

How is Happiness Shaped Across the Lifespan?

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18th May 2026

For the *Handbook of Labor, Human Resources and Population Economics*, edited by Klaus F. Zimmermann, Springer.

Abstract

Happiness used to be U-shaped in age but now it rises over the lifespan globally. Unhappiness used to be hump shaped in age and now it declines over the lifespan. The change started prior to COVID. There has been a rapid decline globally in the well-being of the young. I explore why and when this started and how and my views changed on how wellbeing moved as people age. I examine wellbeing data from 65 countries. The evidence is based on data from both the Global Minds survey 2020-2026. The Gallup World Poll surveys 2020-2025 collected face-to-face by interviewers in 45/65 countries finds no evidence of low youth well-being. In contrast of the 56 samples which used phone interviews, eight found low worker well-being. In the Global Minds that where data was collected online every had lower worker well-being. In an attempt to break the tie, I examined data on not flourishing from the Global Flourishing Study on 16 of the 65 countries of these 5/12 showed low youth well-being with CATI samples and 11/16 find the same with CAWI samples. I conclude happiness rises over the lifespan.

"Since the mid-20th century, mental illness has become a leading cause of health burden, particularly among adolescents and emerging adults, with most disorders emerging before the age of 25. Over the past two decades, mental ill health has surged to alarming levels, with evidence confirming that the increase is not just due to better awareness or diagnosis but reflects a genuine public health crisis."
(McGorry et al, 2025, p.1)

Happiness used to be U-shaped in age but now it rises over the lifespan. Unhappiness used to be hump shaped in age and now it declines over the lifespan. The change started prior to COVID. There has been a rapid decline globally in the well-being of the young. I report evidence across 65 countries and explore why and when this started and how and my views changed on how wellbeing moved as folks age.¹ The evidence is especially strong from online surveys.

1. Introduction

I spent the first twenty-five years of my academic career focusing on wages and especially on how it was impacted by both insider and outsider forces. The Mincerian earnings equation (Mincer, 1974) provided a good fit for wage data from around the world. Wages rose with schooling, experience and age and varied by industry and location. The unemployment rate entered negatively into wage equations.² A wage equation in the UK looked much like one in Bolivia, Italy, France and Germany. There were stable and consistent patterns in the data. Until there wasn't.

Around 2000 I began to look at wellbeing micro data and first started looking at, and being impressed by, wellbeing data initially in Eastern Europe (Blanchflower and Freeman, 1997 and Blanchflower 2001) using data from the World Values Survey and the Eurobarometer survey files.

I recall being impressed that there was evidence that happiness data was in fact, reliable and valid. Self-reported measures are recognized to be a reflection of at least four factors: circumstances, aspirations, comparisons with others, and a person's baseline happiness or dispositional outlook. Evidence that recorded happiness levels have been demonstrated to be correlated with the following (Blanchflower and Oswald, 2004),

1. Objective characteristics such as unemployment.
2. The person's recall of positive versus negative life-events.
3. Assessments of the person's happiness by friends and family members.
4. Assessments of the person's happiness by his or her spouse.

¹ The countries are Algeria, Argentina, Armenia, Australia, Bangladesh, Belgium, Bolivia, Brazil, Cameroon, Canada, Chile, Colombia, Congo DR, Costa Rica, Dominican Republic, Ecuador, Egypt, El Salvador, Finland, France, Germany, Ghana, Guatemala, Honduras, India, Iraq, Ireland, Israel, Italy, Ivory Coast, Japan, Jordan, Kenya, Kyrgyzstan, Madagascar, Malaysia, Mexico, Morocco, Mozambique, New Zealand, Nicaragua, Nigeria, Pakistan, Panama, Paraguay, Peru, Philippines, Portugal, Saudi Arabia, Singapore, South Africa, South Korea, Spain, Sri Lanka, Tanzania, Tunisia, UK, Ukraine, United Arab Emirates, Uruguay, USA, Uzbekistan, Venezuela, Yemen, Zimbabwe,

² It no longer does so as I have documented in other work!

5. Duration of authentic or so-called Duchenne smiles (a Duchenne smile occurs when both the zygomatic major and orbicularis oris facial muscles fire, and human beings identify these as 'genuine' smiles).
6. Heart rate and blood-pressure measures responses to stress, and psychosomatic illnesses such as digestive disorders and headaches.
7. Skin-resistance measures of response to stress.
8. Electroencephelogram measures of prefrontal brain activity.

In fact, I rapidly came to realize that there were patterns in the well-being (and ill-being) data, no matter how happiness was measured after spending some time looking at the General Social Surveys. That survey included a 3-step happiness measure

Q1. *'Taken all together, how would you say things are these days—would you say that you are very happy (=3), pretty happy (=2), or not too happy (=1)?'*

The World Values Survey question was a 4-step happiness measure.

Q2. *Taking all things together would you say you are: not at all happy (=1), not very happy (=2), quite happy (=3), very happy (=4)?'*

They contrasted with the 4-step life satisfaction measure used in the Eurobarometer surveys

Q3. *On the whole, are you very satisfied (=4), fairly satisfied (=3), not very satisfied (=2), or not at all satisfied (=1) with the life you lead?'*

I quickly realized that what we can call happiness and life satisfaction equations, all had a broadly similar structure. There were indeed patterns in the data. Happiness equations for the US look like those for European countries. In particular I saw five main things in all these data files.

- 1) Well-being was broadly flat over time
- 2) Work made people happy and the unemployed were unhappy. Unemployment is involuntary.
- 3) There were mixed gender effects
- 4) There were country patterns; the Scandinavian countries such as Sweden and Finland were happy and East European countries such as Bulgaria and Romania were unhappy.
- 5) Happiness was U-shaped in age, as indicated by the inclusion of an age term and an age squared term, the former being negative and the latter positive, implying a U-shape. This was first documented in Blanchflower and Oswald (2004).

Subsequently in Blanchflower and Oswald (2008) that U-shape pattern was documented using data from the World Values survey in 55 countries. Subsequently (Blanchflower 2021a) I showed the pattern existed in 145 countries in a dozen international datasets. In Blanchflower, Graham and Piper (2023) we documented that the U-shape was reported in over 600 published papers across numerous countries and datasets. It didn't matter whether the variable was scored from one to three or from zero to ten, or whether it referred to happiness or life satisfaction or even measures of financial satisfaction or living standards or family life (Blanchflower 2020, Easterlin et al, 2010), the results were the same. As far as I could tell at the time this was one of the most important and stable patterns in social science. Until it wasn't.

Chart 1 illustrates the U-shape in age. It simply plots the relation between 4-step life satisfaction and age using Eurobarometer data across EU countries derived from a simple regression on single year of age and gender, plus a full set of country and year dummies for the period 1973-2019. Sample size is 2,799,471 and includes 36 European countries. It simply takes the individual coefficients and adds them to the constant. The resulting function slopes down to a minimum around age fifty-eight and then picks up. It looks more like a reverse tick than a U-shape.

A simple alternative, that many authors have used is to run the same life satisfaction regression and include age and its square as controls. Doing this we get $-.01599 \text{ Age } (t=133.3) + 0.001328 \text{ Age}^2 (t=107.7)$, with a sample size of 2,799,471 with gender, year and country controls. If we differentiate with respect to age and solve this gives us a minimum of age 60 for the function.³ We plot that function in **Chart 1**. Both functions minimize in midlife.

I also realized that there were comparable patterns in unhappiness data. In Blanchflower and Oswald (2008) I started to explore data on ill-being. I saw evidence from the 2001 Eurobarometer #56.1: Social Exclusion and Modernization of Pension Systems (ICPSR #3475) conducted between September and October 2001. This survey collected identical survey information from approximately 15,500 individuals living in Austria; Belgium; Denmark; East Germany; Finland; France; Greece; Italy; Ireland; Luxembourg; the Netherlands; Portugal; Spain; the UK; Sweden and West Germany. I examined distress⁴ and found it was hump-shaped in age (Table 8). Analogously I found the same pattern in depression and anxiety data from the UK Labour Force Surveys for 2004Q2-2007Q1 (Table 7 and Figure 1).

Chart 2 reports the results of regressing the variable obtained from summing the six variable and creating a GHQ-N6 variable with values between 0 and 18 as in Blanchflower and Oswald (2008) but instead of including age and age squared terms I include single year of age dummies. I also included gender and country dummies and extracted the coefficients and added them to the constant and plot. There is a hump shape with a peak around age fifty. That was how I thought about how wellbeing moved over the lifespan until 2023.

For the next fifteen years or so I continued to argue in numerous papers that it was obvious how happiness and unhappiness were shaped across the lifespan (Blanchflower, 2021a, 2020, Blanchflower, Graham and Piper, 2023 and many others). The young were especially happy, there was a midlife crisis, so happiness reached a low in midlife, and then rose through later life. Unhappiness was the converse being hump-shaped, with an equivalent peak in midlife.

It wasn't clear what happened in old age. There was quite a drawn-out debate about whether there were further peaks and troughs in later life, and the function was more complicated than a U-shape (Laaksonen, 2018). There were also critics. Galambos et al, (2021) argued that increasing the

³ Calculated as $-.016/(2*.00013)=60$

⁴ The depression measure was calculated by amalgamating the following six variables. To the answers to each of these, we assign the integers 0,1,2,3 depending upon whether each was answered not at all, no more than usual, rather more than usual, much more than usual. - 1. Lost much sleep over worry? 2. Felt constantly under strain? 3. Felt you could not overcome your difficulties? 4. Been feeling unhappy and depressed? 5. Been losing confidence in yourself? 6. Been thinking of yourself as a worthless person?

scale of the plot in **Chart 1** took the U-shape away, despite the fact that the two age variables had t-statistics of over 100 (see their amazing Figures 2 and 3). That of course made no sense (Blanchflower and Graham, 2021, Blanchflower, 2021b).

