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THE DECLINING MENTAL HEALTH OF THE YOUNG IN THE UK

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### **ABSTRACT**

We show the incidence of mental ill-health has been rising especially among the young in the years and especially so in Scotland. The incidence of mental ill-health among young men in particular, started rising in 2008 with the onset of the Great Recession and for young women around 2012. The age profile of mental ill-health shifts to the left, over time, such that the peak of depression shifts from mid-life, when people are in their late 40s and early 50s, around the time of the Great Recession, to one's early to mid-20s in 2023. These trends are much more pronounced if one drops the large number of proxy respondents in the UK Labour Force Surveys, indicating fellow family members understate the poor mental health of respondents, especially if those respondents are young. We report consistent evidence from the Scottish Health Surveys and UK samples from Eurobarometer surveys. Our findings are consistent with those for the United States and suggest that, although smartphone technologies may be closely correlated with a decline in young people's mental health, increases in mental ill-health in the UK from the late 1990s suggest other factors must also be at play.

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## 1. Introduction

There is mounting evidence of an increase in poor mental health among the young. The trend, which is evident in the United States, the United Kingdom and elsewhere, is particularly marked among young women (Blanchflower, Bryson and Xu, 2024; Blanchflower, Bryson, Lepinteur and Piper, 2024). The change is so substantial that the hump-shaped pattern of ill-being by age – reaching its peak when people are in their late 40s or early 50s – which has been replicated in hundreds of studies (Blanchflower, Graham and Piper, 2023) no longer holds. Instead, ill-being tends to decline monotonically once people reach their early 20s. With some notable exceptions (life satisfaction, happiness and Cantril’s Ladder) there has been a similar shift in the age profile of subjective wellbeing or positive affect: the U-shape in age characteristic of so many studies has now been replaced by improving wellbeing with age.

It remains unclear when this shift started to take place, and what might account for it. Blanchflower, Bryson and Xu (2024) suggest the change in the United States and the United Kingdom began around the Great Recession of 2008, or shortly thereafter and that, in the United States, this coincided with an increase in suicide rates<sup>1</sup>. Studies also suggest a worsening in mental health during COVID, although there is a debate as to whether this COVID-related effect disproportionately affected the young. Blanchflower, Bryson and Xu (2024) find the worsening in mental health during COVID was greatest among the young in the UK. This was not the case in the USA where there is no statistical evidence in their data of a covid effect but, even so, mental health was worse among the young than among any other group during COVID (Blanchflower and Bryson, 2022a). Here we show evidence that declining mental health overall and for the young in particular appears to have started around 2000. There is a steady upward trend since then with a notable tick-up in the data around 2013.

There has been considerable speculation as to the reasons for declining mental health among the young in particular. Some have pointed to the explosion in smartphone technology and accompanying social media as a proximate cause (Bala, Newson and Thiagarajan, 2024). Whereas access to the internet is generally welfare-enhancing and positively associated with subjective wellbeing (Vuorre and Przybylski, 2024) and mobile phone access has improved lives in numerous practical ways, especially in developing countries (Graham and Nikolova, 2013), high-intensity use of smartphones is correlated with poorer mental health (Blanchflower, Bryson, Lepinteur and Piper; Twenge et al., 2018; Udupa et al, 2023; Twenge and Martin, 2020; Twenge and Farley, 2021). Smartphone technology has also exacerbated other problems in society linked to mental ill-health, such as cyber-bullying (Blanchflower and Bryson, 2024b). More broadly, concern has been expressed about the impact of the explosion in information technologies and their potential role in generating distress and anxiety through the ease with which they permit individuals to make comparisons between themselves and others, often compounding issues like loneliness (Twenge, et al 2021). Sapien Labs (2023) have even suggested that the time series deterioration in mental health is down to the increased ingesting of processed foods.

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<sup>1</sup> See Blanchflower and Bryson 2024a, examining the impact on wellbeing data of the Great Recession and Covid. Wellbeing measures such as the UN’s Human Development Index moved but little. The evidence is mixed, depending on the metrics and the study used. What really moves – and moves a lot – are individuals’ expectations regarding the economy and government, as well as their satisfaction with those aspects of their lives.

