. *Democracy* - And on the whole how satisfied are you with the way democracy works in the country? 0 =extremely dissatisfied…10=extremely satisfied.
Q28. *Education* - Now using this card please say what you think overall about the state of education? 0=extremely bad..1=extremely good.
Q29. *Health* - still using this card please say what you think overall about the state of health services? 0=extremely bad..1=extremely good

We construct an ESS "*Not-flourishing"* index as the average of these five Q31-Q35

I will now read you out a list of the ways you might have felt or behaved during the past week. Using this card please tell me how much of the time during the past week you felt, where 1= no one or almost none of the time 2=some of the time 3=most of the time 4) all or almost all of the time?
Q31. *Depressed* - you felt depressed last week?
Q32. *Effort* - felt everything was an effort past week?
Q33. *Lonely* - felt lonely how often past week?
Q34. *Sad* - felt sad how often past week?
Q35. *Going* - could not get going?

3.1.3: Global Minds (GM), 2020-2025. (https://sapienlabs.org/global-mind-project)

[15] https://www.europeansocialsurvey.org/
[16] https://www.europeansocialsurvey.org/methodology/methodology-overview

Global Minds (GM) is a web-based survey conducted by Sapien Labs. It is available across nearly 170 countries in 25 languages and is publicly available by request. Unlike the other two surveys, single year of age is not available, but age bands are. Currently there are nearly 2 million observations available. We concentrate here on the twenty-two GFS countries. Sample size across these 22 countries from the GFS is 991,889 across years as follows 2020=43,425; 2021=134,763; 2022=209,486; 2023=232,286, 2024=244,898 and 2025=127,031. Sample sizes vary from 658 for Indonesia, 617 for Sweden and 654 for Turkey to 102,559 for Mexico, 102,069 for Egypt and 220,531 for India.[17]

We focus on one positive affect metric, the Mental Health Quotient (MHQ) score (see Bala, Newson and Thiagarajan, 2024) which has a lot of variation given that it ranges between -100 and +200. We also examine GM data on three negative affect variables - fear and anxiety, suicidal thoughts and feeling of sadness and hopelessness, all three of which are scored on a 1-9 scale.

Q36. Fear and anxiety – being scared and experiencing feelings and sensations of nervousness in your mind or body
Q37. Suicidal thoughts - Thinking or feeling you want to kill or physically harm yourself
Q38. Sad and hopeless - "Experiencing overwhelming feelings of unhappiness, sorrow and hopelessness, or having spells of uncontrollable crying"
All have the following responses 1=never causes me any problems 5=sometimes causes me difficulties but I can manage…9=has a constant sever impact on my ability to function.

4. Results
Initially we plot our well-being and ill-being variables by age graphically and present means by age and country before we proceed to regression analyses in which we estimate the age profile of individual well-being and ill-being metrics. We do so for the individual variables as well as several composite indexes, using categorical age variables where the reference category is the 'young' aged under 25. Models also condition on sex and a survey mode dummy and, when we pool data for multiple countries, we include country fixed effects. We also report separate estimates by country. Throughout we use linear estimation even though, in the case of the single items they are ordinal outcomes.[18]

4.1: Global Flourishing Study
In Appendix 2 we report flourishing scores by age by country. Appendix Charts 1-22 plot flourishing by single year of age, derived from the age coefficients from 22 separate regressions also containing a gender dummy[19] and a CAWI dummy. We add the coefficients to the constant and fit a best fit line to each. Only Japan shows a U-shape. Overall, two are flat – Turkey and Nigeria - eleven have an upward slope (Argentina, Australia, Brazil, Germany, Hong Kong, Indonesia, Mexico, Spain, Sweden the UK and the USA), while eight have a downward slope - Egypt (15), India (19), Israel (7), Kenya (20), Philippines (18), Poland (10), South Africa (17) and

[17] We have previously used the GM data in other papers including Blanchflower, Bryson and Xu (2025), and Blanchflower and Bryson (2025a, 2025b, 2025e).
[18] For a discussion of the similarities between estimating age effects using ordered probits or ordered logits, versus OLS see Chen, Oparina, Powdthavee and Srisuma (2022).
[19] The GFS respondents are able to identify as 'male', 'female' or 'other'.

Tanzania (22). A number of these eight are among the lowest income countries in the world with the ranks /22 in parentheses.[20] Tanzania ranks 161/193 UN countries by GNI per capita.

Table 4 reports the results of regressing all 12 11-step well-being metrics used to construct the GFS flourishing index. Each of the 12 separate regressions contains a set of age dummies, a gender dummy 21 country dummies (not reported) and if the survey mode is CAWI. The intention here is to examine the extent to which the control variables operate differently in each of the twelve positive affect variables. The female variable is significantly **positive** in six (*life satisfaction, happiness, worthwhile, promote, content, satrel*), insignificant in one (purpose) and significantly **negative** in five (*physical, mental, give up, expense and foodhse*).

We include seven age dummies in each equation but also report the findings from a simpler specification where these dummies are simply replaced with a single age 18-24 dummy. Focusing on the young variable, it is significantly **positive** in six (*life satisfaction, happiness, physical, give up, expense and foodhse*) and significantly **negative** in the remaining six.).[21]

Column 1 of Table 5 now reports the results for the aggregated flourishing variable, where the age 18-24 dummy is insignificantly different from zero. However, the age pattern looks much like that of the life satisfaction variable in column 1 of Table 4.

In the next three columns - for Cantril's life evaluation, thriving[22], and life evaluation in 5 years time - the age 18-24 coefficients are positive and significant while for not lonely and pain (the last two columns) being young is significantly negative.

VJB argues (p.640) that

> "*Flourishing tends to increase with age in many countries, including Argentina, Australia, Brazil, Sweden and the United States, but not in all. In India, Egypt, Kenya and Japan, patterns are somewhat more U-shaped. In Spain, the pattern is somewhat U-shaped except for the youngest age group (18–24-year- olds), which reports the lowest flourishing. In Poland and Tanzania, it is mostly decreasing with age. Other countries show more complex patterns with age*."

We broadly replicate that. When we ran country level flourishing equations with an age 18-24 dummy and two gender variables we found the coefficient on the young variable to be significantly negative in 12 - Argentina; Australia; Brazil; Germany; Hong Kong; Indonesia; Japan; Mexico; Sweden; Turkey; UK and USA, positive and significant in 8 (Egypt; India; Israel; Kenya; Nigeria; Poland; South Africa and Tanzania) and insignificant in two (Philippines and Spain).

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[20] Gross national income (GNI) per capita in 2021 PPP$. 1) USA=$73,650; 2) Hong Kong $69,436; 3) Sweden $66,102; 4) Germany $64,053; 5) Australia $58,277; 6) UK $54,372; 7) Israel $48,050; 8) Japan $47,775; 9) Spain $46,008; 10) Poland $42,218; 11) Turkey $34,507; 12) Argentina $25,876; 13) Mexico $21,813; 14) Brazil $18,011; 15) Egypt $16,218; 16) Indonesia $13,700; 17) South Africa $13,694; 18) Philippines $10,731; 19) India $9,047; 20) Kenya $5,608; 21) Nigeria $5,569; 22) Tanzania $3,515.
https://hdr.undp.org/data-center/human-development-index#/indicies/HDI

[21] Bradshaw, Kent et al (2025) examined physical health in the GFS and reported that it declined in age (Table 3).

[22] Defined as =1 if flourishing =≥8 and zero otherwise. We return to thriving in the GWP below.

But when we plot the overall data in Chart 1 by extracting the age coefficients from regressing flourishing on single year of country, age and gender (simply adding the age coefficient to the constant as explained above), there is a clear U-shape in age in flourishing. This looks almost identical to what is observed from a single life satisfaction variable which is also plotted in the chart.

In Table 6 we turn to our *not-flourishing* index, as described above and in Appendix 1. Although these variables are in the GFS, they are not the focus of most studies using the data, which have tended to focus on flourishing.

The first four columns report regressions for each of the four components of the index separately. In all four cases and then for the aggregated not-flourishing index in column 5, negative affect declines in age and is higher for females than males. In the last column we run an equation for what we term 'misery', where the respondent scores 3 or 4 on the not-flourishing index. This exhibits the same pattern in age and sex. The consistency in these results in terms of age patterns and the sex differential contrasts somewhat with the flourishing variables where associations with age and sex vary across components of the index.

Chart 2 adopts the same method as Chart 1, plotting single year of age from a regression, with the coefficients added to the constant, but this time for 'not-flourishing'. Not-flourishing declines in age almost monotonically.

Table 7a reports for the 22 countries the sign, and significance, of an age 18-24 dummy for the flourishing variable and the 12 components. A negative sign indicates the young are less happy than older age groups. There is a consistent pattern for almost all of these variables – there are negative signs almost everywhere in thirteen countries - Argentina, Australia, Brazil, Germany, Hong Kong, Indonesia, Japan, Mexico, Spain, Sweden, Turkey, UK and the USA.

Table 7b reports results by country again but this time for the five negative affect variables and the not-flourishing index. This shows age patterns that are broadly consistent with the age patterns from the flourishing index: the thirteen countries where the young were less likely to flourish are the same countries which have positive signs on the youth dummy coefficient for not-flourishing. In addition, we can now add South Africa and the Philippines to that list.

In summary, although flourishing is U-shaped in age in the pooled data it rises in age in 13 countries and declines in 7. By contrast, not-flourishing declines in age overall, and in each of its four components, and it declines in age in 15 of the 22 countries.

4.1.2. Survey Mode in the Global Flourishing Study

We now turn to an analysis of age effects with the twenty-two well-being and ill-being variables contained in the GFS, extending our analysis beyond the flourishing and not-flourishing indices, to see how results vary by survey mode. We thus include all the variables used by VanderWeele, Johnson, Bialowolski *et al.* (2025) plus all the other variables they do not consider.

The final two columns of Table 7b show the correlation between not-flourishing and being young for CATI and CAWI respondents separately. There is some sensitivity to survey mode with the partial correlation more likely to be negative in the case of CATI.

Table 8 estimates a series of positive affect equations for variables Q1-Q12 – the components of the flourishing index - plus flourishing. For simplicity we include an age 18-24 dummy, a female dummy plus country dummies based on survey mode. Based on data in Table 1 we report pooled estimates in part for the country samples that are CAWI only and in part b) for the CAWI samples. Sample sizes average around 140,000 and 60,000 respectively.

In part a) for the CAWI sample, for all 22 countries, eleven of the twelve variables the youth dummy is significantly negative. The exception is self-assessed physical health. Seven of the female coefficients are significantly negative.

In part b) we estimate regressions pooling the 15 countries with CATI (listed at the bottom of the table). In *every* one of the twelve variables the young dummy is significantly *positive and in four the female coefficient is negative*.

Chart 3 plots single year of age for flourishing, obtained once again by plotting the age coefficients added to the constant, but for the separate CAWI and CATI samples. We see clearly that in the case of CATI flourishing slopes down with age so the youngest appear most likely to flourish, whereas with CAWI there is a much steeper slope in age, with the curve rising with age, so the young are least likely to flourish. Thus, it appears that the age profile of flourishing is dependent upon survey mode.

Table 9 does the same for the negative affect variables. With CAWI all six youth variables and all six female variables have positive and significant coefficients. For the CATI samples all six youth coefficients are negative while all six female coefficients are positive again. The implication is that the gender difference in not-flourishing is not sensitive to survey mode whereas the age pattern in not-flourishing is extremely sensitive to survey mode, such that the correlation with being young switches around with survey mode.

Having established the importance of survey mode for age and gender correlations with flourishing and not-flourishing in pooled country regressions, we examine whether these results hold by country. Table 10 reports the signs and significance of youth and gender dummies by country for CATI and CAWI surveys for flourishing and not flourishing by country. For simplicity here we restrict the sample to those under the age of seventy. Among CAWI respondents being young is negatively correlated with flourishing in 13 countries. It is only positive in two countries (Kenya and Poland). Elsewhere it is statistically non-significant. The female dummy is negative in eleven cases and only ever positive in Japan and India.

Turning to not-flourishing, the youth dummy is positive in CAWI cases in 15 of the 22 countries, and only negative in two (Kenya and Poland). With CATI, there are only six positive coefficients for the young. In contrast, there are six positives for the young variable in CATI, and the female dummy is positive in 13 countries.

Table 11 reports four separate regressions including controls for age, gender, labor force status, urban/rural, marital status, CAWI and education. The first column is for flourishing and the second is for life satisfaction. They appear very similar in terms of how the control variables perform: there is a U-shape in age; the unemployed, the retired and students have lower well-being than employees. Flourishing and life satisfaction rise in education and are higher for immigrants. The married, are happier. The one difference is being female which is insignificant for flourishing but positive in life satisfaction.

In the final two columns results for the not-flourishing index and depression are reported. Both are highest at age 18-24 but then decline. Females in both have more ill-being. The unemployed have especially high, ill-being in both. The educated and the married have lower ill-being. The pattern of variables explaining life satisfaction are similar to flourishing and not flourishing is similar to depression *or misery*.

4.2: European Social Survey, 2023-2024 (ESS11) constructing flourishing and not-flourishing indices.

We seek to externally validate the GFS findings with analyses of flourishing in the ESS for the four European countries in the GFS sample – Germany, Spain, Sweden and the UK. We use the interviewer based European Social Survey of 2023/24, which allows us to construct both a flourishing, and not-flourishing indices. The benefit of this survey is that there are plausible variables that can be used to create a flourishing index which includes two of the GFS 12 – life satisfaction and happiness. It also includes five variables relating to the economy, government, democracy, education and the health system. These are plausible components of such an index. The flourishing index suggests a mixed picture by variable while the not-flourishing index suggests a decline in age and for females.

We focus on the 11th and most recent sweep of the survey series, which includes numerous of well-being variables for European countries. The survey includes 11-step life satisfaction and happiness questions, plus 11-step questions on satisfaction with a) the state of the economy b) national government c) way democracy works in the country d) the state of education in the country nowadays e) the state of health services. These are all entirely plausible candidates for inclusion in any flourishing index.[23] The survey does not include any other of the twelve components of the GFS flourishing index or any of the not-flourishing variables.

In the top half of Table 12 we report eight 'flourishing' equations with controls for age and gender, three country dummies and a survey mode dummy. The dependent variables are life satisfaction, happiness, five domain-specific satisfaction metrics (for the economy, democracy, government, education and health), and then a flourishing index which is the sum of the seven 11-step satisfaction variables described above.

In the bottom half of the table, we report on five 4-step not-flourishing measures namely a) felt depressed last week; b) felt sad how often past week c) felt lonely how often past week d) could not get going e) felt everything was an effort past week. These are coded 1= no one or almost

[23] Indeed, Vander Weele and Johnson (2025) argue that: "*as well as encompassing personal experiences of happiness, health, meaning, pro-sociality, relationships and financial security, flourishing extends to strong communities and good environments*".

none of the time 2=some of the time 3=most of the time 4) all or almost all of the time. For the not-flourishing index we add all five together and divide by 5.

Table 12 reports coefficient on the age 18-24 dummy and female dummy with t-statistics in parentheses. The results for not-flourishing and its components are very clear. The coefficient for being young is positive throughout, though not always statistically significant (apart from in the individual country model for Israel) while women score more highly on the not-flourishing index and all its components.

However, turning to the top half of the table, it seems that the young are also more likely to be flourishing, although the positive coefficients are not always statistically significant for the individual variables. The pattern for the female variable is mixed – significantly negative in the overall equation and significantly positive in the satisfaction with government equation. This contrasts sharply with the not flourishing equation, where the young coefficient is everywhere significantly positive – the young are worse off. Analogously, the female coefficient is always significantly positive. It is clear that, given these correlations, we can conclude that, at least in the ESS Sweep 11, not flourishing is not simply the opposite of flourishing.