Hudomiet et al (2023) settled the matter for me, using life satisfaction data for the US from the Health and Retirement Survey.⁵, showing that there was a mortality selection bias that had to be adjusted for. Happy people, defined as whether they said they were satisfied with their lives, live longer. Once that adjustment is made, well-being declines in old age driven by deaths of a spouse and low well-being in the last three years of life. *"According to this non-parametric estimate of the longitudinal age profile, life satisfaction declines with age from 3.91 at age 65 to 3.52 at age 89, a decline of 0.39 (or 0.45 standard deviation). This is in contrast with the cross-sectional profile (short-dashed line) that shows a modest increase from age 65 to 71 and flatness after that".* (p. 437).⁶

The work by Case and Deaton (2020) suggested that the evidence on morbidity showing high ill-being in midlife, tracked mortality. Deaths of despair also peaked in midlife. That is deaths from drug overdoses, alcohol poisoning and suicide. So, morbidity and mortality tracked each other. As I note below, the hump shaped pattern in drug overdoses and suicide still remain.⁷

As a labor economist my main interest has been in the wellbeing of those of working age, from approximately age 18. Most of the work I did in fact focused on individuals from age 18-75. I had little academic interest in the wellbeing of children, but I do now for reasons I explain below. Recent work using the GSOEP and the UK Understanding Society longitudinal household panel survey examined how life satisfaction changes between ages 10 and 24. Orben et al (2022) found that *"adolescence harbours the steepest and most pronounced drops in life satisfaction across the whole adult lifespan in both datasets, and that this drop is steepest before the time frame normally studied by longitudinal surveys (16–18 years or older)."* So, children were happier than adults. Life satisfaction declines in adolescence

2. Bye Bye U-shape

Then along came COVID, a global pandemic and associated lockdowns. Kids were unable to go to school. I taught my Dartmouth classes online. Everyone feared the wellbeing of the young was going to fall and so it did. My colleague Doug Staiger who has the office next to mine asked me one day if I had seen the interview that Jean Twenge with Ezra Klein in the New York Times⁸ The interview made me sit up. This is what Jean said.

"So, around 2012, more and more teens started to say they felt lonely and left out. And more started to say they felt like they couldn't do anything right, or that they didn't enjoy life. Those last two are classic symptoms of depression. Then, other data started to pop up. Clinical level depression that requires treatment started to rise. Emergency room admissions for self-harm started to rise in C.D.C. data. Same

⁵ The question in the HRS was "Please think about your life-as-a-whole. How satisfied are you with it? Are you completely satisfied, very satisfied, somewhat satisfied, not very satisfied, or not at all satisfied?"

⁶ Years ago, my old friend John Abowd told me that the big deal with happiness was whether it predicted anything. Predicting longevity seems a pretty big deal.

⁷ See Garnett and Miniño (2023) and <https://sprc.org/about-suicide/suicide-data/suicide-by-age/>

⁸ <https://www.nytimes.com/2023/05/19/podcasts/transcript-ezra-klein-interviews-jean-twenge.html>

thing for suicide attempts and completed suicides. So, at first, I thought it might be a blip, a year or two of data. But it kept going. So, for example, between 2011 and 2019, well before the pandemic, clinical level depression among teens doubled. Emergency room admissions for self-harm tripled in 10 to 14-year-old girls. So, this is why I say we know it's not just the pandemic.

Golly, so I went and checked the data I had and found she was right. The well-being of the young had collapsed but the decline preceded COVID. I also learnt subsequently from the work of Jean and Jon Haidt that the mental health of children under the age of eighteen had also been declining from around 2013. It turned out the U-shape had gone. Jean and co-authors showed this in three US data sets (Udupa et al, 2023).

I first went to examine data from the Behavioral Risk Factor Surveillance System (BRFSS), one of the datasets examined by Udupa et al (2023) that I had previously worked on (Blanchflower and Oswald, 2020). I had seen a big rise in despair, based on those in the survey who gave the answer 30 to the BRFSS question “*Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?*”. In the US as a whole despair rose from 3.6% in 1993 to 6.4% in 2019. But I hadn't spotted, or even reported, the decline in youth well-being. My interest was in differences by gender, low education and the prime age.

Chart 3 shows the evidence. Despair of the young had been rising since around 2015 and the extent of this was so substantial it collapsed the U-shape. The chart plots the most recent data for the US which now shows that ill-being declines in age. The hump shape that existed in the years before 2020 was clearly hump-shaped. It shows the dramatic rise in despair of the young and much less change for those age fifty and above. In the years from 2020 onwards the hump-shape has disappeared. In Blanchflower, Bryson and Xu (2025) we found similarly for the UK. We also showed that the young were especially unhappy in 30 countries.⁹ The rise is especially marked among young, less educated women. The relationship between age and well-being had shifted and the U-shape had disappeared into the ether for several countries, the question then was how global this was.

In other work we also showed that that U-shape in happiness in several countries had also gone and happiness now rises in age in Western Europe (Blanchflower DG and Bryson A (2025a) and in six English-speaking countries (Twenge and Blanchflower, 2025). Other authors began documenting the decline in youth wellbeing around the world in Canada (Huang Helliwell and Norton, 2025), Australia (Leigh and Robson, 2025), Iceland (Thorisdottir et al, 2021), and Norway (Witoszek and Larsen, 2026).

We have now also shown that the disappearance of the U-shape in the US is driven by a dramatic decline in the well-being of young workers (Blanchflower and Bryson, 2026a, 2026b). We also showed this pattern in more than 100 countries. **Chart 4** illustrates for the USA. Despair among the non-workers remains hump shaped with the function moving upwards but retaining the same shape. For workers the function declines from left to right, but has risen sharply on the left-hand

⁹ Algeria, Angola, Argentina, Australia, Brazil, Canada, Chile, Colombia, Ecuador, Egypt, France, Germany, Guatemala, India, Italy, Iraq, Jordan, Mexico, Morocco, New Zealand, Nigeria, Pakistan, Paraguay, Peru, Philippines, Saudi Arabia, South Africa, Spain, Tunisia, United Kingdom, United States, Uruguay, Venezuela and Yemen

side, with young worker well-being rising markedly. We also showed this rise is especially marked among ages 18-21, less educated workers.

There has also been a dramatic decline in the wellbeing of children. Marquez et al (2024) recently documented declines in well-being of adolescents aged 15 in the PISA surveys across OECD countries. They report life satisfaction in 2015, 2018 and 2022 and document an overall decline in numerous countries between 2015 and 2018, which of course precedes COVID and then again from 2018 to 2022. Countries with data in all three years that showed declines in all three years were found in Austria, Brazil, Bulgaria, Chile, Colombia, Costa Rica, Croatia, Czechia, Dominican Republic, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Mexico, Netherlands, Peru, Poland, Portugal, Qatar, Slovakia, Slovenia, Spain, Switzerland, Thailand, Turkey, UAE, UK and Uruguay.¹⁰

The US saw a decline in life satisfaction for age 15 between 2015 and 2018. Of note also is that accompanying this decline in life satisfaction have been marked declines in test scores in these PISA surveys. But there is consistent evidence from the US that test scores fell prior to COVID and continue to fall (Dewey et al, 2026).

A major question is why has there been a deterioration in adolescent and youth well-being? Haidt (2024) has argued this has a great deal to do with the availability of the internet and smartphones and the timing is right. Their spread starts around 2013 as the youth mental health crisis takes off and it precedes COVID. Pugno (2025) established that this effect is causal showing that there are a number of papers that look at the random spread of broadband around the world that then track declining youth mental health especially among young women and girls. Pugno also noted that heavy users of social media were most likely to suffer negative effects as it took them away from beneficial activities. Twenge, Domino and Rio (2026) examined data on life satisfaction of 15 year olds in the PISA surveys and found *"among boys, heavy users of social media are more likely to report low life satisfaction and more likely to report very high life satisfaction, suggesting variation among heavy users that should be examined in future research. Among girls, the results are more straightforward, with light users reporting the highest life satisfaction and heavy users the lowest" (p.157).*

Twenge (2023) though has also noted that, in the US there is evidence of changes in societal changes among the young going back decades. This includes declines in the proportion of 8th and 10th graders who like doing dangerous things or taking risks (Figure 6.26). Plus, there has been marked declines in the percent of 8th, 9th and 12th graders who engage in adult activities such as having tried alcohol, gone on a date, had sex or a paid job (Figure 6.16 and 6.17). The proportion of 12th graders who have a driver's license (Figure 6.16) or 'prefer to have a mate' has been in decline for years.

3. Evidence on declining youth well-being around the world CATI v CAWI

The evidence of declines in youth well-being is especially apparent in the six English speaking countries of Australia, Canada, Ireland, New Zealand, UK and the USA. (Twenge and

¹⁰ Marquez et al (2026) also reports declines in life satisfaction among adolescents aged 15 in This was replicated also among 15-year-olds in the Health Behavior of School-aged Children (HBSC) surveys in multiple countries in 2013, 2017 and 2021.