Some question the centrality of new technologies in explaining the demise of young people's mental health, pointing instead to wider societal changes such as the growth in inter-generational income inequality in some countries and, with it, a growing 'gap' between expectations and aspirations (Vuorre and Przybylski, 2023). If Blanchflower, Bryson, and Xu (2024) are correct in saying that the mental health of the young began deteriorating around the time of the Great Recession, this pre-dates the explosion in social media accompanying the advent of the iPhone, raising the possibility that the Great Recession itself may have played a role – for example, through the 'scarring effect' it may have had on the young, both in terms of their future labour market prospects, and the possible impact it may have had on their parents' health.

Others question whether there has been any real underlying change in the mental health of the young at all, suggesting instead that it may have become more 'acceptable' to report mental ill-health because the stigma attached to doing so may have dissipated, or because there is increasing recognition of an existing problem linked to better screening procedures and more careful diagnoses of problems (Corredor-Waldron and Currie, 2024). Even if these factors contribute to the rise, they cannot account for the fact that the rise in reported mental ill-health among the young is occurring at the same time as rising self-harm and suicide among adolescents, at least in the United States (Twenge, 2020).

Blanchflower, Bryson, Lepinteur and Piper (2024) map this new empirical regularity, that mental health improved with age, for forty-seven countries using data from the International Social Survey Program for 2011 and 2021 (ISSP), the Come-Here Survey for 2020-2024 (for France, Germany, Italy, Spain and Sweden), the European Health Interview Survey (EHIS) in 2014 and 2019 and country-specific surveys for New Zealand between 2011 and 2022 and the Netherlands in 2010 and 2021. The pattern is apparent across a range of ill-being metrics including the PHQ, GAD, unhappiness, depression and chronic depression, anxiety, suicidal thoughts and psychological distress. Other studies including Botha et al (2023) for Australia and Garriquet (2021) for Canada find similar results.<sup>2</sup>

We contribute to the literature by focusing on trends in mental ill-health in the UK among those of working age, going back further in time than most studies, to ascertain when any trends may have begun. In doing so we exploit data on depression, phobias and panics in the *Labour Force Survey*, first asked in 1997. This is supplemented with analyses of both mental ill-health and subjective wellbeing in the *Scottish Health Surveys* of 2008-2021, the *Annual Population Survey* (APS) from 2012-2023, the UK *Global Minds* data from 2020-2023, and the UK survey in *Eurobarometer* from 2004-2023. We show the incidence of depression has been rising since the late 1990s, although the rate of growth increased rapidly after the Great Recession of 2008, rising at an even faster rate in the pre-pandemic period. The increase in phobias and panics is less pronounced.

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<sup>2</sup> The one exception was the Gallup World Poll data for France, Germany, Italy, Spain and Sweden for 2020-2023 where the authors were unable to discern a clear pattern (Blanchflower, Bryson, Lepinteur and Piper, 2024, Appendix Table A3). However, John Rothwell subsequently confirmed that the shift in the age pattern of wellbeing was also apparent in the Gallup World Poll by pooling these data across three periods (2005-2011; 2012-2017; and 2018-2023). [https://www.afterbabel.com/p/a-debate-on-the-strengths-limitations?r=1gr7ic&utm\\_campaign=post&utm\\_medium=web](https://www.afterbabel.com/p/a-debate-on-the-strengths-limitations?r=1gr7ic&utm_campaign=post&utm_medium=web)

Although the rise in depression and phobias and panics is apparent among all age groups and for men and women, it is most pronounced among the young, and especially young women aged under 25. It is much bigger for depression. As a consequence, the age profile of mental ill-health shifts to the left-over time, such that the peak of mental ill-health shifts from around age 50 pre-Great Recession to one's mid-20s at the end of the period. These trends are much more pronounced if one drops the large number of proxy respondents in the LFS, indicating fellow family members understate the poor mental health of respondents, especially if those respondents are young.

Changes in the age profile of anxiety are also apparent in the *Annual Population Survey* (APS) since it was first collected in 2012, such that anxiety now falls with age. By contrast, life satisfaction and happiness have not shifted and do not follow the same age profile as ill-being. For Scotland we present data on depression from the LFS as well as new and consistent evidence from the Scottish Health Surveys, 2008-2021 on ill-being and well-being. We find that, by the end of the period, depression (as captured in GHQ scores) is declining with age, whilst WEMWBS - a measure of positive affect - is *rising* with age. And yet, the traditional life satisfaction measure still shows a U-shape in age.<sup>3</sup>

In Section Two we review the recent literature on the rise of mental ill-health in the UK. Section Three introduces our data and estimation methods. Section Four reports results from various UK surveys. Section Five looks at the UK's ranking of young people in international surveys. Section Six concludes.