We ran separate country regressions and in the case of flourishing the only significant youth variable was for Germany and was positive. In the case of not flourishing the youth variable was significantly positive in both Germany and Sweden.[24]

4.3: Global Minds, 2020-2025

In this section we analyze Global Minds data for the 22 GFS countries which was collected entirely online over the period 2020-2025. We report results for one positive affect variable (the MHQ score) and the three negative affect variables described in the Data section.

Average MHQ scores for the young age 18-25 in the full sample were everywhere below the overall averages which are in parentheses below – Argentine 22 (80); Australia 13 (61); Brazil 15 (68); Egypt 21 (56); Germany 18 (63); Hong Kong 2 (37); India 17 (53); Indonesia 28 (64); Israel 45 (91); Japan 6 (40); Kenya 47 (76); Mexico 17 (60); Nigeria 37 (90); Philippines 54 (87); Poland 31 (65); South Africa 12 (58); Spain 19 (58); Sweden 26 (82); Tanzania 62 (81); Turkey 31 (67); UK 8 (52) and USA 26 (85).

Table 13 estimates a set of equations for the MHQ and then for suicidal thoughts, fear and anxiety and feeling sad and hopeless. Equations include year and country dummies. Well-being rises in age and ill-being declines in age, consistent with earlier studies using GM data (Blanchflower, et al. 2025; Blanchflower and Bryson, 2025b, 2025c). Women are also less happy than men and more likely to suffer from suicidal thoughts, fear and anxiety and feelings of sadness and hopelessness.

Table 14 shows these findings hold for each of the 22 countries, with one or two exceptions. The young are especially *unhappy in all specifications for all countries*. Women report having a lower MHQ score and being more anxious, sad and hopeless and having more suicidal thoughts than

[24] The youth variable was also significant and positive in the not flourishing equation for Slovenia, Norway, Netherlands, Iceland, Finland, Switzerland and Austria.

men. So, in this survey – conducted via CAWI - there is essentially no difference between the age-profile and gender gaps between the results from the MHQ flourishing variable and the three not-flourishing variables.

The evidence from Global Minds is entirely consistent with the findings from the CAWI samples in the GFS but inconsistent with the results from the CATI results in the GFS.

5. Discussion and Conclusion

We examined the Global Flourishing Survey building on earlier work by VJB (2025) and other papers that focused on 'flourishing' based on a 12-variable composite index. Respondents to the survey were not actually asked if they were flourishing and so the authors use this 12-item construct, which averages a series of positive affect variables they argue represent components of 'flourishing'. There is a long history distinguishing flourishing conceptually from other aspects of positive affect so efforts to construct an empirical measure for flourishing are welcome. However, our empirical investigation of the statistical properties of this particular 12-item construct do raise some questions as to what should be included and excluded from the index. Furthermore, the GFS contains useful additional information on how people feel which is often overlooked when examining the GFS, most notably aspects of what we call 'not-flourishing'. We argue it is important to examine these too because 'not-flourishing' is not simply the flip side of flourishing. This becomes apparent when we focus on the partial correlations between flourishing and not-flourishing and two key demographic characteristics, namely age and gender.

Recently, evidence has emerged of a rapid decline globally in the well-being of the young along with a worsening of their mental health documented in a variety of studies including Twenge (2023a) for the US, Krokstad et al (2022) for Norway, Thorisdottir et al (2021) for Iceland and Leigh and Robson (2025) for Australia and Blanchflower (2025) for 167 UN countries. The GFS data are collected at the end of this period, so we might anticipate well-being to rise with age, and ill-being to fall. Instead, we find that flourishing is U-shaped in age in the pooled data and rises in age in 13 countries and declines in 7. By contrast, not-flourishing declines in age overall, and in each of its four components, and it declines in age in 15 of the 22 countries.

Survey mode matters. Following the recent literature on the importance of survey mode and its influence on the way people answer wellbeing questions, we decided to explore its role in the GFS. Every country had some observations collected by the internet while fifteen had CATI samples. When CATI is used, the young are happier than other age groups, but the opposite is the case when data are collected via CAWI. We validate the findings with analyses from two other data sets. First, we construct flourishing and not flourishing indices using different variables for the four European countries in the GFS - Germany, Spain, Sweden and UK - from the interviewer based European Social Survey (ESS) of 2023-2024. As with the GFS, the not-flourishing data shows ill-being declines in age while the flourishing data is more mixed. Second, we examine the internet-based Global Minds (GM) surveys, 2020-2025, on the same group of countries, and find well-being *rises* in age for all in both flourishing and not-flourishing variables.

Blanchflower and Bryson (2025c) used the GFS to study well-being in Asia and the Middle East for seven countries - Hong Kong, India, Indonesia, Israel, Japan, the Philippines and Turkey. We

found for 18 variables that the sign on the 18-24 youth variable was positive using the telephone sample and negative with the internet sample.

Rickwood and Coleman-Rose (2023) note that there is evidence that people completing interviewer administered questionnaires are more likely to provide socially desirable responses than those completing self-administered questionnaires (see Milton et al (2017), Aquilino, 1998) Burkill et al (2016) and D'Ancona, 2014). This they call *social desirability bias* which they argue:

> *"is the tendency to under-report socially undesirable attitudes and behaviours and over-report more desirable attributes. This may happen for two reasons: first, for impression management, which is the deliberate presentation of self to conform to an audience's normative expectations; and second, due to self-deception, which is based on motivation to maintain a positive self-concept that may be unconscious".*

The literature suggests that survey modes of data collection may differently impact an individual's response process, leading to systematic variation in responses. Rickwood and Coleman-Rose (2023), for example, looked at two large national community samples of young Australians aged 12–25 years conducted in 2020 and 2022 which used both interviewer-administered and self-report modes of data collection. Results showed participants reported lower psychological distress and higher well-being in the interviewer-assisted compared with the self-report mode. Kocjan, Lavtar and Sočan (2023), in a study in Slovenia reported statistically significant and notable differences in means, suggesting that individuals who respond face-to-face systematically report better outcomes.

It is also possible that a shift from interviewer-based surveys to web-based surveys affects the degree to which young people are assisted by others when asked to provide survey responses on sensitive topics, with unknown consequences for the differential responses of young people to subjective well-being questions over time (Kooijmans et al (2022).

It has been harder to discern declining youth well-being from life satisfaction and happiness data than in negative affect data such as depression, anxiety, despair and distress (Twenge and Blanchflower, 2025 and Blanchflower and Bryson 2025d). This also appears to be the case with the flourishing index. The reasons for this remain unclear, although clearer age-related results emerge when accounting for survey mode effects.

Unfortunately, those using the GFS have paid little attention to the role of survey mode. There are concerns about the nature of the GFS survey and other social surveys, given how different results are depending on the methods the survey used to collect the data. The CATI samples seem very different from the CAWI and studies using the data need to take account of this. The concern is that survey mode impacts many other studies, including already published ones, using the GFS. One example is volunteering as examined by Nakamura, Woodberry, et al (2025), using the GFS data the pattern by age is different by survey mode not considered by the authors.[25] It declined in

[25] The weighted percent who volunteered by age was a follows

	CATI	CAWI
<25	26	23
25-34	28	20

age in CATI but was essentially flat with CAWI. In another case Lomas, Padgett, Ritchie-Dunham et al. (2025a), considered balance in life but didn't examine survey mode. This turned out to matter.[26] In a third study using the GFS, Lomas, Padgett, Ritchie-Dunham et al (2025b) examined inner peace and survey mode mattered again and was not considered.[27]

The question is what to believe? It certainly seems that the evidence of poor youth mental health derived from self-reports is consistent with the objective evidence. This includes rising youth suicide rates (Garnett and Curtin, 2024) along with increased mental health hospitalizations of children and adolescents (Zhang, Liu and Zhang, 2025, Arakelyan et al, 2023, Yard et al, 2021). One possibility is that the young tell the truth when they self-report and lie to interviewers. Response rates for interviewer-based surveys are also particularly low and falling. The young don't answer the phone or make phone calls.

Analogously in the 1980s there was a good deal of work on youth unemployment which grew dramatically, especially in Europe. In many countries the average duration rose sharply for the young. David Ellwood (1984) noted that long spells of unemployment for the young created "*permanent scars and not temporary blemishes*". Public policy for a decade focused on easing the transition from school to work for the young. The concern is that this mental health crisis among the young will also create permanent scars.

Carefully examining the wellbeing, but particularly the ill-being of the young and women is important because, as a number of studies have shown, poor mental well-being when young potentially has long-term consequences. A recent paper examining longitudinal data from the 1970 British Cohort Study found evidence that individuals with higher adolescent self-evaluation, report higher levels of generalized trust up to 30 years later (Adamecz and Kiss, 2025). Blanchflower and Bryson (2024b) noted from the British birth cohort of 1958 - the National Child Development Study - that being bullied as a child had negative consequences up to fifty years later including on mortality. Cyberbullying may well have long-term negative consequences. Declining youth mental health likely has long-term consequences.

35-44	29	20
45-54	29	21
55-64	27	20
65-74	23	20
75-84	17	23
85+	20	20

[26] The weighted percent responding was as follows

	CATI	CAWI
Always	27	12
Often	32	62
Rarely	34	23
Never	7	3
N	59,816	141,675

[27] The weighted percent responding was as follows

	CATI	CAWI
Always	36	16
Often	30	59
Rarely	27	23
Never	7	3
N	59,960	141,618

We have documented the declining mental health of the young in many countries that started around 2015. Flourishing isn't the inverse of not-flourishing; the evidence is stronger in negative affect than positive affect measures. Declining youth well-being since 2015 is more apparent in surveys that are collected via the internet, based on self-reports than it is in interviewer-based surveys. Social desirability bias may help to explain these differences. The objective evidence on mental health hospitalizations and suicide among the young are also rising globally. The big question is what to do about it.

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Table 1. Country by Annual Survey Mode, Global Flourishing Study 2022-2024

	CAPI	CATI	CAWI	Total
Argentina	0	1,451	5,273	6,724
Australia	0	0	3,844	3,844
Brazil	0	1,265	11,939	13,204
Egypt	0	4,508	221	4,729
Germany	0	0	9,506	9,506
Hong Kong	0	0	3,012	3,012
India	0	12,549	216	12,765
Indonesia	0	3,620	3,372	6,992
Israel	0	2,743	926	3,669
Japan	0	542	20,001	20,543
Kenya	0	9,917	1,472	11,389
Mexico	0	1,559	4,217	5,776
Nigeria	550	5,609	668	6,827
Philippines	0	4,174	1,118	5,292
Poland	0	625	9,764	10,389
South Africa	0	2,010	641	2,651
Spain	0	0	6,290	6,290
Sweden	0	0	15,068	15,068
Tanzania	0	8,790	285	9,075
Turkey	0	840	633	1,473
UK	0	0	5,368	5,368
USA	0	0	38,312	38,312
Total	550	60,202	142,146	202,898

Table 2. Unweighted percentage aged 18-24

		Unweighted			Weighted			
	#18-24	CAWI %	CATI %	All %	All %	Census %	GM	GM #18-24
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Argentina	868	15	4	13	17	14	13	11,752
Australia	175	5		5	9	11	22	6,603
Brazil	2,587	21	5	20	15	14	5	1,026
Egypt	706	22	15	15	20	19	18	18,523
Germany	698	7		7	9	8	13	3689
Hong Kong	282	9		9	7	7	47	540
India	2,335	40	18	18	20	17	30	65,741
Indonesia	1,182	25	14	17	17	16	31	212
Israel	575	22	7	16	15	16	13	2496
Japan	1,584	8	30	8	8	8	16	685
Kenya	3,657	44	6	32	25	25	18	2,230
Mexico	1,126	24	6	19	17	17	39	39,756
Nigeria	1,699	23	25	25	22	26	10	3,262
Philippines	861	34	12	16	20	20	23	7,218
Poland	836	8	5	8	9	8	33	154
South Africa	497	26	17	19	17	15	16	6651
Spain	630	10	20	10	9	9	24	12315
Sweden	1,824	12		12	10	10	17	104
Tanzania	1,781	24	12	20	25	25	23	1957
Turkey	259	25		18	15	14	21	140
UK	245	5		5	9	10	17	11,091
USA	296	1		1	7	12	15	19,615
All	24,703	10	18	12	13		22	215,760

Columns (6) based on Census data taken from the Census Bureau's International Database and is age18-24/age 18+. GM is the percentage 18-24 in Global Minds surveys 2020-2024, unweighted. Columns (1)-(5) from Global Flourishing Study and (7) & (8) from Global Minds.

Table 3. Variables used from the Global Flourishing Study

a) 11-step Flourishing

Q1. *Life* - Overall, how satisfied are you with life as a whole these days? 0=not at all satisfied..10=completely satisfied.

Q2. Happy - In general, how happy or unhappy do you usually feel? 0=extremely unhappy ..10=extremely happy.

Q3. Physical - In general, how would you rate your physical health? 0=poor…10=excellent.

Q4. Mental - How would you rate your overall mental health? 0=poor…10=excellent.

Q5. Worthwhile - Overall, to what extent do you feel the things you do in your life are worthwhile? 0=not at all…10=completely.

Q6. Purpose - I understand my purpose in life. 0=strongly disagree..10=strongly agree.

Q7. Promote - I always act to promote good in all circumstances, even in difficult and challenging situations. 0=not true at all…10=completely true of you.

Q8. Giveup - I am always able to give up some happiness now for greater happiness later. 0=not true at all…10=completely true of you.

Q9. Content - I am content with my friendships and relationships. 0=strongly disagree..10=strongly agree.

Q10. Satrel - My relationships are as satisfying as I would want them to be. 0=strongly disagree..10=strongly agree.

Q11. Expenses - How often do you worry about being able to meet normal monthly living expenses? 0=worry all the time..10=do not ever worry.

Q12. Foodhse - How often do you worry about safety, food or housing? 0=worry all the time..10=do not ever worry.

Q13. *Flourishing* is the sum of (Life satisfaction+Happiness+Physical+ Mental +Worthwhile+Purpose+Promote+Happylater+Content+Satrel+Expense+Foodhse)/12

Additional 11-step flourishing questions

Q14. Life evaluation - today 0=worst possible 10=best possible.

Q15. Life5 - Life evaluation five years from now 0=worst possible 10=best possible.

Q16. Not Lonely - How often felt lonely - always 0 never 10.

Q17. *Pain* – bodily pain last 4 weeks - 1=none at all, 2=not very much, 3=some, 4=a lot

b) 4-step Not flourishing

Q18. *Anxious* - feeling nervous, anxious or on edge – 1=not at all, 2=several days, 3=more than half, 4=nearly every day.

Q19. Depressed - Feeling down, depressed or hopeless– 1=not at all, 2=several days, 3=more than half, 4=nearly every day.

Q20. Worry - Not being able to stop or control worrying– 1=not at all, 2=several days, 3=more than half, 4=nearly every day.

Q21. No Interest - little interest or pleasure in doing things– 1=not at all, 2=several days, 3=more than half, 4=nearly every day.

Q22. Not flourishing is (Anxious+Depressed+Worry+No interest)/4.