Blanchflower, 2025). In addition, it is also notable in Western European countries Blanchflower and Bryson (2025a), i.e. Belgium, Denmark, Finland, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Sweden, Switzerland and Turkey. It turns out that the evidence on how happiness and unhappiness move over the lifespan differs depending on how the data have been collected. This did not matter in prior years when a U-shape was observed.

The issue here is whether the data is collected by interviewers, either face-to-face or via telephone. This is referred to as a Computer-Assisted Telephone Interviewing (CATI), a market research and polling methodology where live interviewers use computer scripts to conduct and log survey responses. The main alternative is referred to as Computer-Assisted Web Interviewing (CAWI), an internet-based survey research technique. CAWI is a data collection method where respondents to the survey complete surveys online via a browser or mobile app. It is a highly efficient, cost-effective survey method. The concern here is that young people especially are more optimistic with interviewers than they are online. There is a concern that, following Rickwood and Coleman-Rose (2023), there is social desirability bias. Over time we have seen that young people don't make phone calls or answer the phone. The issue that has to be addressed is the potential of sample selection bias.

The evidence as we will show below is much more mixed on the well-being of the young. Blanchflower (2025) noted for the US that the disappearance of the happiness U-shape and low youth wellbeing was apparent in multiple surveys and was consistent whether the data was collected by either CATI (BRFSS, General Social Survey) or by CAWI (US Household Pulse Surveys).¹¹ The evidence though is much weaker using CATI surveys outside of English speaking and European countries. It is unclear why. Reisinger (2022) suggests that this relates to issues of privacy; respondents are less likely to report intimate emotions to an interviewer, especially face-to-face.

Blanchflower (2026) has shown that there is evidence of low youth well-being in 20 countries with evidence from both CATI and CAWI surveys. Evidence was found for this in thirteen countries from Northern Europe – Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Netherlands, Norway, Spain, Sweden and Switzerland, plus the five other major English-speaking countries Australia, Canada, New Zealand, the UK and the USA and one from Latin America and one from Asia – Argentina and Indonesia. So the differences between CATI and CAWI survey results are largely for non-advanced countries.

The evidence on declines in youth well-being are particularly strong in CAWI surveys and this is consistent with the objective evidence. The All-payer IQVIA Longitudinal Prescription Database was analyzed by Chua et al, 2024 who found that the monthly anti-depressant dispensing rate for U.S. adolescents and young adults, for those ages 12-25 years increased by 66% from 2016 to 2022. Before March 2020, this rate increased by 17.0 per month. Between 2016 and 2022, the number of adolescents and young adults with ≥ 1 dispensed antidepressant prescription increased

¹¹ These include 1) National Health Interview Survey (NHIS), 1997-2018, 2) The National Health and Nutrition Examination Study (NHANES), 2013-2020 3) The National Survey of Drug Use and Health (NSDUH), 2004-2022, 4) American National Election Studies, (ANES) 2008-2020, 5) Healthy Minds (HM), 2007-2023. 6) Youth Risk Behavior Surveillance System (YRBS), 1999-2021 7) Youth Risk Behavior Surveillance System (YRBS), 1999-2021 8) National Survey of Children's Health, 2016-2020.

by 46.1%, from 4,633,433 to 6,768,106. “*Antidepressant dispensing to adolescents and young adults was rising before the COVID-19 outbreak and rose 63.5% faster afterward*”. This increase was driven by increased dispensing to females.

There is also evidence of 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, Leyenaar et al 2025, Yard et al, 2021). Hospitalization rates for adolescent eating disorders have risen six- to seven-fold since 2010.¹² Overall 9.5% of US high school students attempted suicide in the past year (Verlenden et al, 2024). In England, hospital admissions for mental health conditions among adolescents rose by 65% between 2012 and 2022, with a 113% yearly increase among girls aged 11–15 (Mahase, 2025). Cybulski et al. (2021) and Bertuccio et al (2024) and Bertuccio et al, (2025) and document rising youth suicide rates among the young in Europe. Social media poses both risks and opportunities: which Rodway et al (2020) have linked to 24% of youth suicide deaths in the UK (aged 10–19) especially among girls.

4. Empirical Evidence on Youth Well-being and Survey Mode in 65 Countries

I examine evidence on youth wellbeing using the two main international datasets that contain conflicting data on well-being in these 65 countries. I try to reconcile these differences from a third micro dataset that has data on 16 of the 65.

- 1) The Gallup World Poll, 2005-2025 (GWP). This is a micro, CATI survey that samples approximately 1000 observations per country no matter its size. So, the USA with a population of 340 million has approximately the same sample size as Belgium, with a population of 12 million. We examine data from 2020-2025. In the years from 2020 there are 849,062 across approximately 150 countries. The GWP contains one well-being variable with eleven steps coded from 0-10 (the Cantril life evaluation measure used in the World Happiness Report (<https://www.worldhappiness.report/ed/2026/>), plus several yes/no variables including smile, enjoy, worry, sadness and pain. We also focus on *worry*. The survey also identifies whether the interview was conducted face-to-face or by phone. In most of the 65 both are used but in 8 only phone interviews are used. We find this makes a difference. All of the countries where we find evidence of lower youth well-being the data were collected by phone e.g. Australia, Canada, Finland, India, New Zealand, Saudi Arabia, Singapore and the USA.
- 2) Global Minds, 2020-2026 (GM). This is a CAWI survey where data is collected online. Overall, there are 2,257,499 million observations for over 200 countries. Of these 69 countries have more than 4000 observations and 100 have less than 250 observations. The survey contains multiple well-being variables. We focus on an MHQ score coded from -100 to +200 and feelings of sadness, distress or hopelessness coded from 1-9.¹³

¹² Erin Digitale 'More kids are being hospitalized for eating disorders -- researchers learned why', Stanford Medicine. January 18th 2024, <https://med.stanford.edu/news/insights/2024/01/kids-hospitalized-eating-disorders-why.html>

¹³ The MHQ score results are classified as follows -100 to <-50=distressed. -50 & <0=struggling; 0-<50=enduring, 50 to <100=managing' 100 to <150=succeeding and 150+ thriving. <https://sapienlabs.org/mhq/>

- 3) Global Flourishing Study 2022-2024 (GFS). This is a survey that conducted interviews in 17 of the 65 countries we examined. In five of them – Australia, Germany, Spain, the UK and the USA - only CAWI surveys were conducted but in eleven subsamples of both modes were included – Argentina, Brazil, Egypt, Israel, India, Japan, Kenya, Mexico, Nigeria, Philippines, South Africa and Tanzania. It turns out that survey mode makes a difference with youth wellbeing more apparent in CAWI surveys. We focus on a not flourishing variable defined and used in Blanchflower and Bryson (2025b).

We examine the data from these surveys in an attempt to determine how happiness varies across the lifespan. The evidence is much stronger that the young are in trouble from CAWI surveys than from CATI (Blanchflower, 2026a). The question is what to believe?

In what follows I focus on 65 countries that are in both the GWP and have at least 4000 observations in GM in the years since 2020. Across these 65 countries the GWP has 406,642 observations with approximately 1000 observations per year per country. India has 31,249 while the USA has 6002. The GM is an online survey has 2,160,769 observations on these 65 countries all of which have at least 4000 observations. India has the largest sample size with 247,000 observations, with four other countries with over 100,000 observations (USA (n=140,556), Egypt (n=121,557), Mexico (n=110,327), Argentina (n=100,661)).¹⁴ Average sample size is 33243 in GM and 5928 in the GWP sample.

The countries are listed below with four from Eastern Europe, seven from Western Europe, eighteen from Latin America, fifteen from Asia and the Middle East, six English speaking and fifteen from Africa.

E Europe	W Europe	Latin America	Asia	English speaking	Africa
Armenia (69)	Belgium (10)	Argentina (47)	Bangladesh (130)	Australia (7)	Algeria (96)
Kyrgyzstan (117)	Finland (12)	Bolivia (108)	India (130)	Canada (16)	Cameroon (155)
Ukraine (87)	France (26)	Brazil (84)	Iraq (126)	Ireland (11)	Congo DR (171)
Uzbekistan (107)	Germany (5)	Chile (45)	Israel (27)	NZ (17)	Egypt (100)
	Italy (29)	Colombia (83)	Japan (23)	UK (13)	Ghana (143)
	Portugal (40)	Costa Rica (62)	Jordan (100)	USA (17)	Ivory Coast (157)
	Spain (28)	Dominican R (89)	Malaysia (67)		Kenya (143)
		Ecuador (88)	Pakistan (168)		Madagascar (183)
		El Salvador (132)	Philippines (117)		Morocco (120)
		Guatemala (137)	Saudi Arabia (37)		Mozambique (182)
		Honduras (139)	Singapore (13)		Nigeria (164)
		Mexico (81)	South Korea (52)		S. Africa (106)
		Nicaragua (123)	Sri Lanka (89)		Tanzania (165)
		Panama (59)	UAE (15)		Tunisia (105)
		Paraguay (99)	Yemen (184)		Zimbabwe (153)
		Peru (79)			
		Uruguay (48)			
		Venezuela (121)			

¹⁴ We exclude from GM sample all countries with under 4000 observations. In the GWP two countries are excluded with sample sizes of <1000.

In parentheses the rankings from the UN Human Development Report are provided. Out of the 65 countries 28 rank number 100 or higher.¹⁵ Many of these countries are poor.

I make use of four main well-being measures, two each from the GWP and GM. One positive and one negative affect variable for each. In the case of GM Cantril's life evaluation measure is widely used. The English wording of the question is

Q1. *“Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?”*

We also make use of a negative affect measure in the GWP.

Q2. Worry " *Did you experience the following feelings during a lot of the day yesterday? How about worry—Yes/No?*"

In the GM we make use of an MHQ score well-being variable variable coded from -100 to + 200. The higher the score the higher is wellbeing. The MHQ is an aggregate mind health or mental health score that integrates ratings across 27 mental capacities and 20 problem items. The score is on a negative-positive scale, where negative scores indicate a likely clinical diagnosis and typically 5 or more symptoms, while overall scores across the scale relate linearly to productive days. The MHQ algorithm is not a simple summation or averaging across its components but rather involves a nonlinear algorithm that is described in Newsom, Sukhoi and Thiagarajan (2024).

We also make use of a 'negative affect' variable indicating sadness which is scored from 1-9.

Q3. Feelings of sadness, distress or hopelessness - *“Experiencing overwhelming feelings of unhappiness, sorrow and hopelessness, or having spells of uncontrollable crying”*.

In the Global Flourishing Survey we have data on 17 countries of which 11 have subsets of data collected by both CATI and CAWI, while five Australia, Germany , Spain, UK and USA are entirely collected online.

The way I examine the well-being of the young is first to run a regression, pooled across all 65 countries for each of the four variables and two datasets with controls for gender, year and country. Age is included in eight bands, with the excluded category ages 18-24. I then repeat the regressions in part b) replacing the eight age bands with a single age 18-24 variable. In part this is to show that the second, simpler regression allows us to compare the wellbeing of the young compared to older age groups. In each case the second column adds controls for education and labor force status. Adding these variables has only a minimal impact on coefficient size and none at all on sign.

¹⁵ <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>

Table 1 reports the results. Part a) uses data from the GM survey. In the first two column the MHQ score rises in age with some reduction in the coefficients when controls are added. Of note is that females have lower MHQ scores. In columns 3 and 4 for sad and hopeless, consistent evidence is found. Sadness and hopelessness decline in age. Females have higher levels of unhappiness. The single age 18-24 variables in part b) are significantly negative for MHQ and significantly positive for sadness.

Table 2 now repeats the exercise using Cantril and then worry from the GWP. The results are exactly the *opposite* to those using GM. In column 1 with basic controls, life evaluation declines in age and that is the case in column 2 with more controls. In columns 3 and 4 worrying rises in age and in part b) the young have higher life satisfaction and lower levels of worrying. Plus, in each case females have lower wellbeing and higher illbeing than men, exactly the opposite to what is seen using GM in **Table 1**.

I explore this issue in more detail and estimate 65 separate country-level equations using GM and then GWP. I report coefficient, t-value and sample size for each of the 65 countries in **Table 3**. Starting with the GM country level results, in *every* case the age 18-24 variable is significantly negative. When the country sample is pooled the 18-24 variable is significantly negative for GM.

A recent paper examined the well-being of the young using data from the 2023-2025 Gallup World Poll. Helliwell, Aknin et al (2026), and found that

"Subjective wellbeing of the young has fallen dramatically since 2011 in the United States, Canada, Australia, and New Zealand, with very limited evidence of corresponding changes elsewhere. " (p. 41)

Those findings are replicated in **Table 3** where significant negatives are found for these four countries plus Finland, Saudi Arabia, Singapore and the UK, making 8/65. Of the remainder 12/57 countries six had insignificant coefficients on the youth variable – Algeria, Belgium, Brazil, France, Germany, Ghana, Ireland, Madagascar, Nigeria, Spain, UAE and Uzbekistan. The remaining 45/65 had significant positives.

Chart 5 reports the results of regressing Cantril on single year of age dummies, gender and year using GWP data. I extract the coefficients and add them to the constant. I estimate first for the period 2005-2019 (n=1,017,974) and then for 2020-2025 (n=401,154). In both cases the functions slope *down* from left to right. The function for the later period is lower across the whole distribution, suggesting happiness has declined over time. But it says wellbeing declines in age while it increases in age in GM.

The GWP collects data using three survey methods – face-to-face (57.6%), telephone (41.7%) and web (0.7%). The distribution by country is reported in **Appendix 1**. In **Table 5** we report the results of regressing cantril on an age18-24 dummy, along with gender and year, separately depending if the survey was collected face to face or on the phone. Of note is that there is not a single significant negative in the first column. *All* of the nine negatives are from phone interviews. Of particular note is that India has a positive face to face and a negative when the phone is used.

Of the 65 countries we examined here 16 of them were also included in the Global Flourishing Study of 2022-2024.¹⁶ Of note in that survey is that 7 countries were only sampled by CAWI methods, but the remaining 16 countries had data collected using both methods. Of the sixteen GFS countries there was evidence of low youth effects in **Table 5** for three of the sixteen - Australia, UK and USA using the GWP and for all sixteen using GM. The GFS has data available on not flourishing as used by Blanchflower and Bryson (2025b) which is the sum of four negative variables which are coded 1-4, so it varies from 4 to 16 with an unweighted mean of 7.45.

Q4. Anxious - feeling nervous, anxious or on edge – 1=not at all, 2=several days, 3=more than half, 4=nearly every day.

Q5. Depressed - Feeling down, depressed or hopeless– 1=not at all, 2=several days, 3=more than half, 4=nearly every day.

Q6. Worry - Not being able to stop or control worrying– 1=not at all, 2=several days, 3=more than half, 4=nearly every day.

Q7. No Interest - little interest or pleasure in doing things– 1=not at all, 2=several days, 3=more than half, 4=nearly every day.

Q8. Not flourishing is (Anxious+Depressed+Worry+No interest)/4.

Table 5 reports estimates taken from a series of not flourishing equations, for the 16 countries, separately by survey mode. The evidence of positive youth and significant coefficients, implying significantly high youth unhappiness is found in five countries using CATI – Argentina, Brazil, Japan, Mexico and South Africa. High youth unhappiness found in 13/16 using CAWI sampling methods. The only exceptions are Kenya which has a significant negative coefficient and insignificant ones for Egypt and Tanzania. So there is evidence of high unhappiness rates in 13/16 with the only exceptions being Egypt, Kenya and Tanzania.

Of note is that Blanchflower and Bryson (2025c) examined responses to 40 questions using the GFS for a sample of seven countries in Asia and the Middle East – including three of our 65 countries - Israel, Japan and the Philippines plus four others - Hong Kong, India, Indonesia and Turkey. Separate equations were estimated to obtain coefficients on age 18-24 variable by CATI and CAWI. For 20 emotional variables such as happiness, life satisfaction, worthwhile, suffering or loneliness the CATI sample showed the young were happier while the CAWI sample showed they were less happy. For more objective criteria such as exercise, drinking and smoking there was no difference. It seems using CATI sampling generates a more optimistic response than CAWI. It seems the CAWI results are more consistent with objective evidence.

The findings from both the GFS and GM are not the same as those from the GWP. They suggest the young are especially unhappy which is not what is found in the GWP. In part it is likely that the sample is CATI in the GWP and young respondents are overly optimistic. Another possibility is that the GWP suffers from sample selection bias, excluding young unhappy young people. The GWP evidence is more supportive when telephones are used than they are with face to face interviews. Privacy may well be an issue here.

5. Conclusions

¹⁶ 16/23 of the GFS countries are included in the sample of 65 countries we examined - Argentina, Australia, Brazil, Egypt, Germany, Israel, Japan, Kenya, Mexico, Nigeria, Philippines, South Africa, Spain, Tanzania, UK and USA.

My dear old friend Klaus Zimmerman, the editor of this volume, who I have known for decades asked me to write a chapter for him on how happiness varies by age. He told me that what was expected is an academic review and evaluation of the state-of-the-art in the literature. He wanted an evaluation *"using global knowledge, NOT a usual research article and not focused on a particular country"*. Good idea and I have tried to do that. What I have written is clearly global and is totally different compared with what I would have written just two years ago.

For two decades from around 2003 to 2023 I would have written about the extensive global literature showing that happiness was especially high among the young, declined through middle age and then picked up again. Hudomiet et al (2023) persuaded me, using US data from the Health and Retirement Survey that after age 65 happiness predicted longevity and once mortality selection bias was adjusted for, happiness probably fell through death driven especially by low happiness in the last three years of life. COVID seemed hugely important and likely knocked happiness especially among the young who were stuck at home during the lockdowns. I spent two years teaching my students by zoom from Florida. Then my house was hit head on by a Cat5 hurricane bringing 7 feet of water under my house but that is a story for another day.

Jean Twenge was the first to note that there had been a collapse in the well-being of the young in the US and I had to rethink everything. Suddenly the U-shape had gone. The unhappiness function in despair in the US rose sharply on the LHS and resulted in a downward slope in age in unhappiness (**Chart 3**). With my co-authors Alex Bryson and Xiaowei Xu (2025) we found the U-shape had also gone in the UK and thirty other countries. The search was then on to see if that was true elsewhere. Pedro Conciaco at the UNDP commissioned us to find out if other countries hadn't seen a collapse, and if so, what institutions were successful in preventing it. We were disappointed and didn't find any. The collapse in test scores among 15 year-olds globally along with declines in their life satisfaction was disappointing.