Table 4. 11-step Well-being GFS all countries

	Life satisfaction	Happiness	Physical	Mental	Worthwhile	Purpose
25-34	-.1183 (5.92)	-.1628 (8.86)	-.2053 (11.34)	.0303 (1.70)	-.0290 (1.54)	.0508 (2.65)
35-44	-.2284 (11.11)	-.2836 (15.01)	-.4694 (25.21)	.0407 (2.22)	.0259 (1.33)	.1371 (6.95)
45-54	-.2047 (9.42)	-.2660 (13.31)	-.6821 (34.66)	.1664 (8.58)	.0053 (0.26)	.2233 (10.71)
55-64	.0443 (1.96)	-.0523 (2.51)	-.7434 (36.20)	.4958 (24.48)	.2373 (11.06)	.4884 (22.44)
65-74	.5547 (23.27)	.4159 (18.97)	-.5309 (24.59)	1.0194 (47.87)	.6091 (27.01)	.8824 (38.55)
75-84	.8141 (26.79)	.6546 (23.42)	-.4993 (18.14)	1.3509 (49.74)	.7764 (26.99)	1.1662 (39.92)
85+	.7923 (11.50)	.6289 (9.94)	-.6633 (10.64)	1.3699 (22.27)	.5927 (9.09)	1.1860 (17.94)
Female	.0721 (6.51)	.0697 (6.85)	-.1436 (14.31)	-.1940 (19.59)	.1179 (11.25)	.0042 (0.40)
constant	7.3110	7.5003	7.7929	7.8319	7.8857	7.5703
Adj R^2	.0819	.0652	.1031	.1441	.0880	.1369
N	201,934	202,193	202,280	202,041	202,035	201, 824
18-24	.0602 (3.42)	.1278 (7.91)	.4584 (28.89)	-.2329 (14.73)	-.0832 (5.01)	-.2570 (15.21)
Mean	6.83	6.99	7.06	7.55	7.30	7.41

	Promote	Happy later	Content	Satrel	Expense	Foodhse
25-34	.0627 (4.00)	-.0295 (1.59)	-.0833 (4.41)	.0175 (0.87)	-.2675 (10.41)	-.3036 (12.04)
35-44	.0680 (4.22)	-.0732 (3.84)	-.1274 (6.56)	-.0199 (0.97)	-.2962 (11.21)	-.3420 (13.19)
45-54	.1369 (8.03)	-.0837 (4.16)	-.0555 (2.70)	.0260 (1.20)	-.1576 (5.64)	-.2040 (7.44)
55-64	.3075 (17.27)	-.0289 (1.37)	.1980 (9.24)	.2664 (11.72)	.2119 (7.27)	.1082 (3.78)
65-74	.5741 (30.69)	.0621 (2.81)	.6351 (28.18)	.7073 (29.59)	.9246 (30.18)	.6702 (22.29)
75-84	.6582 (27.58)	.1086 (3.85)	.9608 (33.44)	1.0245 (33.61)	1.4311 (36.63)	1.1028 (28.75)
85+	.6083 (1.24)	-.0113 (0.18)	1.0635 (16.36)	1.2401 (17.96)	1.7197 (19.46)	1.2752 (14.67)
Female	.0655 (7.54)	-.0503 (4.89)	.0845 (8.07)	.0612 (5.51)	-.3743 (26.29)	-.3014 (21.57)
constant	8.3456	8.0102	8.0140	7.4668	4.2038	3.9781
Adj R^2	.1304	.1354	.0919	.0742	.1479	.1738
N	201,952	201,084	201,091	201,737	202,253	202,130
18-24	-.1657 (12.04)	.0391 (2.41)	-.0339 (2.04)	-.1260 (7.15)	.0494 (2.18)	.1249 (5.63)
Mean	7.88	7.29	7.56	7.24	5.69	5.99

Equations include a CAWI dummy, and country dummies

Table 5. More 11-step positive affect variables

	Flourishing	Life evaluation	Thriving	Life in 5	Not lonely	Pain
25-34	-.0876 (6.90)	-.1574 (8.48)	-.0227 (6.18)	-.1917 (10.94)	.0776 (3.24)	.0439 (5.80)
35-44	-.1323 (10.12)	-.2671 (14.00)	-.0296 (7.83)	-.4452 (24.66)	.1843 (7.49)	.1163 (14.98)
45-54	-.0884 (6.40)	-.2399 (11.90)	-.0192 (4.82)	-.6052 (31.74)	.2938 (11.29)	.1970 (24.08)
55-64	.1332 (9.24)	-.0115 (0.55)	.0317 (7.60)	-.6933 (34.84)	.6245 (22.99)	.2662 (31.20)
65-74	.5497 (36.22)	.4430 (20.02)	.1146 (26.11)	-.6846 (32.75)	1.1534 (40.40)	.2550 (28.42)
75-84	.8005 (41.25)	.6654 (23.57)	.1878 (33.46)	-.8925 (33.49)	1.4691 (40.35)	.2940 (25.66)
85+	.8307 (18.82)	.6888 (10.78)	.2096 (16.42)	-1.3418 (22.07)	1.3643 (16.55)	.3294 (12.66)
Female	-.0474 (6.73)	.0861 (8.37)	-.0102 (4.91)	.1314 (13.52)	-.1134 (8.55)	.1428 (34.06)
Constant	7.1689	6.5840	.2759	8.1943	6.2542	2.1156
Adj R^2	.1414	.1229	.0809	.1211	.0525	.0530
N	197,101	202,143	197,101	198,880	202,036	202,272
18-24	-.0096 (0.85)	.1095 (6.71)	.0000 (0.01)	.4520 (29.40)	-.3378 (16.02)	-.1434 (21.72)
Mean	7.07	6.42	.310	7.49	6.62	2.34

18-24 is from a separate regression replaces the age dummies with an 18-24 dummy only. Excluded 18-24, male. Equations include country dummies and survey mode. T-stats in parentheses. Means are weighted

Table 6. Negative affect

	Anxious	Depressed	Worry	Interest	Not flourishing	Misery
25-34	-.0179 (2.39)	-.0353 (4.75)	-.0308 (4.05)	-.0375 (4.85)	-.0315 (5.10)	-.0102 (3.72)
35-44	-.0542 (7.00)	-.0814 (10.64)	-.0894 (11.39)	-.0795 (9.99)	-.0779 (12.25)	-.0202 (7.16)
45-54	-.1557 19.02)	-.1437 (17.77)	-.1628 (19.63)	-.1275 (15.15)	-.1502 (22.35)	-.0401 (13.42)
55-64	-.2918 (34.14)	-.2253 (26.68)	-.2621 (30.28)	-.1922 (21.88)	-.2460 (35.08)	-.0615 (19.69)
65-74	-.4736 (52.70)	-.3604 (40.60)	-.4010 (44.06)	-.2978 (32.25)	-.3880 (52.63)	-.0956 (29.12)
75-84	-.5533 (48.23)	-.4026 (35.57)	-.4416 (38.05)	-.3179 (26.98)	-.4332 (45.97)	-.1077 (5.65)
85+	-.5669 (21.83)	-.3712 (14.48)	-.4441 (16.91)	-.2385 (8.93)	-.4119 (19.28)	-.1052 (1.05)
Female	.1472 (35.25)	.1001 (24.27)	.1361 (32.19)	.0277 (6.47)	.1006 (29.40)	.0273 (17.86)
constant	2.1771	1.8779	2.0585	1.9993	2.0324	.1723
Adj R^2	.0849	.1129	.1318	.1229	.1338	.0567
N	201,861	201,908	201,943	201,759	200,069	200,069
18-24	.1376 (20.62)	.1265 (19.33)	.1394 (20.75)	.1121 (16.51)	.1313 (24.05)	.0342 (14.16)

18-24 is from a separate regression replaces the age dummies with an 18-24 dummy only. Excluded 18-24, male. Equations include country dummies and survey mode. Misery is set to 1 if not-flourishing is 3-4. T-stats in parentheses.

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Table 7a. Signs on an age 18-24 variable for flourishing

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Argentina	-	-	-	+	-	-	-	-	-	-	-	0	0
Australia	-	-	-	0	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	0	-	-	-	-	-	-	-	+	+
Egypt	+	+	+	+	+	-	0	0	0	0	-	+	+
Germany	-	-	-	+	-	-	-	-	0	-	-	-	0
Hong Kong	-	-	0	0	-	-	-	-	-	-	-	-	-
India	+	+	+	+	+	+	+	+	+	+	+	+	0
Indonesia	-	-	0	0	-	0	-	-	-	-	-	-	-
Israel	+	+	+	+	+	+	0	0	0	0	+	0	+
Japan	-	-	-	+	-	-	-	-	0	.	0	-	-
Kenya	+	+	+	+	+	+	0	+	0	0	0	+	+
Mexico	-	-	0	0	-	-	-	-	-	-	-	-	0
Nigeria	+	0	0	+	+	0	0	0	0	0	0	0	+
Philippines	0	+	+	+	0	0	-	-	0	0	0	0	0
Poland	+	+	+	+	+	0	-	-	-	+	+	+	+
South Africa	+	0	+	+	-	0	0	0	0	0	0	+	+
Spain	-	-	0	+	-	-	-	-	-	0	-	0	+
Sweden	-	-	-	+	-	-	-	-	+	-	-	-	-
Tanzania	+	+	+	+	+	+	+	+	+	+	+	+	+
Turkey	-	0	0	+	-	0	0	-	0	-	-	-	0
UK	-	-	-	0	-	-	-	-	0	-	-	-	-
USA	-	-	-	-	-	-	-	-	-	-	-	-	-
All	0	+	+	+	-	-	-	-	+	-	-	+	+

1) Flourishing 2) Life satisfaction 3) Happiness 4) Physical health 5) Mental health 6) Worthwhile 7) Purpose 8) Promote 9) Give up 10) Content 11) Satisfied with relationships 12) Expense 13) Foodhse

Table 7b. Signs on an age 18-24 variable for not-flourishing

						Not flourishing	
	Anxious	Depressed	Worry	No interest	Not flourishing	CATI	CAWI
Argentina	+	+	+	+	+	+	+
Australia	+	+	+	+	+		+
Brazil	+	+	+	+	+	+	+
Egypt	0	+	0	0	0	0	0
Germany	+	+	+	+	+		+
Hong Kong	+	+	+	+	+		+
India	-	-	-	-	-	-	0
Indonesia	+	+	+	+	+	+	+
Israel	-	-	-	-	-	-	+
Japan	+	+	+	+	+	+	+
Kenya	-	-	-	-	-	-	-
Mexico	+	+	+	+	+	+	+
Nigeria	+	0	0	0	0	0	+
Philippines	0	0	0	+	+	0	+
Poland	-	-	-	0	-	0	-
South Africa	+	+	+	0	+	+	+
Spain	+	+	+	+	+		+
Sweden	+	+	+	+	+		+
Tanzania	-	-	-	-	-	-	0
Turkey	+	+	+	+	+	+	
UK	+	+	+	+	+		+
USA	+	+	+	+	+		+
All	+	+	+	+	+	-	+

Notes: Equations also include female and CAWI dummy. + means significantly positive, - means significantly negative 0=insignificant cut-off is t≥1.5.

Table 8. GFS Flourishing variables by survey mode

a) CAWI

	Life satisfaction	Happiness	Physical	Mental	Worthwhile	Purpose	Flourishing
18-24	-.2642 (13.08)	-.1951 (10.53)	.2386 (12.58)	-.6737 (33.13)	-.3865 (19.47)	-.5669 (25.80)	-.2559 (17.21)
Female	-.0010 (0.09)	.0227 (2.17)	-.1028 (9.58)	-.2703 (23.49)	.0852 (7.59)	-.0270 (2.17)	-.0806 (9.59)
N	141,312	141,557	141,617	141,636	141,544	141,426	137,915

	Promote	Give up	Content	Satrel	Expense	Foodhse
18-24	-.3643 (22.46)	-.0894 (4.71)	-.1846 (8.90)	-.2562 (11.51)	-.1998 (7.02)	-.0740 (2.72)
Female	.0639 (6.96)	-.0957 (8.91)	.0595 (5.07)	.0414 (3.36)	-.4325 (26.87)	-.3144 (20.41)
N	141,430	141,407	141,275	141,167	141,626	141,468

Notes all 22 countries included. T-statistics in parentheses.

b) CATI

	Life satisfaction	Happiness	Physical	Mental	Worthwhile	Purpose	Flourishing
18-24	+.4812 (14.25)	+.5432 (17.43)	+.7351 (25.20)	+.3217 (12.45)	+.3018 (9.89)	+.1335 (4.94)	+.3067 (17.59)
Female	+.2510 (9.67)	+.1832 (7.65)	-.1602 (7.15)	-.0351 1.77)	+.1977 (8.43)	+.0792 (3.81)	+.0306 (2.27)
N	60,072	60,087	60,113	60,055	59,942	59,851	58,642

	Promote	Give up	Content	Satrel	Expense	Foodhse
18-24	+.0840 (3.27)	+.1933 (6.33)	+.1476 (5.12)	+.0280 (0.94)	+.3614 (9.27)	+.3556 (9.01)
Female	+.0791 (4.00)	+.0912 (3.88)	+.1363 (6.16)	+.0918 (3.99)	-.2817 (9.41)	-.3007 (9.92)
N	59,973	59,847	60,076	60,020	60,077	60,112

Countries are Argentina; Brazil; Egypt; India; Indonesia; Israel; Japan; Kenya; Mexico; Nigeria; Philippines; Poland; South Africa Tanzania and Turkey.

Table 9. GFS by survey mode by not flourishing variables

a) CAWI samples

	Anxious	Depressed	Worry	No interest	Not flourishing
18-24	+.3149 (36.88)	+.2973 (26.85)	+.3141 (36.91)	+.2674 (31.31)	+.2985 (41.35)
Female	+.1595 (33.00)	+.1027 (21.77)	+.1606 (33.37)	+.0304 (6.30)	+.1137 (29.01)
N	141,363	141,411	141,519	141,351	140,240

Notes all 22 countries. T-statistics in parentheses

b) CATI samples

	Anxious	Depressed	Worry	No interest	Not flourishing
18-24	-.0880 (8.01)	-.0904 (8.31)	-.0807 (7.16)	-.0827 (7.16)	-.0849 (10.12)
Female	+.1394 (16.51)	+.1031 (12.33)	+.0929 (10.71)	+.0306 (3.45)	+.0907 (14.05)
N	59,956	59,950	59,881	59,861	59,299

Notes countries are Argentina; Brazil; Egypt; India; Indonesia; Israel; Japan; Kenya; Mexico; Nigeria; Philippines; Poland; South Africa; Tanzania and Turkey

Table 10. Country effects for life satisfaction and anxiety for young and females, GFS age<70

	Flourishing						**Not flourishing**					
	CAWI only			CATI only			CAWI only			CATI only		
	18-24	Female	N	18-24	Female	N	18-24	Female	N	18-24	Female	N
Argentina	-	-	5,046	-	0	1,136	+	+	5,104	+	+	1,166
Australia	-	0	2,802				+	+	2,809			
Brazil	-	-	11,525	0	-	1,095	+	+	11,679	+	+	1,103
Egypt	0	0	211	+	0	4,279	0	0	219	0	+	4,424
Germany	-	-	8,252				+	+	8,320			
Hong Kong	-	0	2,815				+	0	2,927			
India	-	+	190	+	+	11,710	0	0	210	-	+	11,927
Indonesia	-	0	3,248	-	+	3,520	+	+	3,338	+	+	3,526
Israel	0	0	859	+	-	2,327	+	+	861	-	+	2,319
Japan	0	+	15,484	0	+	395	+	0	15,932	+	0	402
Kenya	+	-	1,426	+	-	9,611	-	+	1,449	-	+	9,667
Mexico	-	-	4,047	0	0	1,309	+	+	4,118	+	+	1,318
Nigeria	0	-	642	+	+	5,433	+	-	661	0	+	5,482
Philippines	0	0	1060	0	0	4,015	+	+	1,085	0	+	4,014
Poland	+	-	8,968	0	+	516	-	+	9,284	0	0	514
South Africa	0	0	614	+	0	1911	+	+	627	+	+	1,924
Spain	0	-	5,865				+	+	5,943			
Sweden	-	-	15,008				+	+	12,229			
Tanzania	-	0	278	+	+	8,318	0	0	279	-	0	8,451
Turkey	-	0	618	0	0	801	+	0	623	+	+	797
UK	-	-	4,009				+	+	4,091			
USA	-	-	26,554				+	+	26,681			

Table 11. Flourishing, and not flourishing variables with controls, GFS.

	Flourishing	Life satisfaction	Not flourishing	Depression
25-34	-.2814 (20.11)	-.3940 (17.76)	.0212 (3.08)	.0169 (2.05)
35-44	-.3961 (26.47)	-.6048 (25.51)	-.0108 (1.47)	-.0149 (1.69)
45-54	-.3493 (22.02)	-.5810 (23.13)	-.0868 (11.13)	-.0828 (8.83)
55-64	-.0981 (5.87)	-.3107 (11.73)	-.1938 (23.56)	-.1800 (18.18)
65-74	.3144 (16.05)	.1746 (5.63)	-.3374 (35.00)	-.3226 (27.83)
75-84	.5815 (24.00)	.4507 (11.77)	-.3944 (33.10)	-.3808 (26.61)
85+	.6618 (14.05)	.5015 (6.75)	-.3938 (17.02)	-.3768 (13.59)
Female	-.0049 (0.67)	.0968 (8.24)	.0830 (22.77)	.0751 (17.12)
Other sex	-.7846 (11.98)	-.8340 (8.02)	.3385 (10.47)	.3250 (8.37)
Self-employed	-.0081 (0.73)	-.0817 (4.59)	.0350 (6.33)	.0357 (5.36)
Retired	-.0891 (6.12)	-.0750 (3.25)	.0380 (5.30)	.0521 (6.05)
Student	.0116 (0.62)	-.0168 (0.57)	.0246 (2.68)	-.0015 (0.14)
Homemaker	-.1464 (10.57)	-.0725 (3.31)	.0791 (11.61)	.0973 (11.86)
Unemployed	-.4692 (32.67)	-.7503 (32.91)	.1928 (27.24)	.2391 (28.07)
Other lmkt	-.4119 (22.26)	-.4717 (16.14)	.1364 (14.99)	.1506 (13.79)
Born in country	-.0763 (4.36)	-.0782 (2.82)	-.0015 (0.18)	.0096 (0.93)
Small town	.0387 (3.77)	.0205 (1.27)	.0076 (1.52)	.0025 (0.42)
A large city	.0548 (4.84)	.0102 (0.57)	-.0050 (0.90)	-.0129 (1.94)
A suburb	.0227 (1.88)	-.0329 (1.72)	-.0009 (0.16)	-.0121 (1.69)
CAWI	-.1037 (6.77)	-.2522 (10.40)	.2060 (27.31)	.2274 (25.10)
Married	.5663 (57.70)	.7591 (48.78)	-.1423 (29.46)	-.1696 (29.19)
Separated	-.0517 (2.24)	-.1531 (4.17)	.1158 (10.15)	.1330 (9.71)
Divorced	.0104 (0.62)	.0447 (1.69)	.0059 (0.73)	.0055 (0.56)
Widowed	.1903 (9.69)	.2261 (7.28)	.0073 (0.76)	.0155 (1.34)
Domestic partner	.2672 (17.77)	.4266 (17.88)	-.0412 (5.56)	-.0745 (8.36)
Secondary	.2083 (16.68)	.1531 (7.74)	-.1448 (23.52)	-.1754 (23.72)
College	.4757 (32.46)	.4175 (17.98)	-.2433 (33.70)	-.2753 (31.74)
DK educ	.1627 (1.40)	.2542 (1.38)	-.1368 (2.36)	-.1839 (2.67)
Constant	6.8722	6.8140	2.0992	1.9158
Adj R^2	.1779	.1083	.1502	.1019
N	193,622	198,279	195,926	198,268

Excluded: 18-24; employee, completed elementary education. single, rural area. All equations include country dummies.

Table 12. Flourishing and not-flourishing in the 2023/2024 European Social Survey - Germany, Israel, Spain, Sweden and the UK

	Age 18-24	Female	N
Life	.0259 (0.33)	-.0223 (0.51)	7,989
Happiness	.0221 (0.32)	.0430 (1.10)	7,994
Satisfied – economy	.0616 (0.68)	-.2356 (4.69)	7,916
Satisfied – democracy	.2215 (2.15)	-.1324 (2.32)	7,780
Satisfied – govt	.4698 (4.65)	.0452 (0.81)	7,794
Satisfied – education	.4543 (5.03)	-.0925 (1.82)	7,758
Satisfied – health	.5834 (6.11)	-.4065 (7.69)	7,956
Flourishing	.2506 (4.12)	-.1303 (3.77)	7,419
Germany	.4430 (4.05)	-.0950 (1.55)	2,311
Israel	.2726 (0.85)	-.1172 (1.09)	795
Spain	.2069 (1.73)	-.0196 (0.27)	1,718
Sweden	.1021 (0.74)	-.1700 (2.46)	1,154
UK	.2507 (1.26)	-.2900 (3.54)	1,441
Felt depressed	.0269 (0.96)	.1384 (8.85)	7,984
Felt sad	.0289 (1.06)	.1656 (10.88)	7,996
Felt lonely	.0853 (3.14)	.0619 (4.10)	7,986
Couldn't get going	.0407 (1.43)	.0940 (5.95)	7,980
Everything an effort	.0205 (0.65)	.1469 (8.42)	7,986
Not flourishing	.0412 (1.97)	.1196 (10.25)	7,065
Germany	.0523 (1.51)	.1068 (5.54)	2,400
Israel	-.0750 (1.54)	.1016 (2.80)	873
Spain	.0060 (0.14)	.1930 (7.28)	1,833
Sweden	.2644 (5.22)	.1007 (4.01)	1,222
UK	.0647 (0.95)	.0780 (2.75)	1,610

Table 13. Global Minds, 2020-2025.

	MHQ	Suicidal thoughts.	Fear and anxiety	Sad and hopeless
25-34	17.473 (73.34)	-.8121 (92.84)	-.2631 (30.80)	-.4678 (49.90)
35-44	36.760 (155.10)	-1.4531 (166.99)	-.7394 (87.01)	-1.1526 (123.57)
45-54	54.182 (238.65)	-1.8205 (218.41)	-1.1605 (142.56)	-1.7168 (192.15)
55-64	68.982 (314.25)	-2.1141 (262.33)	-1.5373 (195.33)	-2.2182 (256.78)
65-74	83.738 (349.41)	-2.4109 (274.02)	-1.9362 (225.33)	-2.7105 (287.41)
75-84	94.993 (290.07)	-2.6308 (218.82)	-2.2981 (195.72)	-3.1261 (242.57)
85+	99.808 (140.48)	-2.7366 (104.91)	-2.5579 (100.40)	-3.3894 (121.22)
Female	-8.687 (57.78)	.1229 (22.28)	.5430 (100.75)	.6253 (105.71)
Other sex	-23.733 (30.65)	.8527 (29.97)	.5474 (19.71)	.7394 (24.25)
Constant	56.322	3.1716	5.7229	5.7230
Adjusted R^2	.2080	.1384	.1147	.1652
N	997,050	996,990	996,992	996,983

Excluded category: 18-24. T-statistics in parentheses. Includes year and country dummies

Table 14. Signs and significance on age 18-24 and female variables (t>1.5), Global Minds, 2020-2025.

	MHQ		Anxious		Suicidal thoughts		Sad and hopeless		
	18-24	Female	18-24	Female	18-24	Female	18-24	Female	MHQ N
All	-	-	+	+	+	+	+	+	997,050
Argentine	-	-	+	+	+	+	+	+	89,580
Australia	-	-	+	+	+	0	+	+	30,015
Brazil	-	-	+	+	+	+	+	+	19,429
Egypt	-	-	+	+	+	+	+	+	102,551
Germany	-	-	+	+	+	-	+	+	29,496
Hong Kong	-	-	+	0	+	0	+	+	1,156
India	-	-	+	+	+	+	+	+	221,882
Indonesia	-	-	+	+	+	0	+	+	682
Israel	-	-	+	+	+	-	+	+	19,519
Japan	-	+	+	0	+	-	+	0	4,381
Kenya	-	-	+	+	+	0	+	+	12,399
Mexico	-	-	+	+	+	+	+	+	102,761
Nigeria	-	-	+	+	+	+	+	+	31,568
Philippines	-	-	+	+	+	+	+	+	32,031
Poland	-	0	+	+	+	0	+	+	467
South Africa	-	-	+	+	+	+	+	+	41,451
Spain	-	-	+	+	+	+	+	+	51,204
Sweden	-	-	+	+	+	0	+	+	620
Tanzania	-	-	+	+	+	+	+	+	8,499
Turkey	-	0	+	+	+	0	+	+	620
UK	-	-	+	+	+	-	+	+	66,475
USA	-	-	+	+	+	-	+	+	130,297

Chart 1. Flourishing and Life satisfaction by age
(from a regression with age coefficients added to the constant)

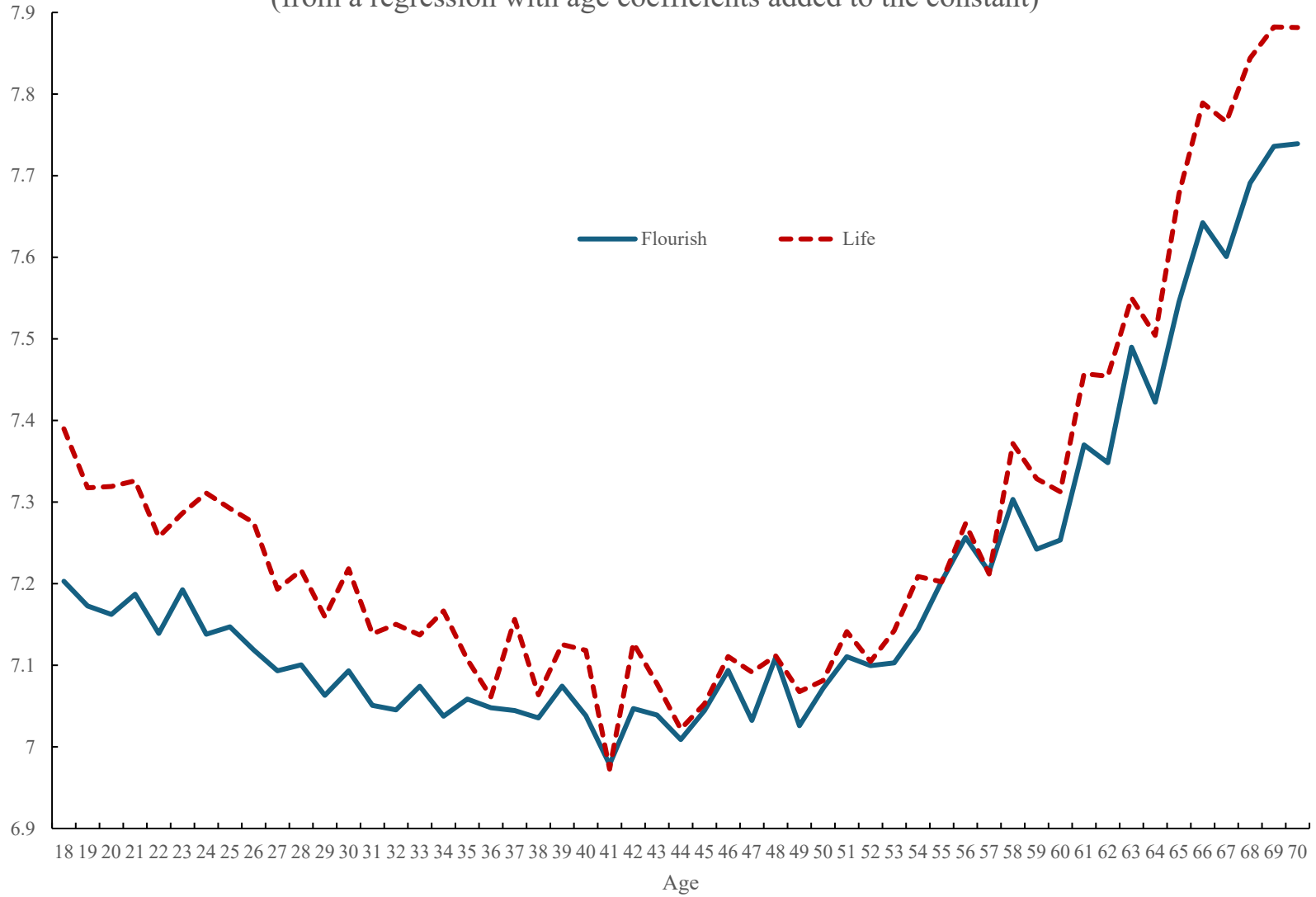


Chart 2. Not-flourishing by age, GFS, 2022-2024
(from a regression with age coefficients added to the constant)