The evidence on the well-being of the young is exactly the opposite in the Gallup World Poll than it is in Global Minds over the years 2020-2026. The former is a CATI survey conducted by interviewers. Out of the 65 countries we examined in **Table 4**, a total of 45 conducted interviews face-to-face and not a single one of the 65 countries reported low well-being of the young. In contrast of the 56 samples which used phone interviews, eight found low worker well-being. In the Global Minds that where data was collected online every had lower worker well-being. In an attempt to break the tie, I examined data on not flourishing from the Global Flourishing Study on 16 of the 65 countries of these 5/12 showed low youth well-being with CATI samples and 11/16 find the same with CAWI samples.

The question is what to believe. Below I report in the first two columns Cantril by age for the years since 2020. If I take the Gallup World Poll data and impose weights (*wgt*) with sample of 65 countries, Cantril declines in age. I repeat that using GFS on a subset of 16 countries also with Cantril also with weight imposed (*annual_weight_c1*). The levels of Cantril in the GFS sample are somewhat higher given the selection of only 16/65 countries: the age pattern is the most important. Cantril in the GFS now rises in age. In the final column we see the same pattern in the GM data. I discount the GWP evidence. Well-being rises in age

GWP	GFS	GM
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18-24	5.72	6.09	24
25-34	5.60	6.05	46
35-44	5.51	6.07	65
45-54	5.55	6.17	80
55-64	5.62	6.48	93
65-74	5.88	6.81	103
75+	6.21	7.15	111
N	386,365	165,562	2,265,036

I do then have to decide what I believe. I now give relatively little weight to the evidence from the Gallup World Poll (Blanchflower, 2024). Samples are small, especially for large countries, and do not appear to be nationally representative. In Blanchflower and Bryson (2024b) we found that the survey's well-being measures did not decline during the Great Recession or COVID-19, which seems unlikely to reflect reality, given that most other surveys show declines. The timing of the survey varies by month within and between countries. It is a major concern that sample sizes for very large countries like the US are comparable to those of much smaller countries at around 1000 a year.

I took the microdata from Gallup's U.S. Daily Tracker (USDT) for the period 2008-2017 (n=3,530,270) and also the microdata from the GWP for the United States (n=12,231). Both contained the same controls. There are marked differences, for example in the Cantril's ladder, which was higher in the GWP than in the USDT (7.08 versus 6.90).

In the end what do I conclude about how happiness is shaped across the lifespan? I believe the evidence from the Global Minds Survey in particular on how MHQ score varies across the lifespan, (backed up by data from the GFS). MHQ is 24 for the young and averaged 81 for those 25 and over. Klaus, my friend, my judgment is that now happiness rises in age while unhappiness declines in age over the lifespan. The U-shape has gone.

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Table 1. Wellbeing using Global Minds for GWP countries, 2020-2026 (65 countries) – all include year dummies

	MHQ	MHQ	Sad and hopeless	Sad and hopeless
a) 7 age dummies				
25-34	20.06 (125.65)	12.97 (69.28)	-.4936 (77.79)	-.3073 (40.85)
35-44	38.57 (246.45)	30.00 (154.98)	-1.1279 (181.30)	-.8852 (113.84)
45-54	54.90 (359.25)	46.07 (239.81)	-1.6595 (273.16)	-1.4040 (181.96)
55-64	68.60 (455.71)	60.09 (308.75)	-2.1192 (354.14)	-1.8612 (238.08)
65-74	80.48 (483.60)	70.98 (305.65)	-2.5382 (383.65)	-2.2314 (239.23)
75-84	89.13 (382.42)	79.51 (273.21)	-2.8844 (311.31)	-2.5661 (219.52)
85+	92.46 (172.87)	83.81 (151.06)	-3.0968 (145.64)	-2.8009 (125.68)
Female	-9.18 (100.00)	-8.45 (90.039)	.6688 (183.25)	.6413 (169.93)
Other sex	-25.87 (56.47)	-21.95 (48.68)	.8530 (46.83)	.7494 (41.36)
Labor force	No	Yes	No	Yes
Education	No	Yes	No	Yes
Constant	33.45	44.52	5.40	4.9830
Adjusted R ²	.1904	.2194	.1475	.1611
N	2,160,769	2,160,769	2,160,546	2,160,546
b) Age 18-24 dummy				
18-24	-53.13 (448.97)	-35.89 (216.58)	1.6122 (345.92)	1.0698 (161.94)
Labor force	No	Yes	No	Yes
Education	No	Yes	No	Yes
Constant	88.25	91.62	3.7450	3.5464
Adjusted R ²	.1300	.1808	.1010	.1326
N	2,160,769	2,160,769	2,160,546	2,160,546

Table 2. Wellbeing using Gallup World Poll for GWP countries, 2020-2026

	Cantril	Cantril	Worry	Worry
25-34	-.2172 (17.47)	-.2726 (21.96)	.0633 (24.76)	.0639 (24.77)
35-44	-.3935 (30.21)	-.4048 (30.95)	.1039 (38.77)	.1016 (37.37)
45-54	-.4786 (34.33)	-.4287 (30.59)	.1240 (43.28)	.1181 (40.59)
55-64	-.5040 (34.13)	-.4043 (27.20)	.1198 (39.59)	.1143 (37.12)
65-74	-.4389 (27.15)	-.2890 (17.41)	.0930 (28.13)	.0918 (26.73)
75-84	-.3219 (14.96)	-.1106 (5.02)	.0578 (13.17)	.0552 (12.16)
85+	-.3687 (8.81)	-.1187 (2.84)	.0362 (4.26)	.0313 (3.66)
Female	.1214 (15.86)	.1842 (23.49)	.0498 (31.66)	.0485 (29.85)
Labor force	No	Yes	No	Yes
Education	No	Yes	No	Yes
Constant	5.9145	5.3753	.3546	.3983
Adjusted R ²	.1777	.2019	.0469	.0554
N	386,365	386,365	386,662	386,661
b) Age 18-24 dummy				
18-24	+.3658 (34.32)	.3411 (31.77)	-.0931 (42.50)	-.0898 (40.26)
Labor force	No	Yes	No	Yes
Education	No	Yes	No	Yes
Constant	5.5484	5.0151	.4484	.4946
Adjusted R ²	.1763	.2008	.0447	.0536
N	386,365	386,365	386,662	386,661

Table 3. GM Sixty-five countries controls, also include gender and year coefficients and t-values on 18-24 dummy and sample size.

	Global Minds MHQ		GWP Cantril	
All	-53.13 (448.97)	2,160,709	+.3658 (34.32)	386,365
Algeria	-36.79 (61.59)	71,776	-.0555 (0.70)	4,670
Argentina	-63.83 (99.93)	100,661	.5148 (5.74)	5,865
Armenia	-64.71 (12.66)	4,095	1.2541 (9.25)	4,744
Australia	-59.50 (61.08)	31,570	-.3882 (4.20)	5,762
Bangladesh	-36.87 (27.79)	13,872	.2304 (2.64)	5,442
Belgium	-55.03 (22.10)	12,020	-.0875 (1.24)	5,920
Bolivia	-62.57 (55.49)	19,976	.5536 (8.38)	6,556
Brazil	-59.37 (35.70)	26,954	.1106 (1.11)	5,728
Cameroon	-24.18 (20.59)	12,301	.4572 (5.89)	5,449
Canada	-64.61 (70.93)	43,540	-.5114 (5.25)	5,782
Chile	-73.19 (43.33)	23,645	.4665 (5.05)	6,910
Colombia	-59.23 (99.39)	67,412	.3508 (3.76)	5,638
Congo Kinshasa/DR	-31.10 (21.98)	9,604	.1953 (2.09)	3,618
Costa Rica	-51.03 (23.69)	9,922	.3510 (3.96)	5,818
Dominican Republic	-62.01 (35.32)	11,882	.6358 (5.55)	5,627
Ecuador	-75.89 (62.03)	18,394	.8601 (11.23)	5,697
Egypt	-39.77 (84.15)	121,557	.3922 (4.88)	5,598
El Salvador	-72.03 (42.79)	14,486	.7589 (8.04)	5,571
Finland	-64.80 (20.89)	4,837	-.5994 (7.92)	5,994
France	-55.14 (73.72)	50,285	.0005 (0.01)	5,948
Germany	-49.83 (42.53)	31,093	.0325 (0.31)	6,009
Ghana	-37.66 (15.79)	4,624	-.0246 (0.35)	5,547
Guatemala	-69.76 (53.68)	19,991	.4671 (4.09)	3,670
Honduras	-66.07 (40.31)	13,659	.6506 (5.27)	4,685
India	-48.38 (150.74)	247,903	.4259 (10.51)	28,924
Iraq	-45.17 (63.24)	39,206	.5503 (7.31)	5,820
Ireland	-58.75 (25.75)	12,608	.1217 (1.40)	5,970
Israel	-52.28 (41.06)	21,333	.5055 (3.36)	6,784
Italy	-46.11 (25.04)	41,370	.3190 (3.36)	5,984
Ivory Coast	-37.86 (29.09)	11,377	.2434 (2.93)	5,572
Japan	-35.51 (15.30)	4,838	.4188 (3.84)	5,985
Jordan	-45.60 (48.83)	37,989	.7870 (7.97)	5,599
Kenya	-31.89 (20.54)	14,202	.5650 (6.90)	5,718
Kyrgyzstan	-41.59 (18.77)	5,992	.3515 (4.50)	5,666
Madagascar	-37.91 (18.52)	4,048	.1219 (1.27)	3,647
Malaysia	-77.28 (33.40)	7,458	.4619 (5.96)	5,709
Mexico	-63.34 (136.03)	110,327	.3992 (4.95)	5,870
Morocco	-34.21 (37.44)	41,515	.6556 (7.18)	5,404
Mozambique	-31.79 (25.35)	15,341	.4902 (4.20)	4,238
New Zealand	-66.00 (37.01)	14,771	-.6174 (7.11)	5,787
Nicaragua	-65.44 (42.86)	13,694	.5273 (5.38)	4,824
Nigeria	-54.71 (49.08)	34,332	.0116 (0.16)	5,582
Pakistan	-40.94 (55.59)	58,179	.5708 (7.26)	6,714
Panama	-69.64 (31.71)	8,818	.7278 (6.78)	4,770
Paraguay	-53.52 (39.10)	18,002	.8344 (8.52)	5,708
Peru	-78.51 (97.81)	33,260	.5287 (6.02)	5,635