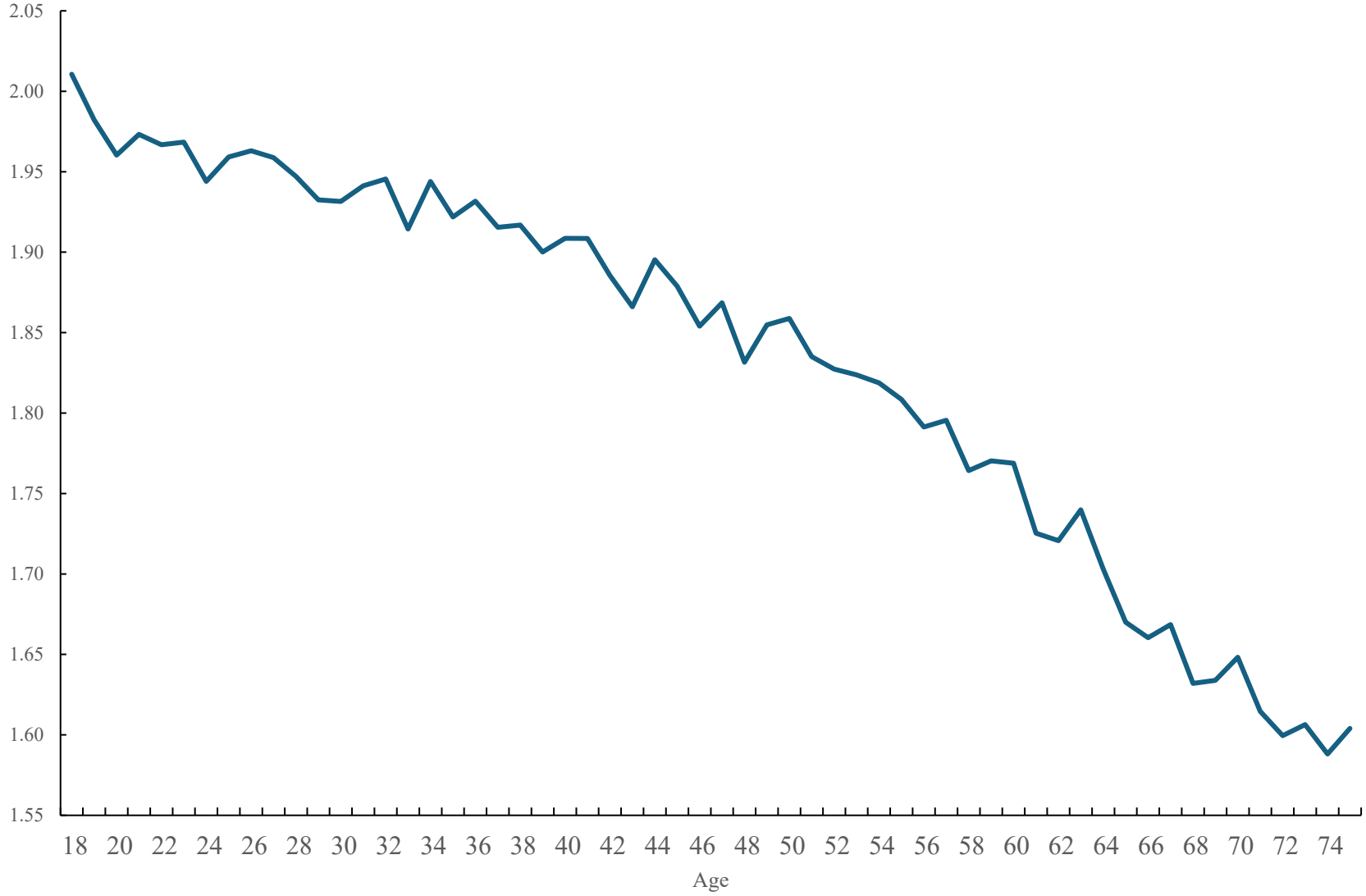
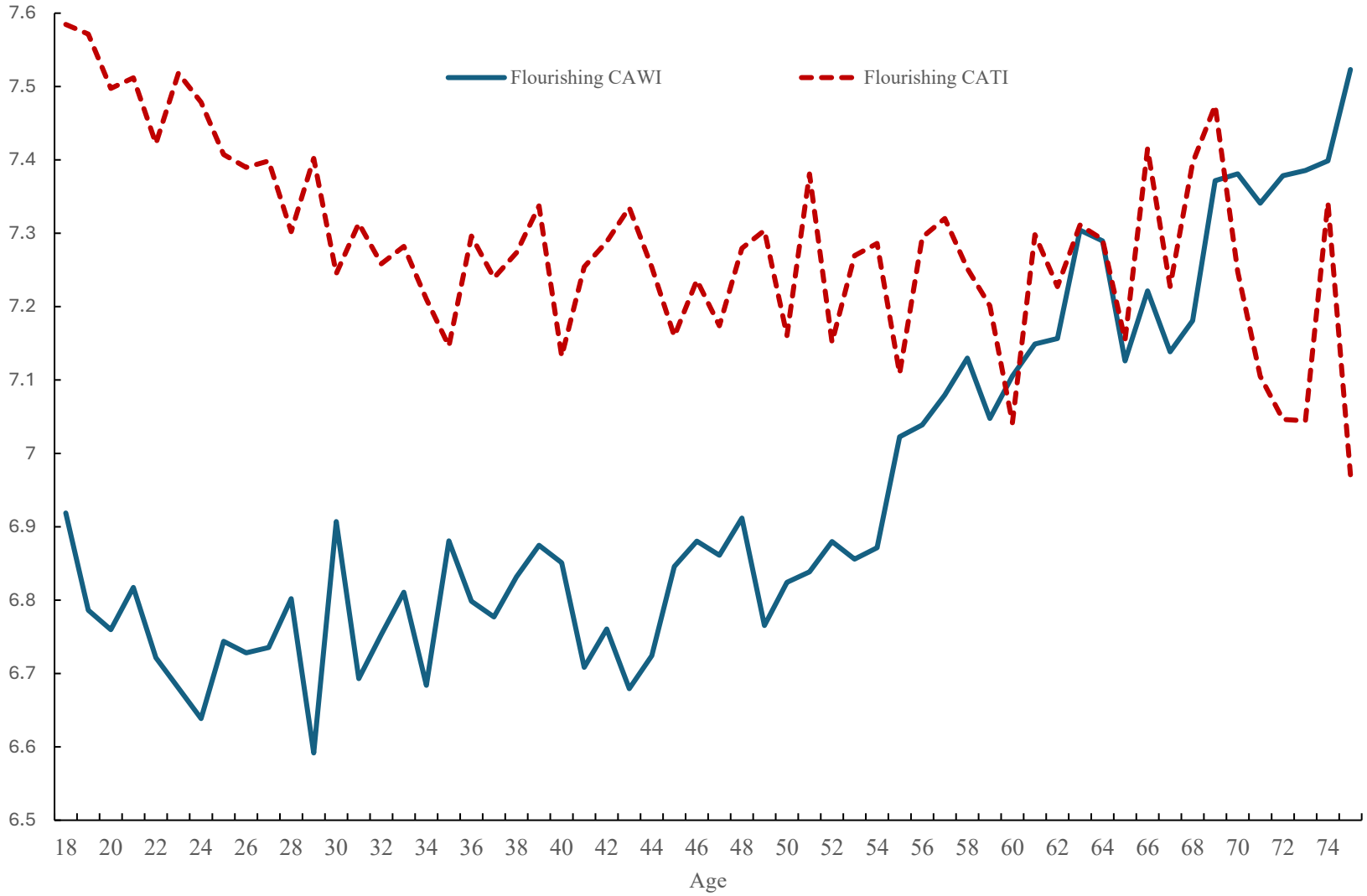


Chart 3. Flourishing by survey mode



Appendix 1: Factor Analysis with 20 well-being and ill-being items from GFS

The table below presents the rotated factor loadings (pattern matrix) and unique variances based on principal components factor analysis run for all 20 well-being and ill-being items in the GFS. The analysis is weighted using the survey weight provided by the study and is confined to observations with complete non-missing data (unweighted N=190,664).

Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Uniqueness
content	0.7584	-0.1835	0.2174	0.1041	-0.0636	0.3290
expenses	0.0702	-0.1463	0.1549	0.8883	0.0736	0.1551
giveup	0.5738	0.1371	0.1585	0.0085	0.2305	0.5736
happy	0.3743	-0.2324	0.6684	0.1467	0.0953	0.3285
purpose	0.7114	-0.1002	0.2262	0.0361	0.1497	0.4090
life	0.3373	-0.2374	0.6844	0.1870	0.0306	0.3256
mental	0.5822	-0.2844	0.2560	0.0901	0.3452	0.3873
physical	0.3724	-0.0716	0.2985	0.1003	0.6570	0.3254
promote	0.6540	0.0444	0.2057	0.0048	0.2213	0.4790
satrel	0.7303	-0.1995	0.2268	0.1189	-0.0713	0.3562
foodhse	0.0567	-0.1536	0.1292	0.8982	0.0491	0.1474
worthwhile	0.5089	-0.1757	0.5475	0.1006	0.0953	0.3912
interest	-0.0410	0.7307	-0.1483	-0.1119	-0.0454	0.4279
capable	-0.4650	0.0425	-0.1404	-0.0718	-0.2230	0.7074
life5	0.2090	0.0294	0.7368	0.0572	0.2051	0.3673
cantril	0.0898	-0.1479	0.8006	0.2268	0.0366	0.2762
anxious	-0.1396	0.7878	-0.0747	-0.1570	-0.1506	0.3070
depress	-0.1428	0.8026	-0.1852	-0.1263	-0.0926	0.2767
pain	0.0508	0.3236	-0.0363	-0.1040	-0.7480	0.3210
worry	-0.0806	0.7930	-0.0721	-0.1611	-0.1061	0.3222
lonely	-0.4307	0.3358	-0.1767	-0.3714	0.0310	0.5316

Factor 1, with an eigen value of 7.36 and a Cronbach's Alpha reliability coefficient of 0.83, consists of 7 items, namely:

- *Content* - I am content with my friendships and relationships. 0=strongly disagree..10=strongly agree.
- *Giveup* - I am always able to give up some happiness now for greater happiness later. 0=not true at all…10=completely true of you
- *Purpose* - I understand my purpose in life. 0=strongly disagree..10=strongly agree
- *Mental* - How would you rate your overall mental health? 0=poor…10=excellent.

- *Promote* - I always act to promote good in all circumstances, even in difficult and challenging situations. 0=not true at all…10=completely true of you
- *Satrel* - My relationships are as satisfying as I would want them to be. 0=strongly disagree..10=strongly agree
- *Capable* – Feel very capable in most things I do in life 1 Never…4 Always

This factor contains six of the twelve items in the GFS flourishing scale and one (CAPABLE) which does not.

Factor 2, with an eigen value of 2.42, and a Cronbach's Alpha reliability coefficient of 0.85 consists of four items and, together, captures negative affect or, what we term here, 'not-flourishing'. It consists of:

- *Interest* - little interest or pleasure in doing things– 1=not at all, 2=several days, 3=more than half, 4=nearly every day.
- *Anxious* - feeling nervous, anxious or on edge – 1=not at all, 2=several days, 3=more than half, 4=nearly every day
- *Depressed* - Feeling down, depressed or hopeless– 1=not at all, 2=several days, 3=more than half, 4=nearly every day
- *Worry* - Not being able to stop or control worrying– 1=not at all, 2=several days, 3=more than half, 4=nearly every day.

Factor 3 captures life satisfaction and happiness. It has an eigen value of 1.42, a Cronbach's Alpha coefficient of 0.85 and consists of the following five items:

- *Happy* - In general, how happy or unhappy do you usually feel? 0=extremely unhappy ..10=extremely happy
- *Life* - Overall, how satisfied are you with life as a whole these days? 0=not at all satisfied..10=completely satisfied
- *Worthwhile* - Overall, to what extent do you feel the things you do in your life are worthwhile? 0=not at all…10=completely
- *Life5* - Life evaluation five years from now 0=worst possible 10=best possible
- *Cantril* – Life evaluation today 0=worst possible 10=best possible

Factor 4 consists of three items, has an eigen value of 1.06 and a Cronbach's Alpha reliability coefficient of 0.75. The items are:

- *Expenses* - How often do you worry about being able to meet normal monthly living expenses? 0=worry all the time..10=do not ever worry.
- *Foodhse* - How often do you worry about safety, food or housing? 0=worry all the time..10=do not ever worry
- *Lonely* - How often felt lonely - always 0 never 10

Factor 5, with an eigen value of 1.00 and a Cronbach's Alpha coefficient of 0.39 consists of only two items:

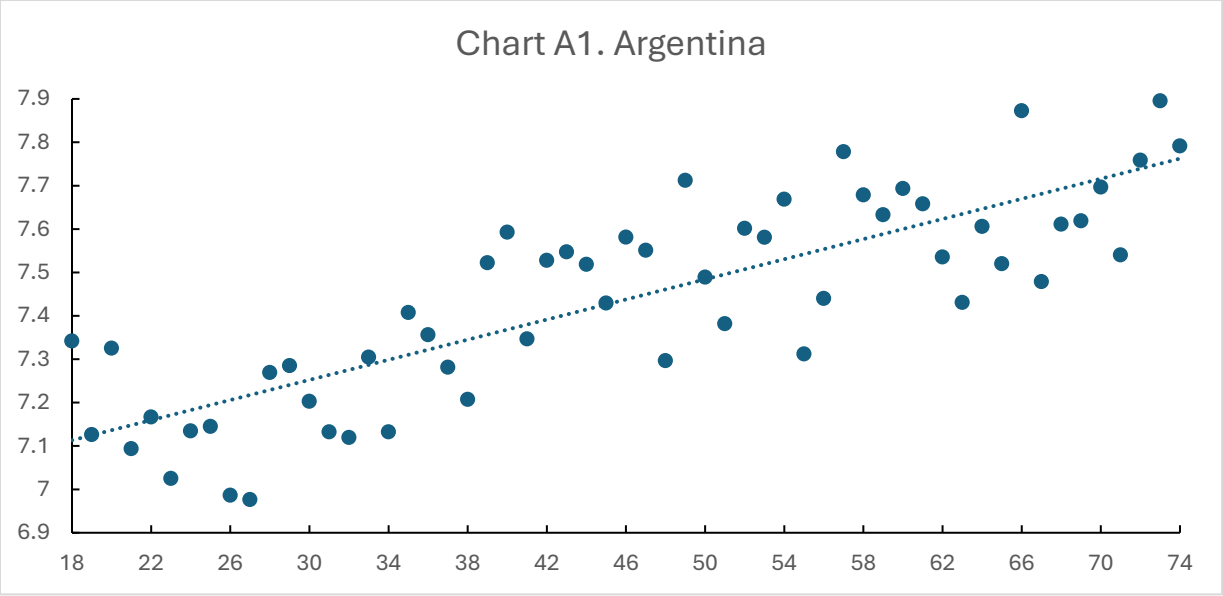
- *Physical* - In general, how would you rate your physical health? 0=poor…10=excellent.
- *Pain* – bodily pain last 4 weeks - 1=none at all, 2=not very much, 3=some, 4=a lot

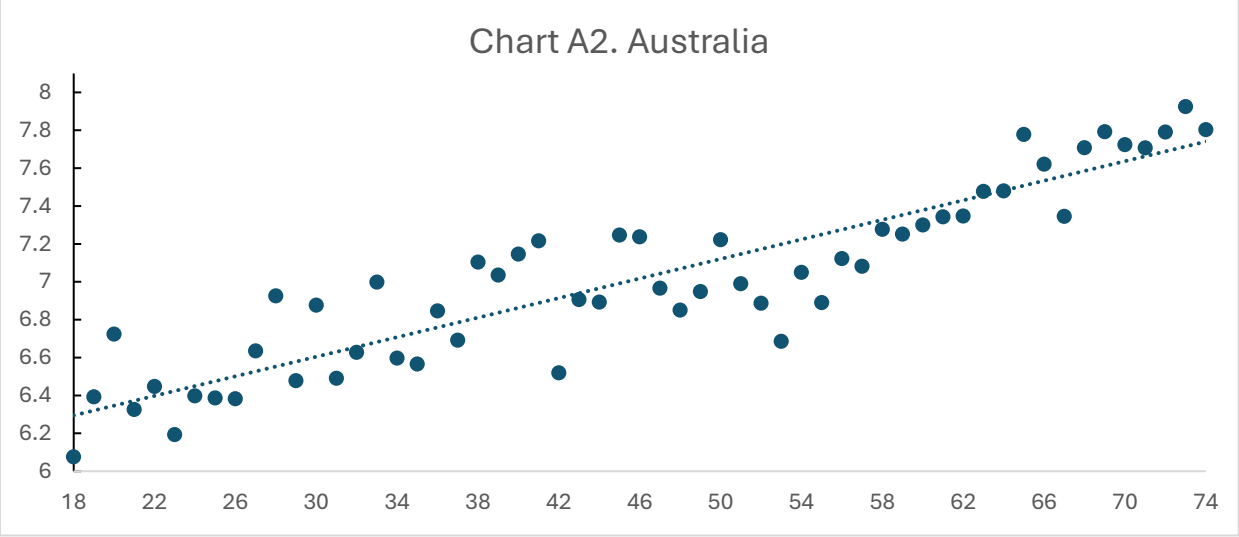
Appendix 2. Flourishing by age and country