Philippines	-48.52 (15.58)	36,498	.3378 (3.95)	5,578
Portugal	-51.06 (15.58)	9,693	.3518 (3.92)	5,916
Saudi Arabia	-49.82 (38.20)	19,193	-.1693 (2.42)	6,011
Singapore	-67.30 (40.10)	9,854	-.1298 (1.79)	4,957
South Africa	-54.002 (59.46)	48,434	.2655 (3.14)	5,762
South Korea	-45.08 (22.78)	10,176	.6381 (5.84)	5,922
Spain	-47.87 (68.83)	56,140	-.0398 (0.41)	5,997
Sri Lanka	-49.08 (20.61)	9,500	.3915 (4.25)	5,635
Tanzania	-23.83 (13.78)	10,321	.4719 (5.36)	5,569
Tunisia	-37.64 (29.67)	26,853	.2714 (3.48)	5,694
Ukraine	-53.05 (17.29)	12,853	1.1078 (10.03)	5,883
UAE	-45.63 (24.69)	10,607	-.1272 (1.22)	5,942
UK	-49.46 (67.52)	69,548	-.5646 (4.02)	6,875
USA	-65.46 (129.78)	140,556	-.0527 (0.53)	5,669
Uruguay	-62.34 (27.63)	16,243	.3637 (4.02)	6,875
Uzbekistan	-40.61 (13.94)	5,950	-.0527 (0.53)	5,669
Venezuela	-62.11 (106.71)	86,648	.3743 (3.69)	5,773
Yemen	-20.40 (27.50)	38,800	.7977 (5.66)	1,872
Zimbabwe	-33.32 (13.43)	8,183	.4944 (6.54)	5,554

Table 4. GWP Cantril estimates of age 18-24 coefficient sign by face-to-face or phone

	Face to face	Phone		Face to face	Phone
Algeria	0	0	Peru	+	+
Argentina	+	+	Philippines	+	+
Armenia	+		Portugal		+
Australia		-	Saudi Arabia		-
Bangladesh	+	0	Singapore		-
Belgium		0	South Africa	+	+
Bolivia	+	+	South Korea		+
Brazil	+	0	Spain		0
Cameroon	+	+	Sri Lanka	+	0
Canada		-	Tanzania	+	0
Chile	+	0	Tunisia	+	+
Colombia	+	0	Ukraine		+
Congo Kinshasa/DR	+		UAE		0
Costa Rica	+	+	UK		0
Dominican Republic	+	+	USA		-
Ecuador	+	+	Uruguay	+	0
Egypt	+	0	Uzbekistan	0	0
El Salvador	+	+	Venezuela	+	+
Finland		-	Yemen	+	
France		0	Zimbabwe	+	+
Germany		0			
Ghana	0	0	+ =significantly positive		
Guatemala	+		- = significantly negative		
Honduras	+		0 =insignificant		
India	+	-			
Iraq	+	+			
Ireland		+			
Israel	+	+			
Italy		+			
Ivory Coast		0			
Japan		+			
Jordan	+	+			
Kenya	+	0			
Kyrgyzstan	+	+			
Madagascar	0				
Malaysia	+	+			
Mexico	+	+			
Morocco	+	0			
Mozambique	+				
New Zealand		-			
Nicaragua	+	+			
Nigeria	0	0			
Pakistan	+				
Panama	+				
Paraguay	+	0			

Table 5. Not flourishing equations with age 18-24 dummy and gender from GFS by survey mode

	CATI		CAWI	
All	-.3400 (10.15)	60139	1.1486 (40.92)	144,944
Argentina	.8527 (2.15)	1,413	1.4274 (10.73)	5,215
Australia			1.9320 (8.60)	3,814
Brazil	1.1081 (2.66)	1,247	1.4876 (17.91)	11,787
Egypt	.0619 (0.46)	4,468	-.4588 (0.78)	220
Germany			1.5767 (13.77)	9,428
India	-.5798 (7.57)	12249	.3985 (0.80)	210
Israel	-.8525 (5.82)	2,673	.4712 (1.94)	904
Japan	.9140 (2.46)	541	1.0941 (12.71)	19,652
Kenya	-.5662 (8.74)	9,842	-.3393 (1.92)	1,449
Mexico	.5456 (1.67)	1,503	1.0409 (8.38)	4,153
Nigeria	-.0839 (0.89)	5,510	.4333 (1.92)	1,191
Philippines	.1718 (1.12)	4,169	.3451 (1.76)	1,091
South Africa	.4286 (2.53)	1,978	1.0636 (3.64)	628
Spain			1.0817 (8.00)	6,222
Tanzania	-.6686 (7.52)	8,701	.3553 (0.73)	279
UK			1.9064 (8.63)	5,305
USA			1.9441 (12.28)	37,864