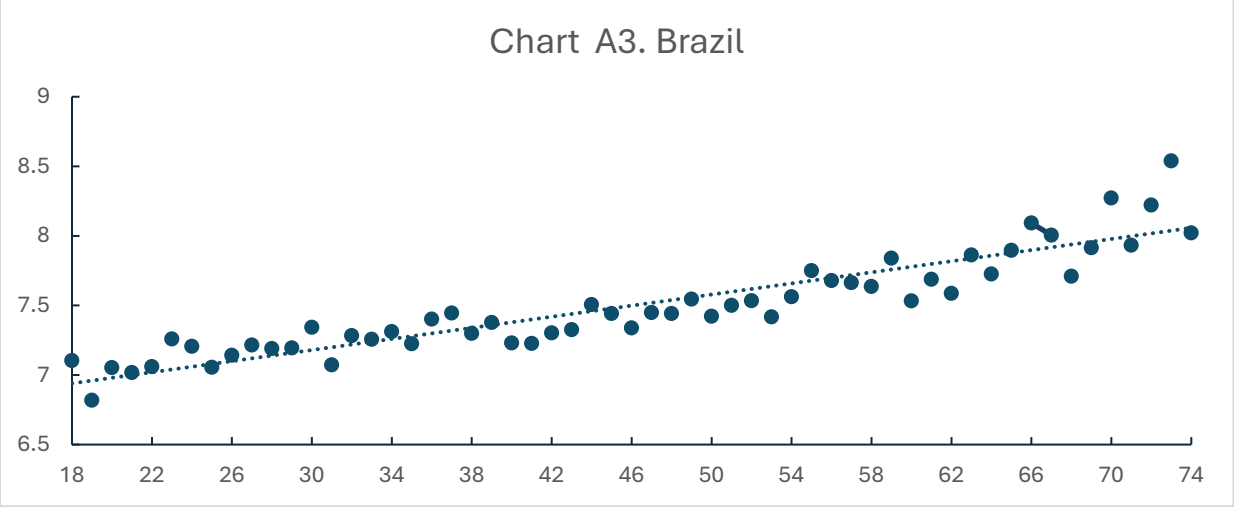
Flourishing	<25	25-34	35-44	45-54	55-64	65-74	75-84	85+	45-54/18-24
Argentina	6.91	6.94	7.17	7.30	7.31	7.28	7.42	7.96	1.06
Australia	6.27	6.53	6.77	6.80	7.15	7.63	8.07	8.15	1.08
Brazil	6.60	6.79	6.94	7.08	7.29	7.65	8.05	7.43	1.07
Egypt	7.52	7.22	7.27	7.34	7.39	6.99	7.15	6.75	0.98
Germany	6.70	6.98	6.98	6.96	6.93	7.19	7.29	7.53	1.04
Hong Kong	7.01	6.53	6.56	7.20	7.73	7.33	7.60	6.24	1.03
India	7.29	6.98	6.74	6.73	6.57	6.69	6.52	6.35	0.92
Indonesia	7.97	8.18	8.16	8.08	8.10	8.00	7.78	7.64	1.01
Israel	8.07	7.95	7.92	7.86	7.84	7.82	7.18	7.65	0.97
Japan	5.68	5.52	5.46	5.49	5.83	6.42	6.80	6.77	0.97
Kenya	7.48	7.33	7.16	7.13	7.15	7.16	7.21	6.90	0.95
Mexico	7.47	7.47	7.66	7.74	7.71	7.96	8.13	8.04	1.04
Nigeria	7.46	7.37	7.34	7.38	7.50	7.21	7.20	7.57	0.99
Philippines	7.68	7.76	7.72	7.71	7.62	7.58	7.78	8.93	1.00
Poland	7.87	7.67	7.52	7.49	7.41	7.54	7.43	7.50	0.95
South Africa	7.23	7.06	7.18	6.82	6.98	7.01	7.31	6.00	0.94
Spain	6.75	6.89	6.86	6.83	6.93	7.01	7.38	7.20	1.01
Sweden	6.58	6.67	6.71	7.01	7.32	7.70	7.80	7.75	1.06
Tanzania	7.67	7.32	7.08	6.85	6.77	6.50	6.61	5.78	0.89
Turkey	6.17	6.13	6.42	6.34	6.57	5.94	7.36	6.92	1.03
UK	6.36	6.80	6.57	6.62	6.68	7.16	7.54	7.48	1.04
USA	6.27	6.47	6.78	7.07	7.46	7.83	8.08	7.95	1.13