Chart 1. Life satisfaction in Europe, Eurobarometers, 1973-2019

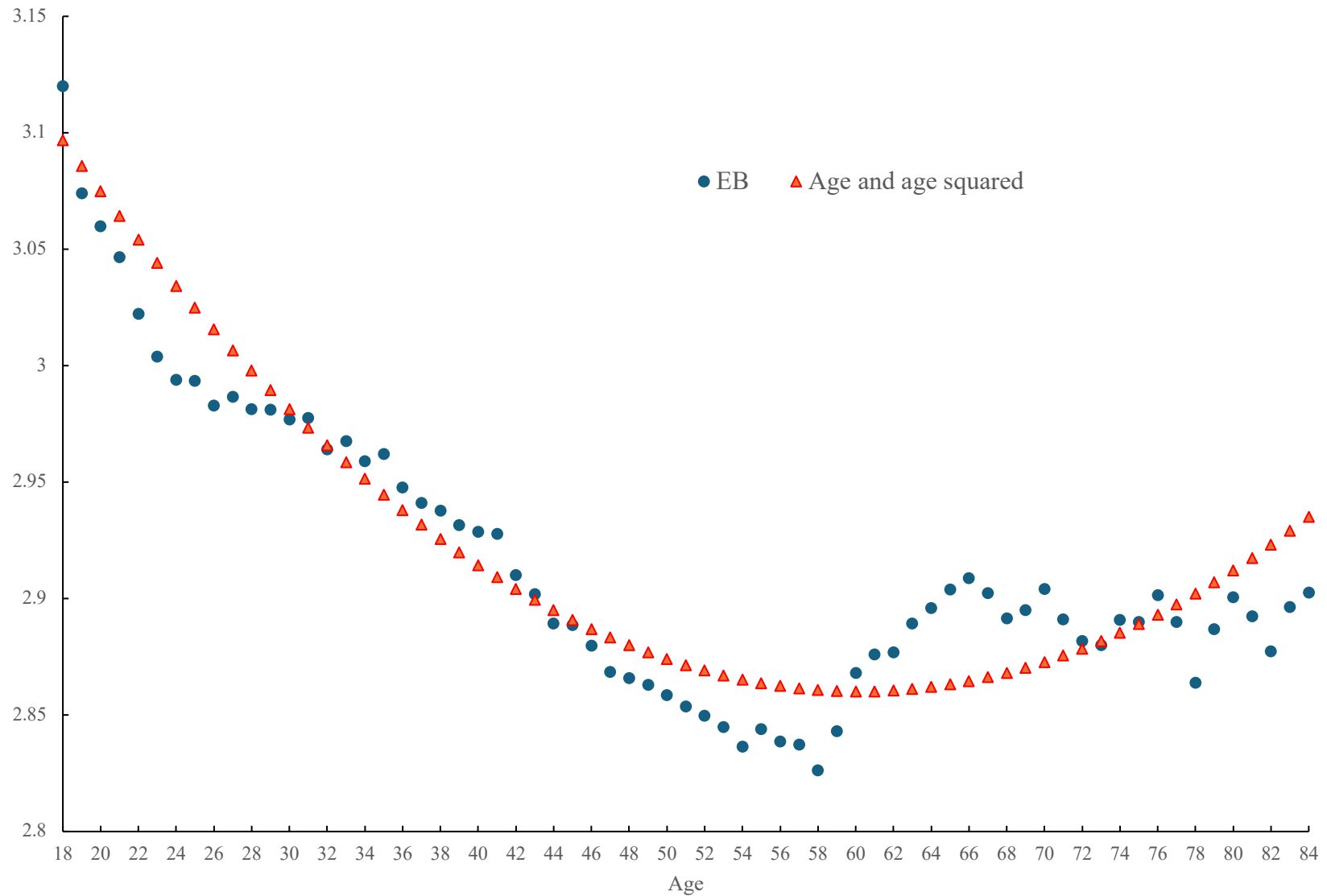


Chart 2. GHQ-N6 Unhappiness, Europe 2001, EB #56.1

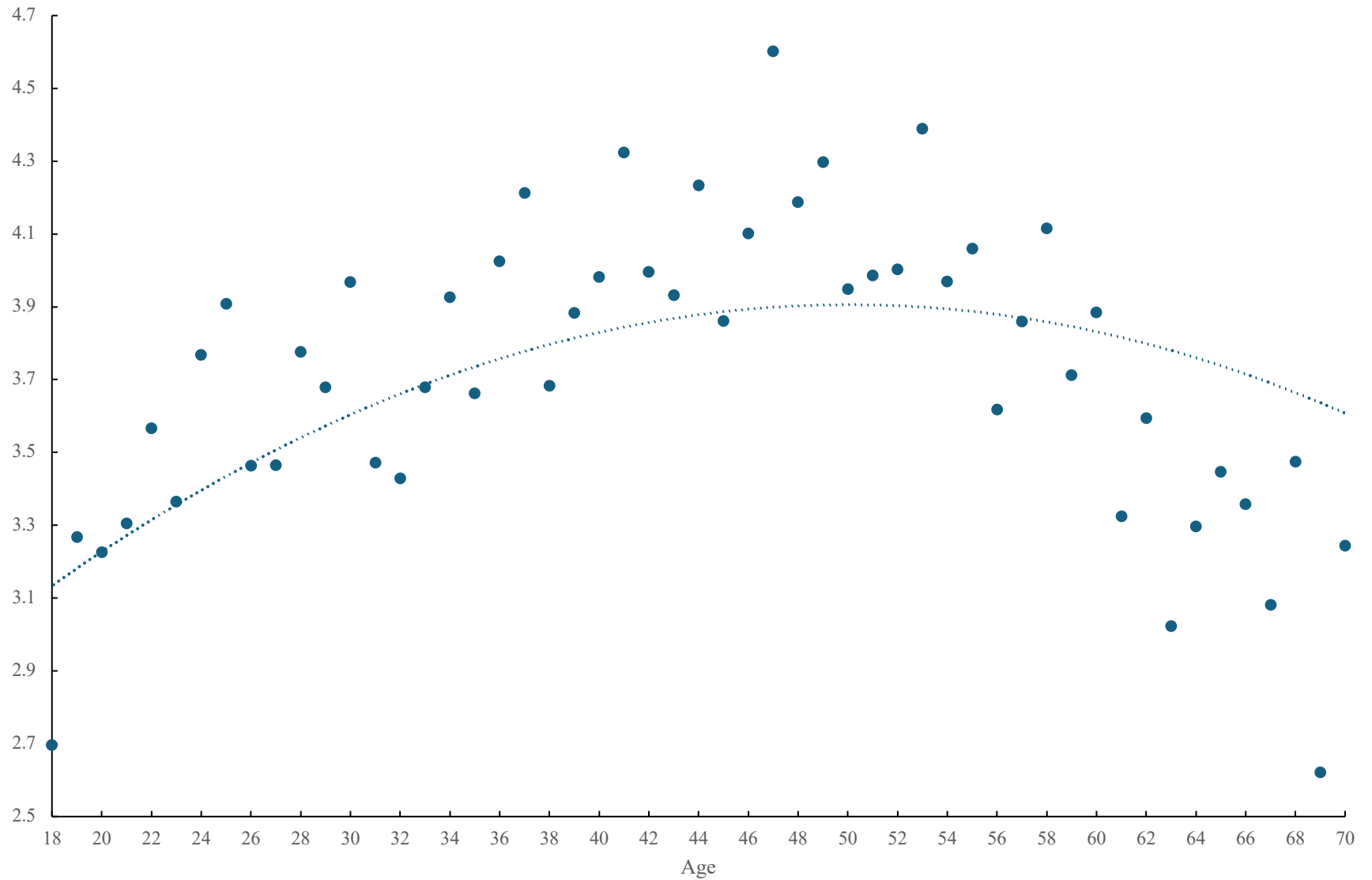


Chart 3. Despair in the USA from the BRFSS

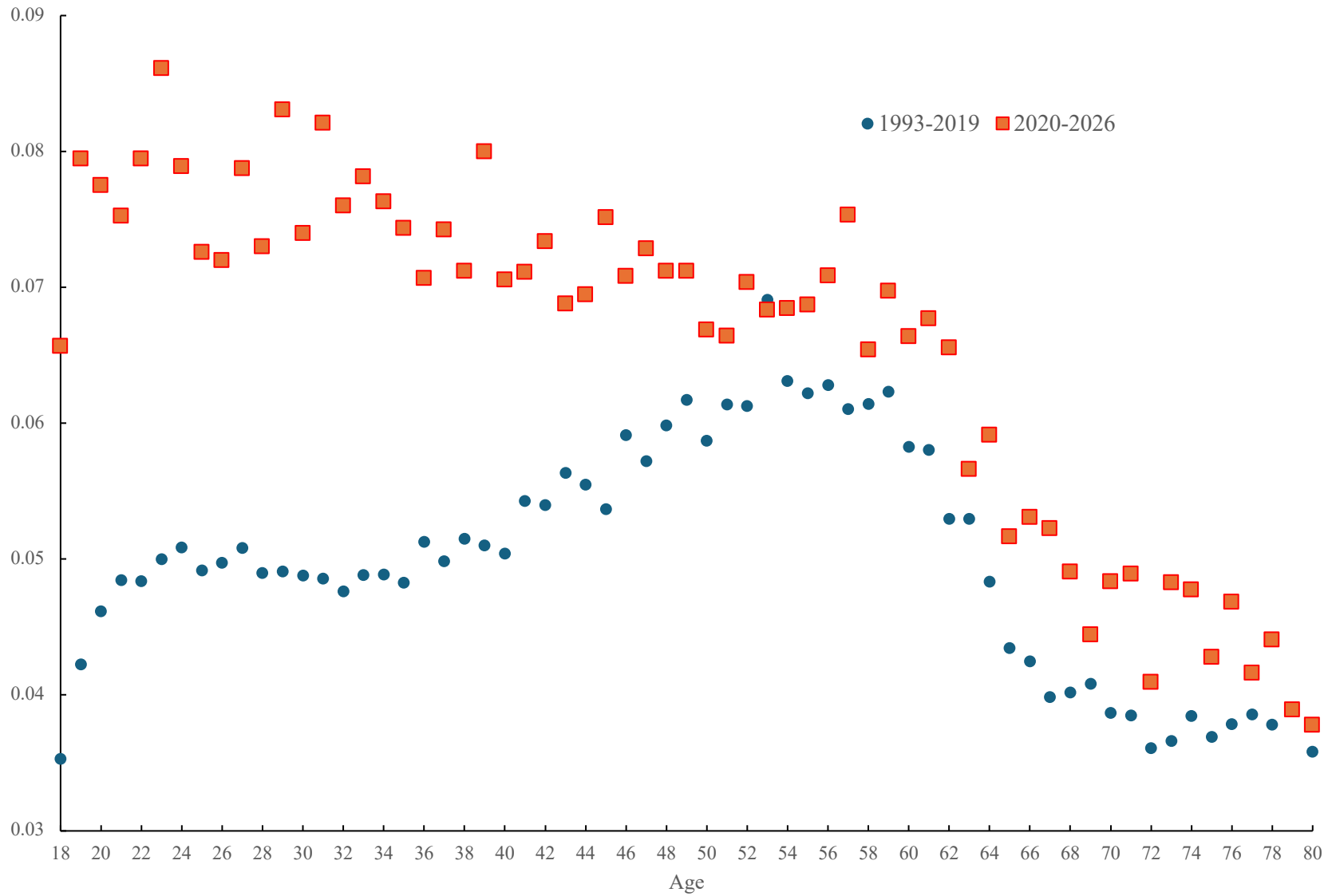


Chart 4. Despair for Workers and non-workers

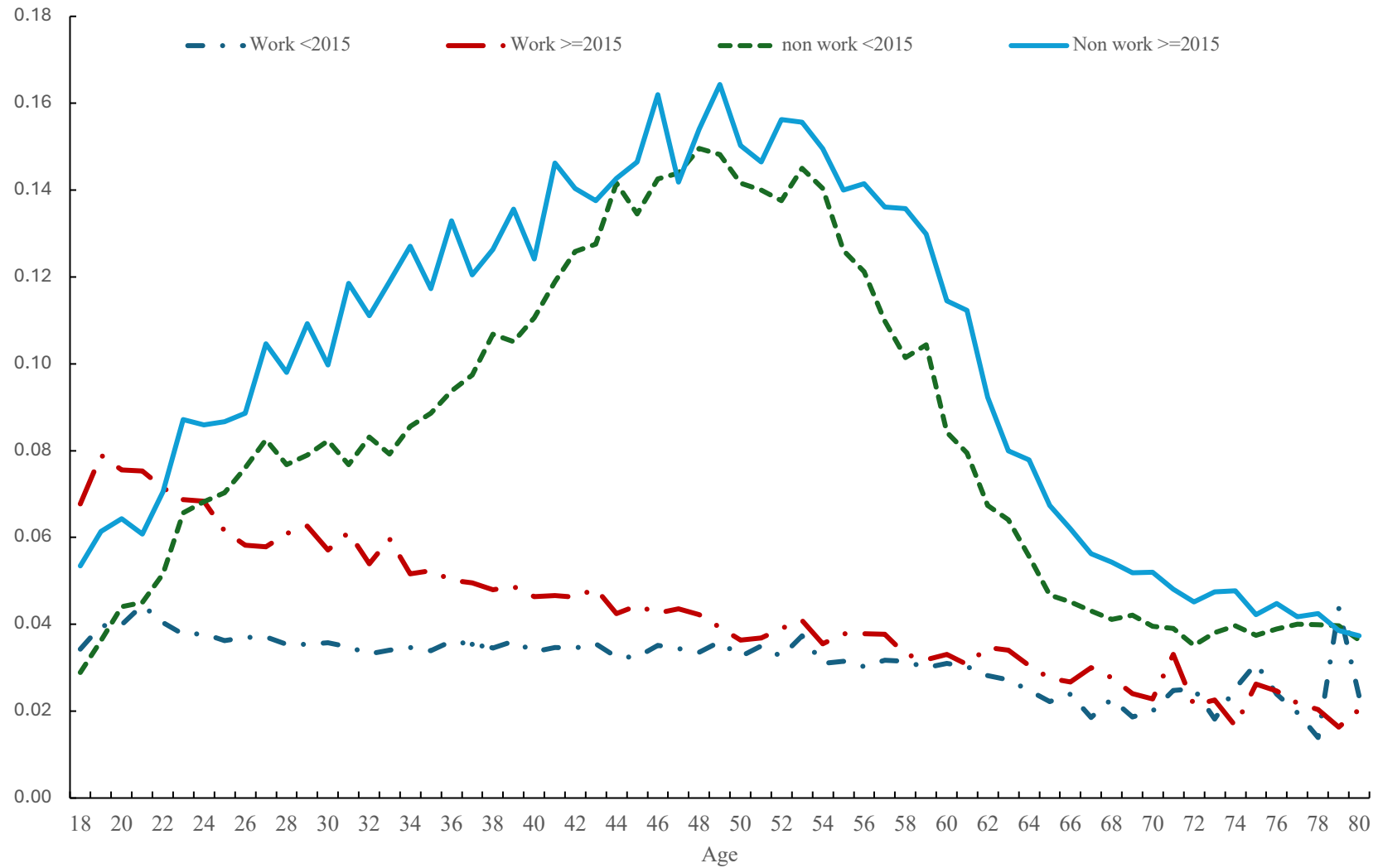
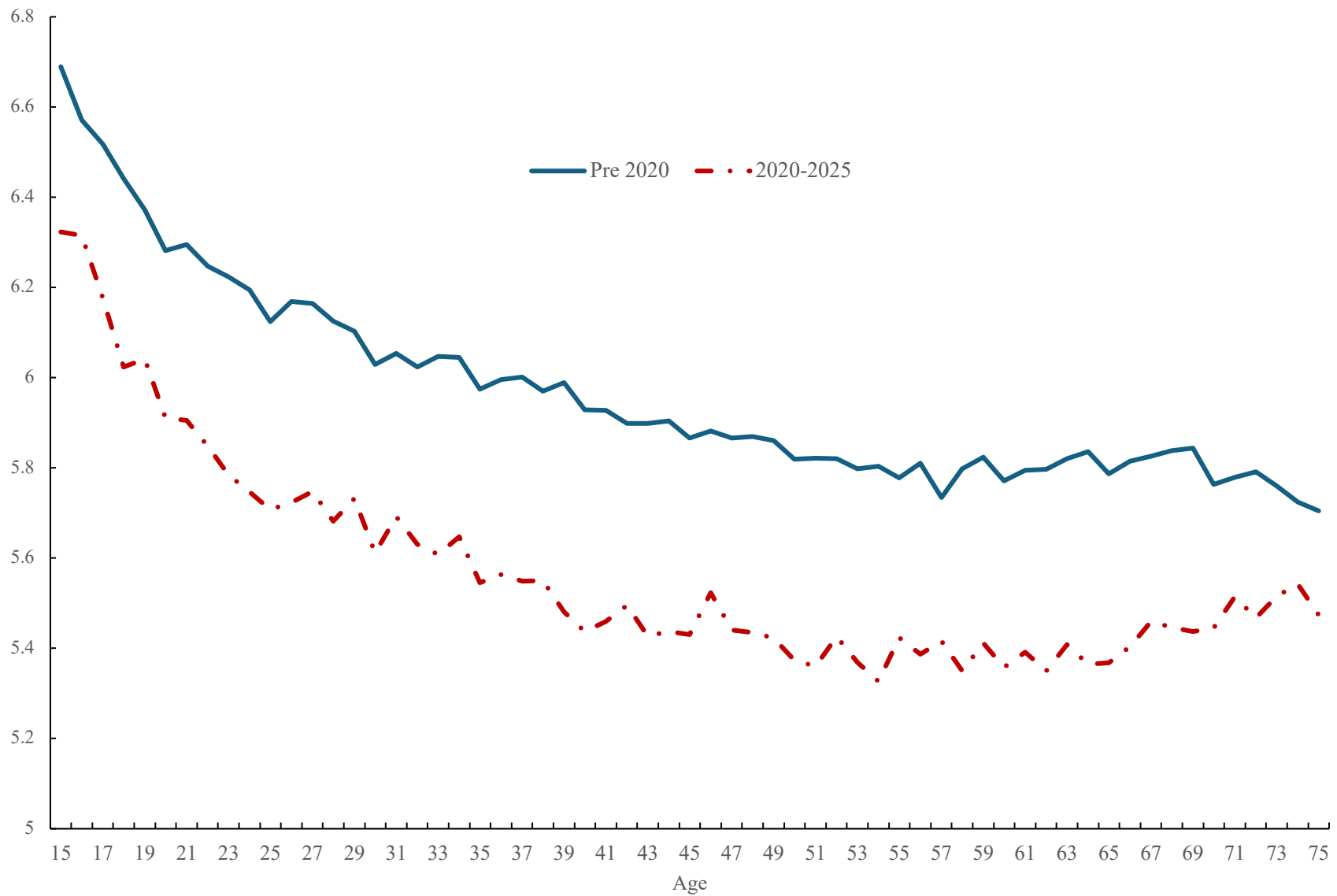


Chart 5. Cantril, GWP



Appendix 1. Survey mode GWP

	Face to face	Phone	Web	Total
Algeria	821	4,033	0	4,854
Argentina	4,012	2,000	0	6,012
Armenia	5,006	0	0	5,006
Australia	0	5,805	200	6,005
Bangladesh	5,000	1,013	0	6,013
Belgium	0	5,818	200	6,018
Bolivia	5,000	2,005	0	7,005
Brazil	4,000	2,007	0	6,007
Cameroon	5,000	1,000	0	6,000
Canada	0	5,870	200	6,070
Chile	6,062	1,000	0	7,062
Colombia	4,006	2,000	0	6,006
Congo Kinshasa/DR	4,000	0	0	4,000
Costa Rica	4,003	2,001	0	6,004
Dominican Republic	5,001	1,000	0	6,001
Ecuador	4,000	2,000	0	6,000
Egypt	5,005	1,002	0	6,007
El Salvador	5,001	1,000	0	6,001
Finland	0	5,816	210	6,026
France	0	5,803	200	6,003
Germany	0	5,891	201	6,092
Ghana	5,000	1,000	0	6,000
Guatemala	4,002	0	0	4,002