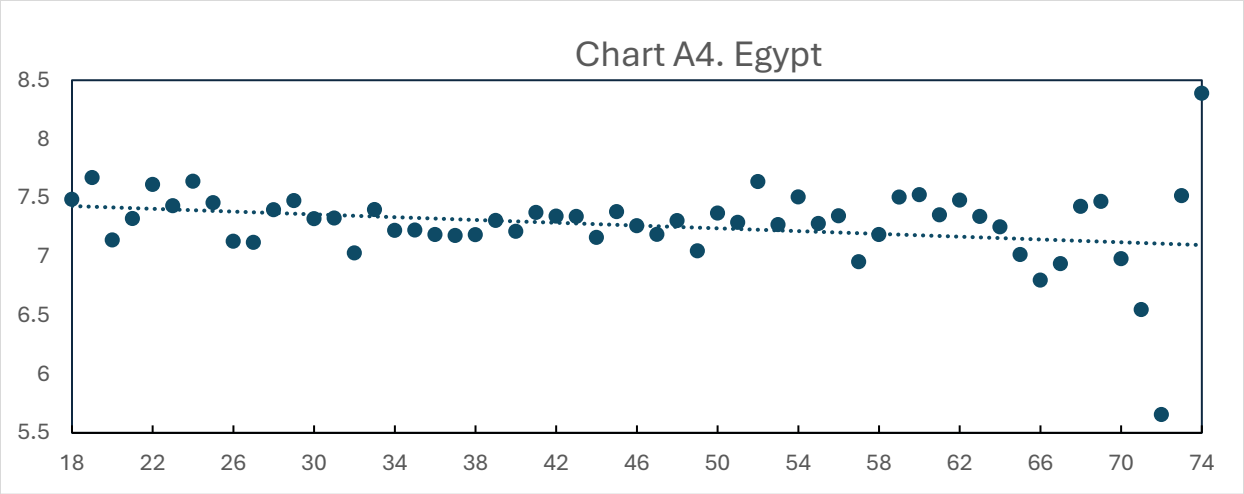
Source: GFS, 2022-2024

Appendix Charts 1-22





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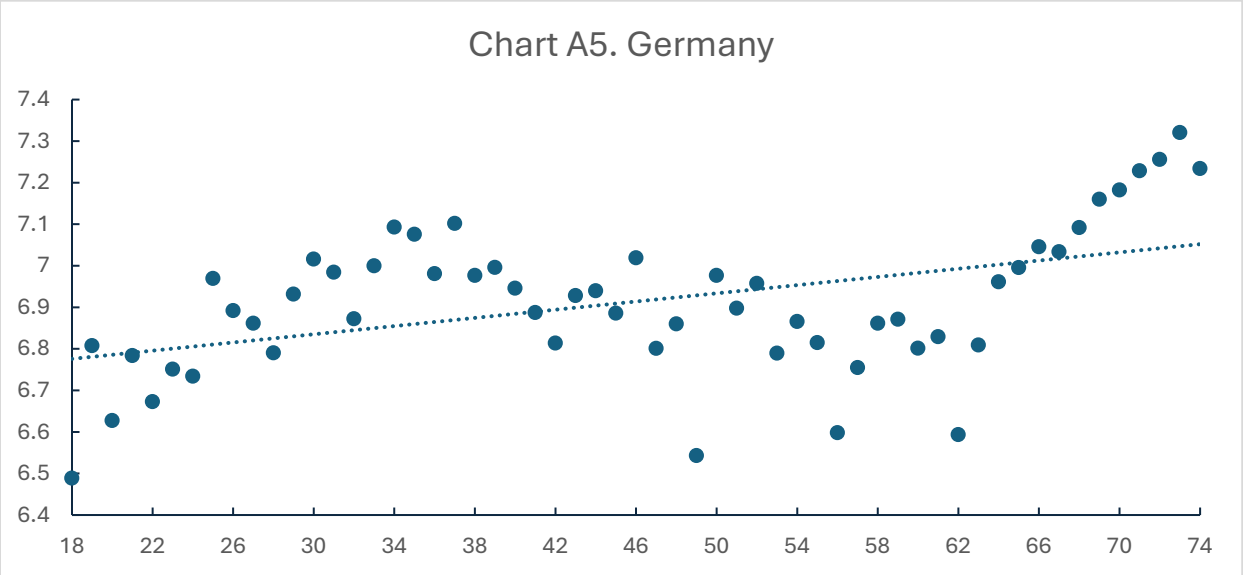
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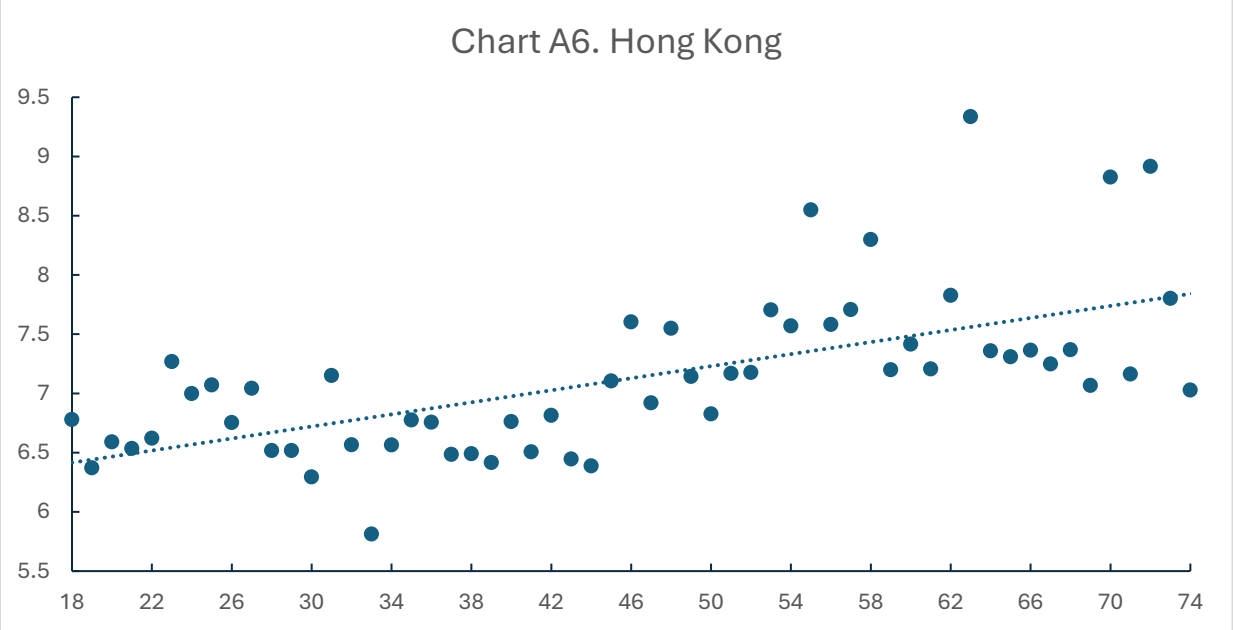
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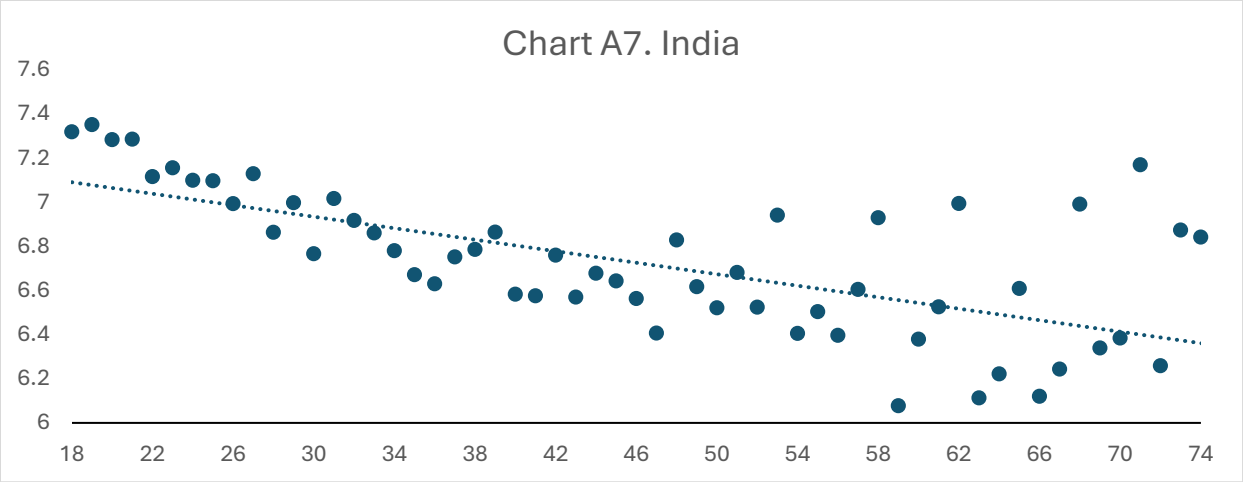
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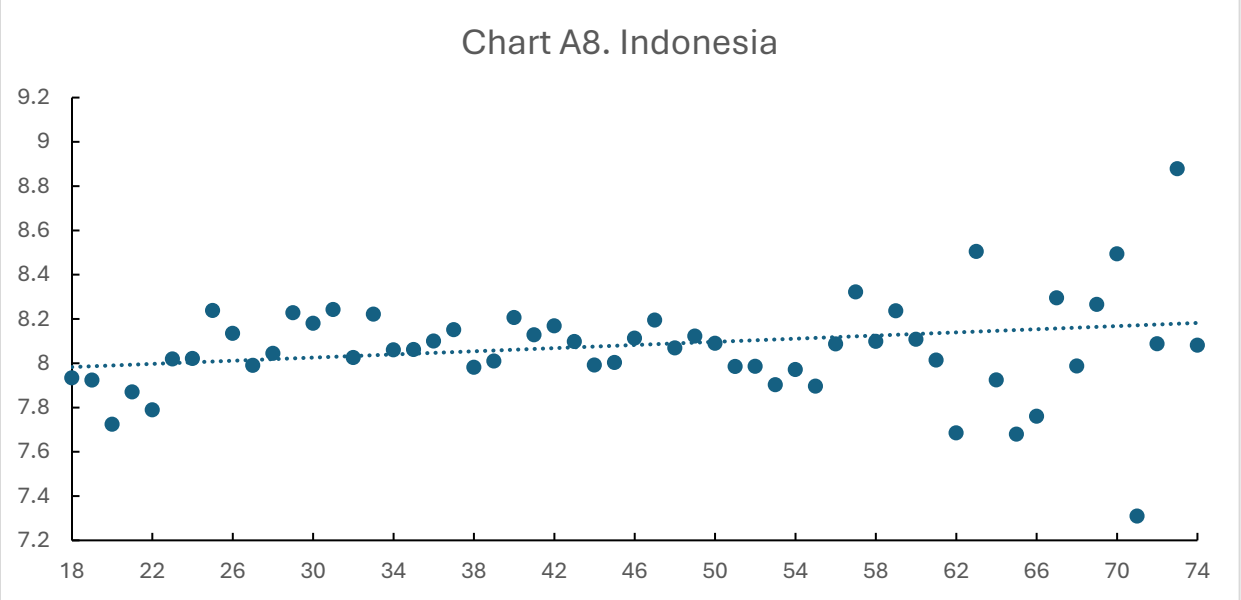
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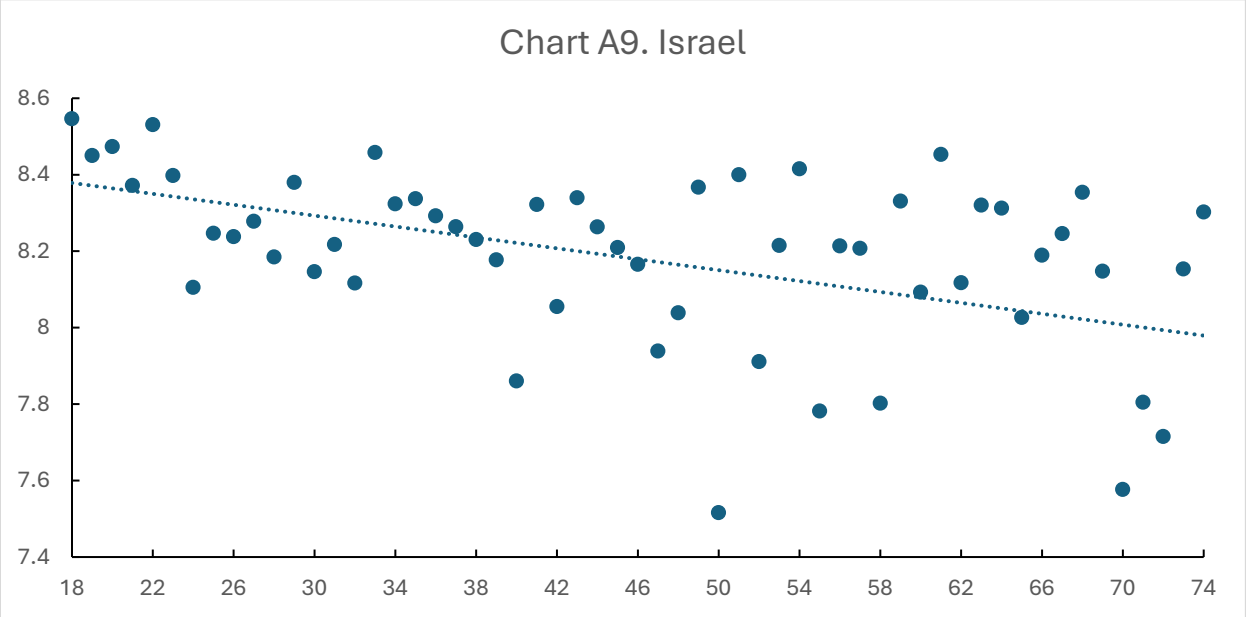
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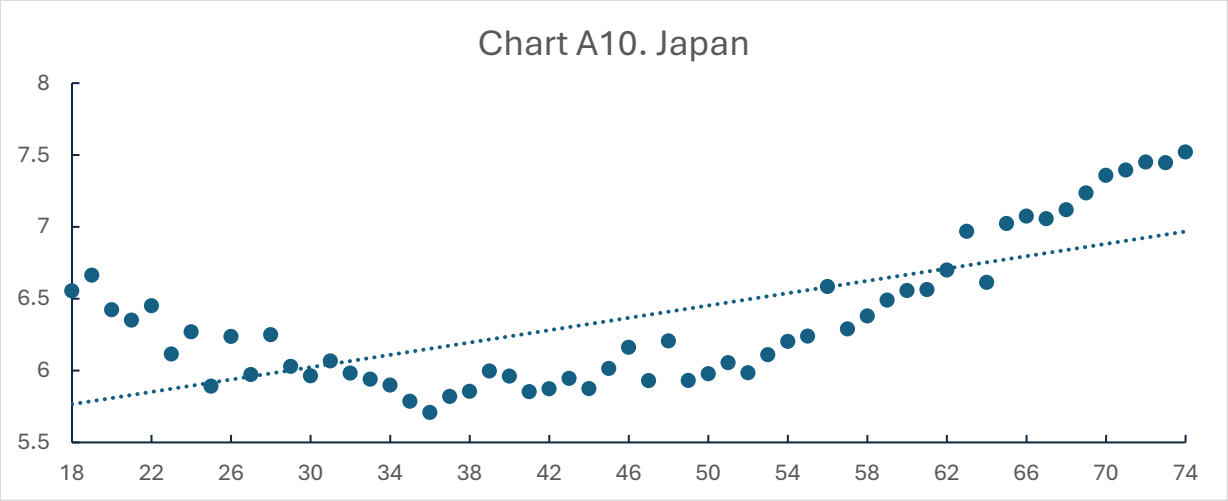
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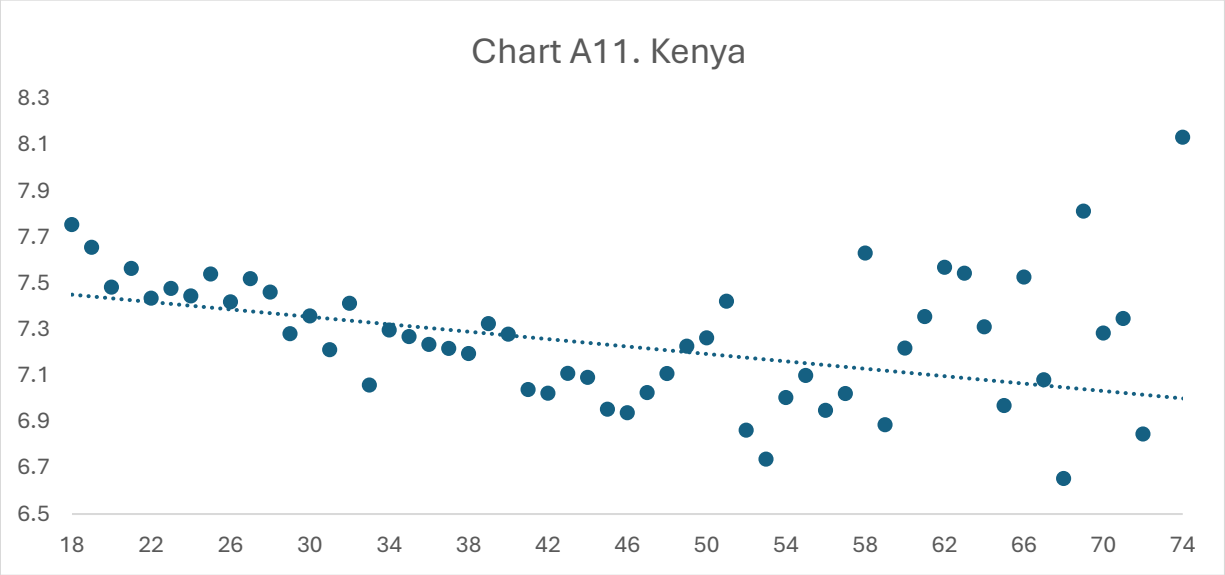
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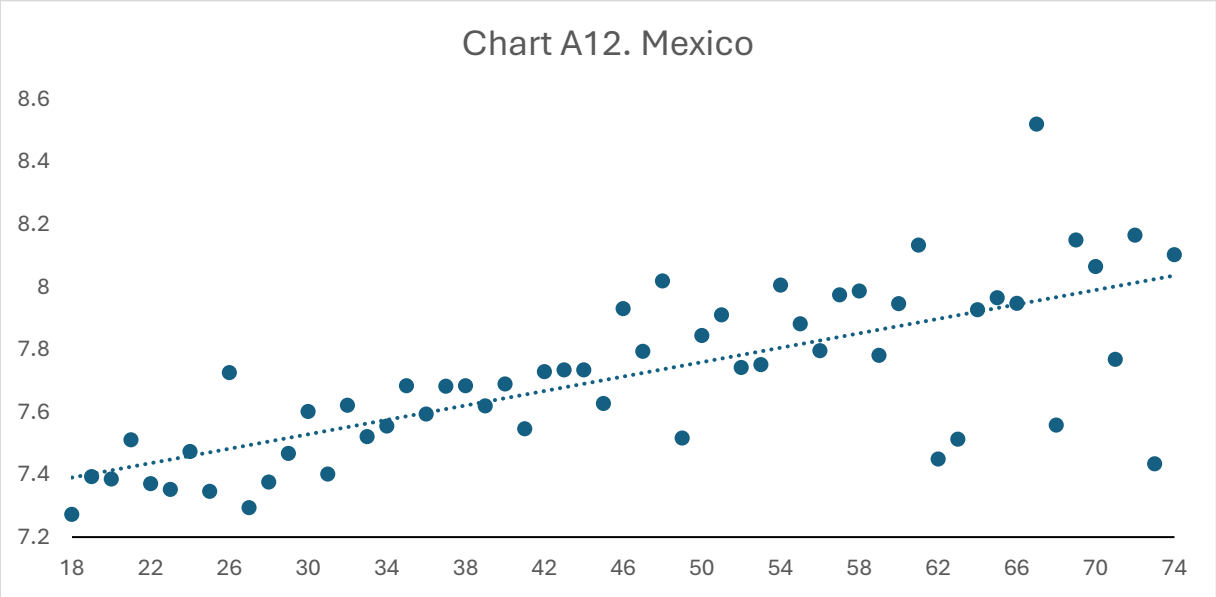
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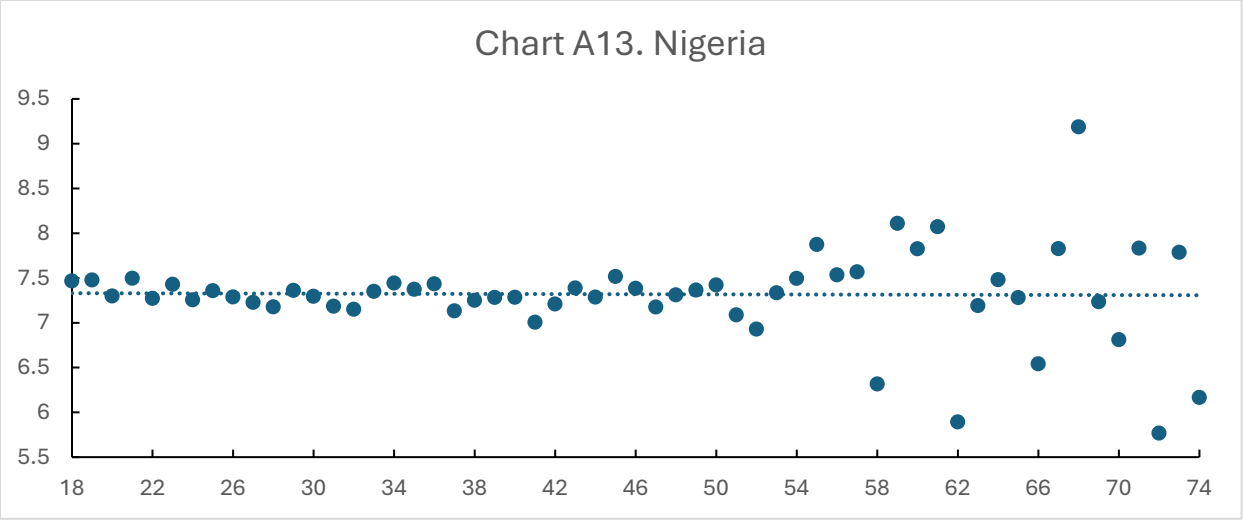