Honduras	5,011	0	0	5,011
India	28,146	3,103	0	31,249
Iraq	5,116	1,000	0	6,116
Ireland	0	5,827	202	6,029
Israel	6,099	1,057	0	7,156
Italy	0	5,808	200	6,008
Ivory Coast	5,000	1,021	0	6,021
Japan	0	5,852	200	6,052
Jordan	4,006	2,012	0	6,018
Kenya	5,005	1,008	0	6,013
Kyrgyzstan	5,001	1,000	0	6,001
Madagascar	4,000	0	0	4,000
Malaysia	4,000	2,000	0	6,000
Mexico	4,039	2,010	0	6,049
Morocco	4,056	2,007	0	6,063
Mozambique	5,000	0	0	5,000
New Zealand	0	5,802	200	6,002
Nicaragua	3,626	1,515	0	5,141
Nigeria	5,000	1,004	0	6,004
Pakistan	7,104	0	0	7,104
Panama	5,013	0	0	5,013
Paraguay	5,001	1,000	0	6,001
Peru	5,000	1,006	0	6,006
Philippines	4,000	2,000	0	6,000
Portugal	0	5,811	200	6,011
Saudi Arabia	0	6,131	0	6,131
Singapore	0	5,031	0	5,031
South Africa	5,042	1,019	0	6,061
South Korea	0	5,844	200	6,044
Spain	0	5,816	202	6,018
Sri Lanka	4,002	2,005	0	6,007

Tanzania	5,006	1,001	0	6,007
Tunisia	5,000	1,003	0	6,003
Ukraine	0	6,001	0	6,001
UAE	0	7,960	0	7,960
UK	0	5,807	200	6,007
USA	0	5,820	200	6,020
Uruguay	6,080	1,001	0	7,081
Uzbekistan	5,000	1,000	0	6,000
Venezuela	3,002	3,002	0	6,004
Yemen	2,000	0	0	2,000
Zimbabwe	5,001	1,004	0	6,005
	34,275	169,352	3,015	406,642