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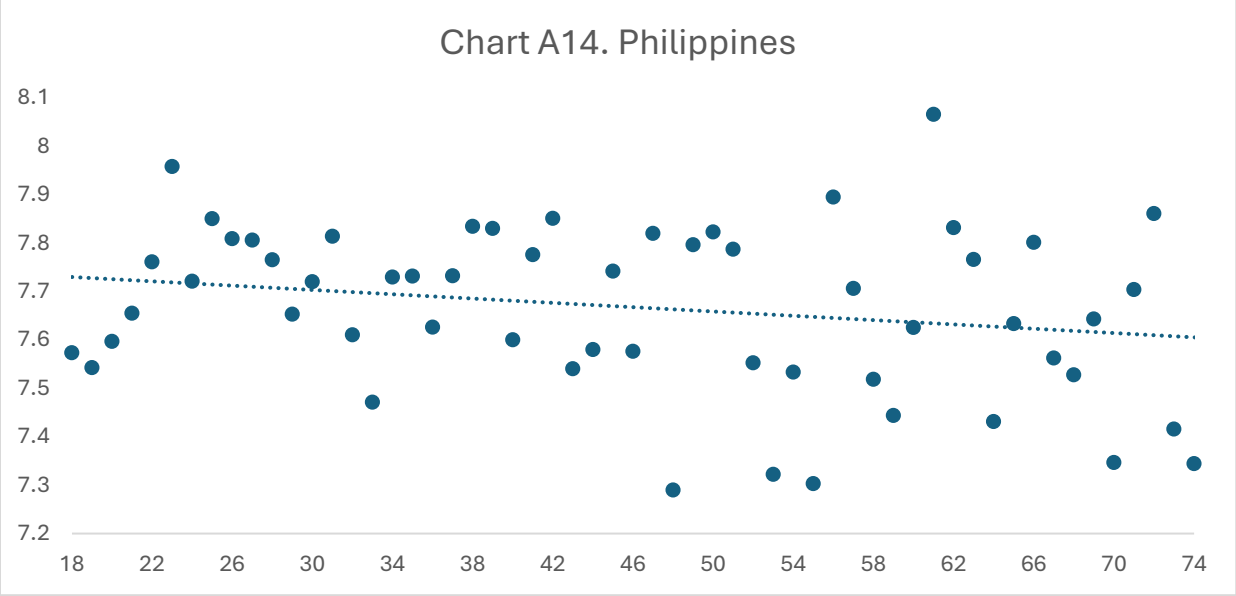
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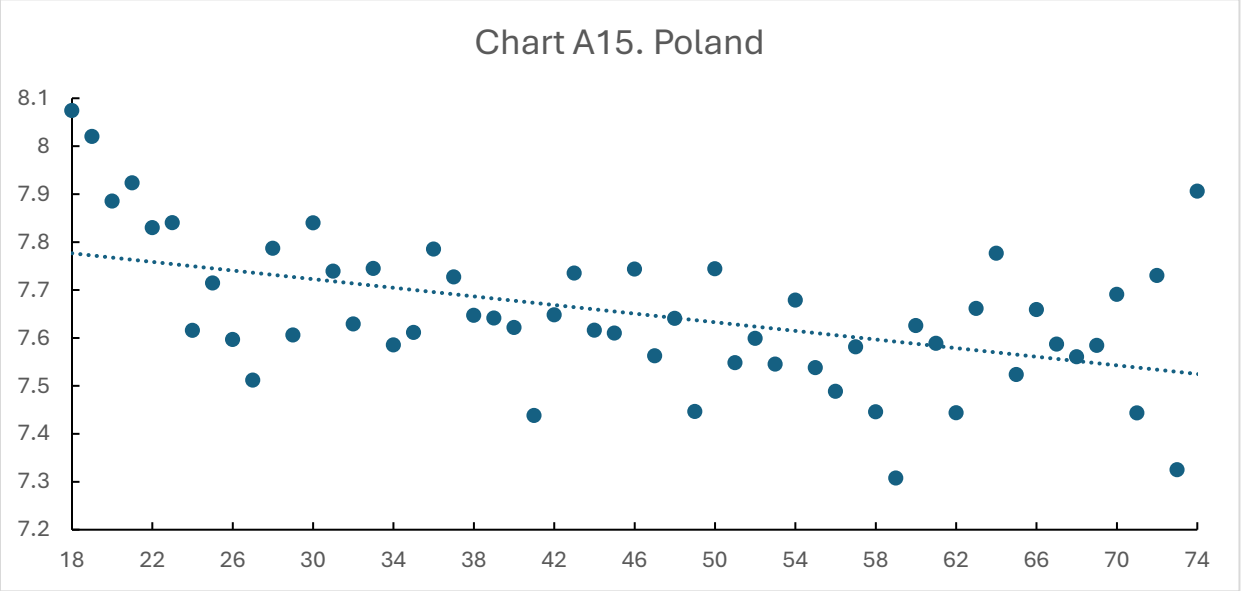
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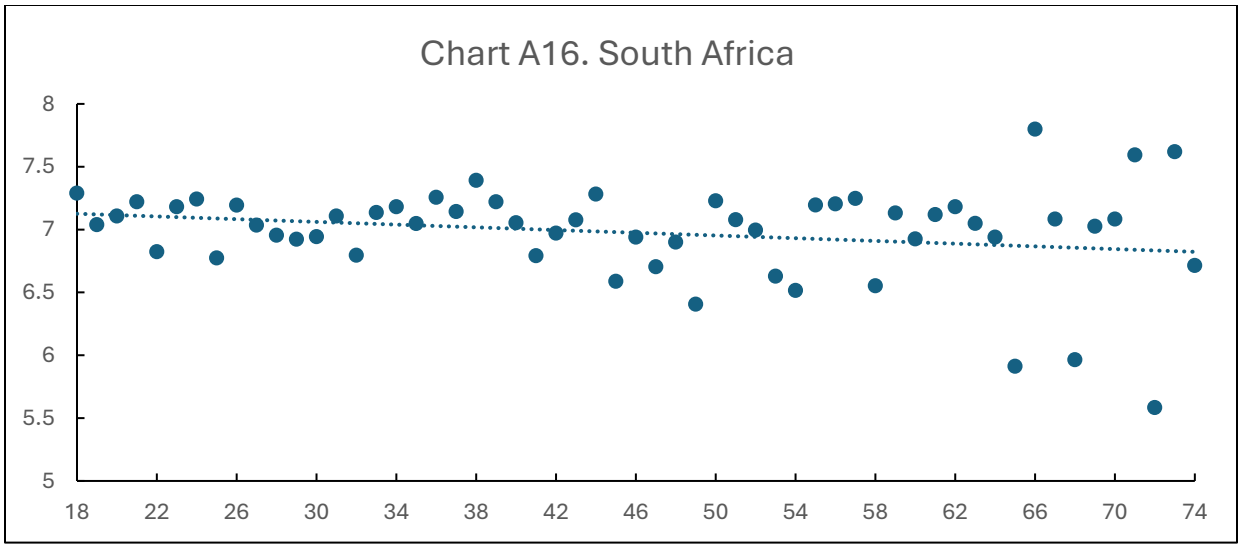
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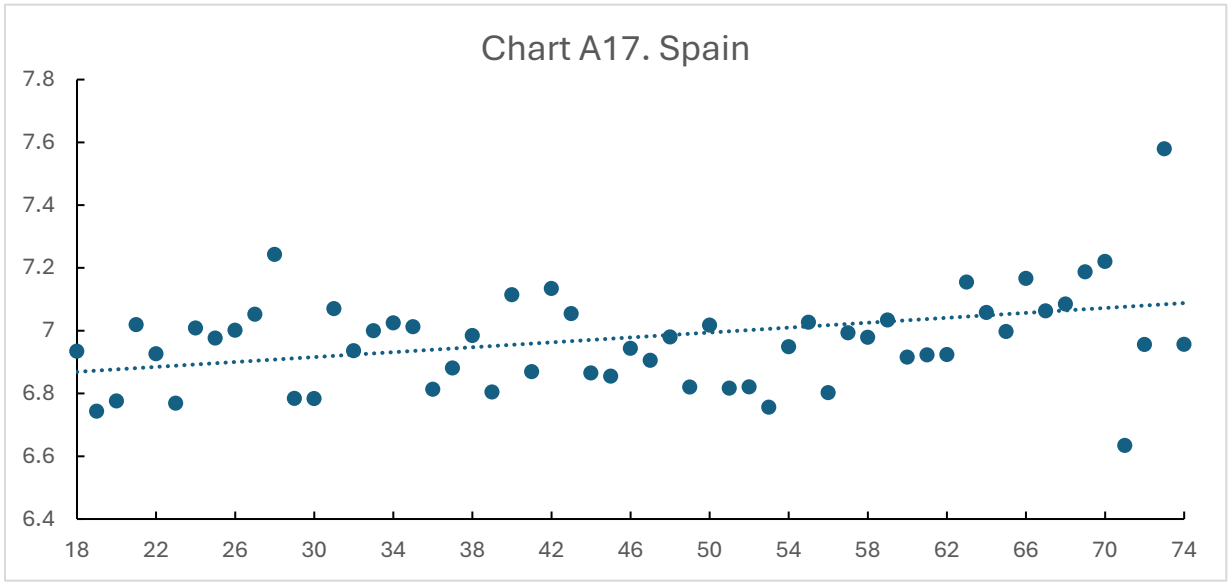
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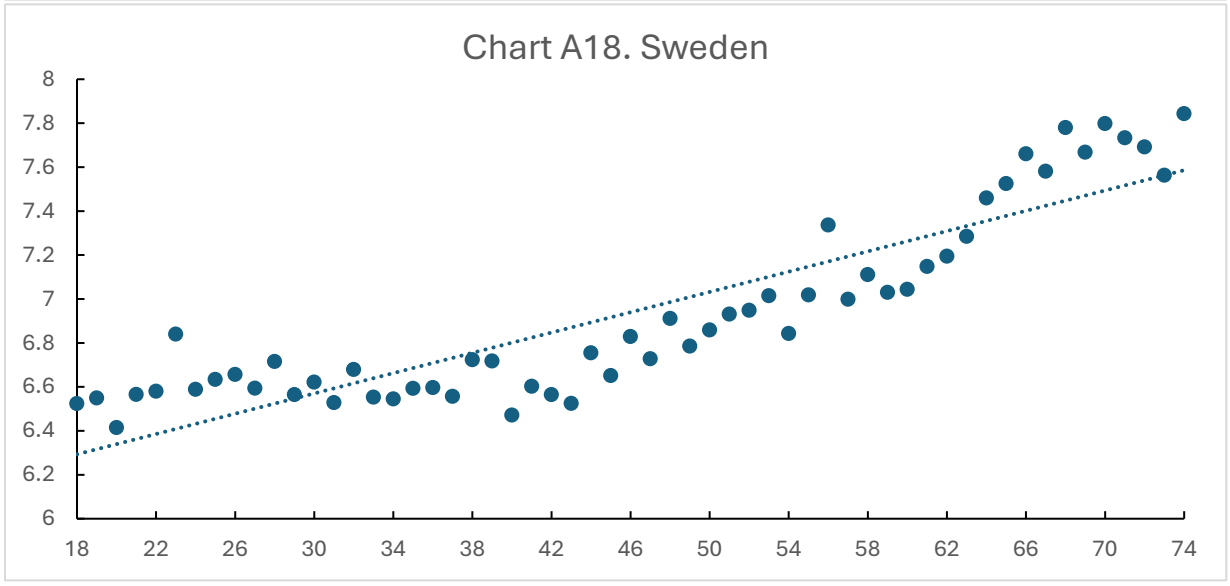
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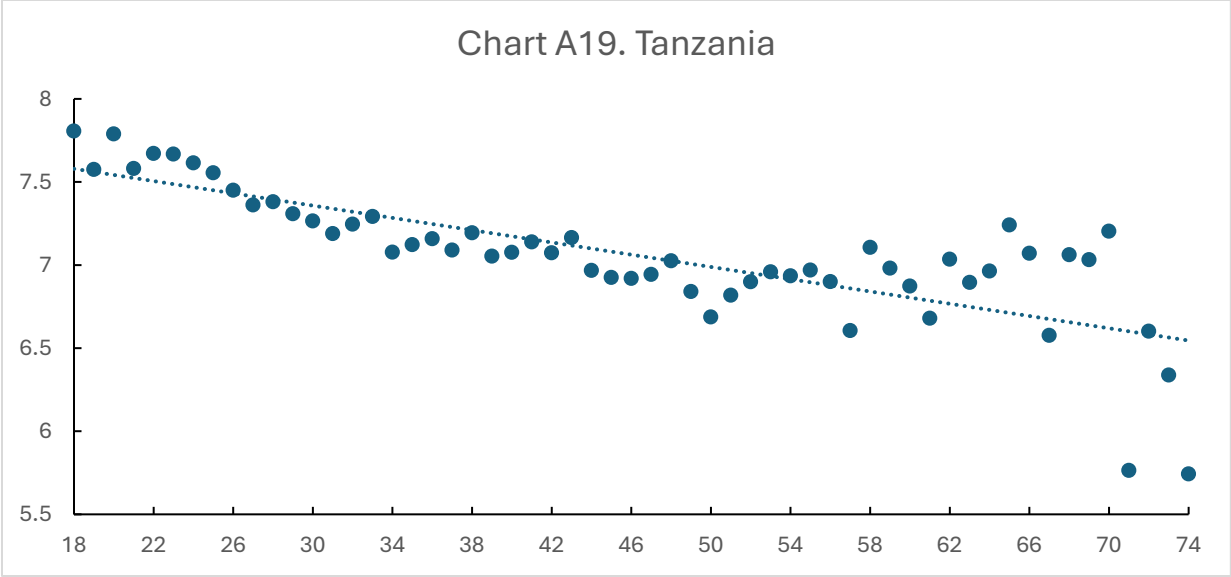
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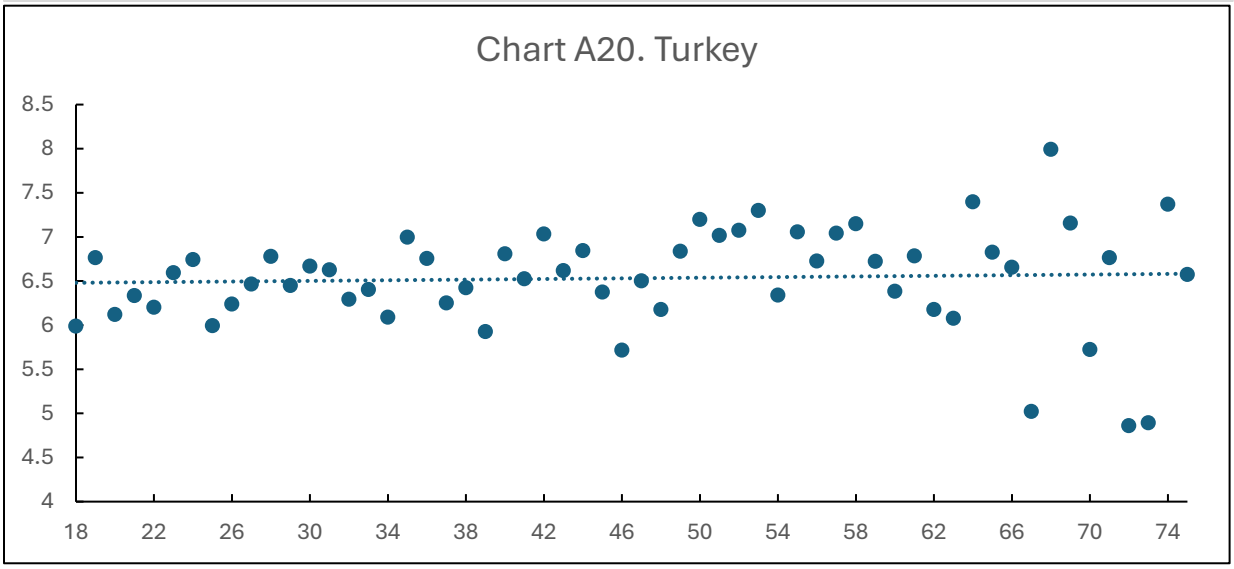
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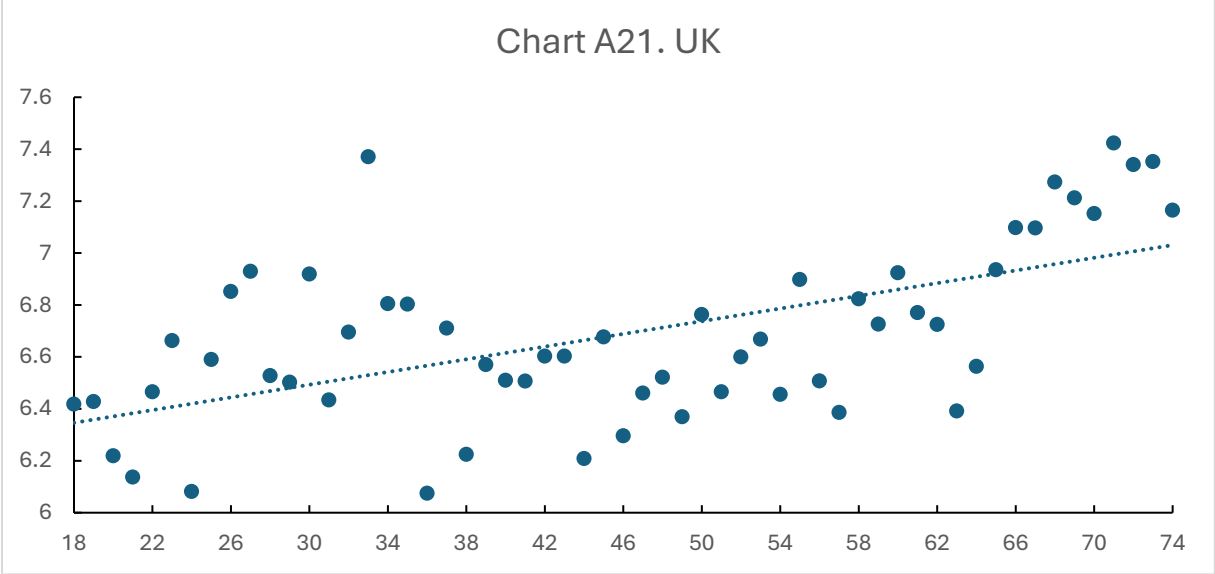
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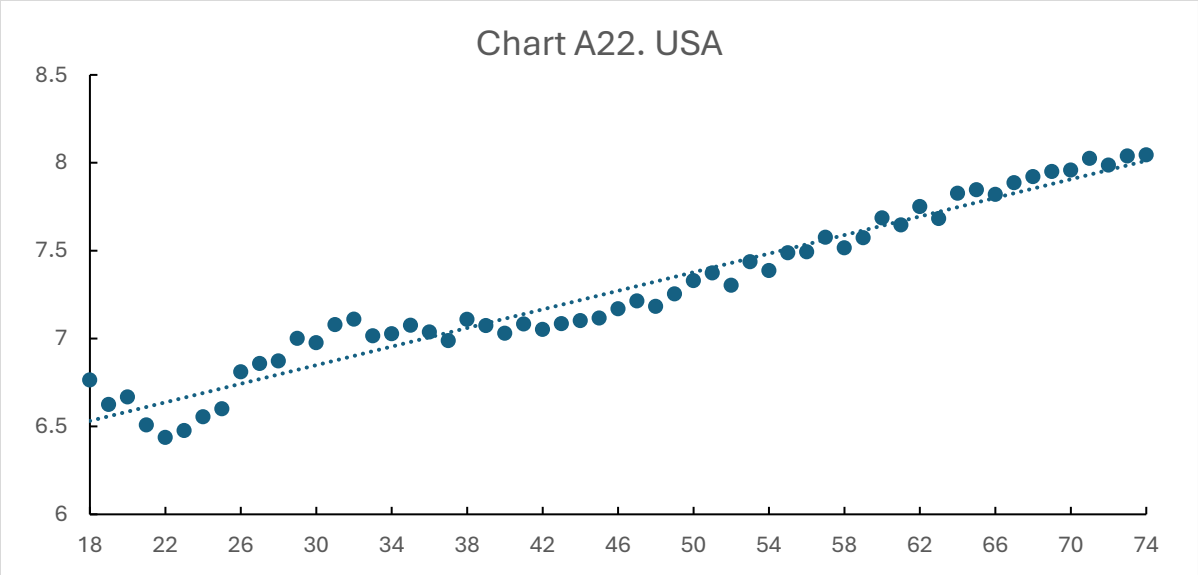
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