## 2. Literature Review on Mental Ill-health in the UK

There is growing evidence for the UK of worsening mental health especially for the young and young women in particular. This has been accompanied by a growth in the prescription of anti-depressants and of anxiety diagnoses, especially for young women.

De la Torre et al (2021) used the Patient Health Questionnaire (PHQ-8) to assess the prevalence of depressive symptoms and of probable depressive disorder in a sample of the UK population (n=17,152) from the European Health Interview Survey of 2014. A significantly higher prevalence of probable depressive disorder was found in those aged 45 to 59 years old compared with those aged 16 to 29. PHQ scores were higher for women than men. The proportion with PHQ  $\geq 15$  were as follows.

	Men	Women
All	2.7	3.8
16-29	1.2	3.4
30-44	2.9	2.9
45-59	4.5	6.0
60-74	2.0	3.0
75+	1.4	3.0

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<sup>3</sup> Both the happiness and anxiety questions in the APS refer to 'yesterday' whereas the life satisfaction question refers to 'nowadays – see below.

However, more recent studies point to a change in the age pattern in depression. Pierce et al (2020) examined 17,452 respondents from waves 8 or 9 of the UK Household Longitudinal Study (UKHLS) panel, including all members aged 16 or older in April 2020.

The authors examined the GHQ-12, and a threshold measure was derived by scoring the “not at all” and “no more than usual” responses as 0 and the “rather more than usual” and “much more than usual” responses as 1, summed to produce a total (range 0–12). The cutoff for the threshold measure was a score of 4 or more. They found that ill-being *declined in age* as follows, based both on the mean and the percent with high levels of distress

	Mean GHQ	High level of distress
16–24	14.7	36.7%
25–34	14.2	35.0%
35–44	13.4	30.6%
45–54	12.5	26.3%
55–69	12.0	24.7%
≥70	10.9	17.6%

Women had higher mean levels (13.6 and 11.5 respectively) as well as higher levels of distress (33.3 and 20.4).

Consistent evidence of worsening mental health was reported by Lalji, Grogan and Bailey (2020) who conducted a retrospective analysis of data on medicines prescribed by GPs in England from the Open-Prescribing Database for January 2015 to 2019. They found that prescriptions for the 10 most prescribed antidepressants rose 25% from 58 million (2015) to 72 million (2019). The data includes prescriptions written by GPs and other non-medical prescribers (such as nurses, pharmacists, optometrists, chiropodists and potentially radiographers) who are attached to practices. The data does not cover private prescriptions.

Slee, Nazareth, Freemantle and Horsfall (2021) report evidence of a dramatic rise in anxiety especially among the young since 1998. Annual incidence rates of generalised anxiety diagnoses and symptoms were calculated from 795 UK general practices contributing to The Health Improvement Network (THIN) database between 1998 and 2018. They found an upward trend for the young from around 1998 with an especially marked uptick from 2014 for young women. Anxiety rates increased in both genders aged 18–24 especially between 2014 and 2018. For women, the increase was from 17.06 to 23.33/1000 person years at risk (PYAR); for men, 8.59 to 11.65/1000 PYAR. Smaller increases in anxiety were seen for both men and women ages 25–34 and 35–44. Generalised anxiety rates for patients aged 55 or older were largely unchanged. They concluded:

*“It is notable that rates of generalised anxiety disorders and symptoms began their current upward trajectory around the time that the effects of the 2008 economic downturn and during the policy of austerity.”* (2021, p.162)

Several of our earlier studies have also tracked trends in depression in the *Labour Force Survey*, based on respondent’s reports of their main health problem. In their paper which focuses on workers only during the pre-Covid period (Spring 1997-April 2018), Bell and Blanchflower (2019)

found depression was hump-shape in age peaking at around age 45. Blanchflower and Oswald (2008a) came to a similar conclusion for all aged 70 or under using the LFS depression metric for the period 2004Q2-2007Q1. Blanchflower (2020) also found the age profile of phobias was hump-shaped using the LFS over the period 2014-2018.

Bell and Blanchflower (2019, column 1, Table 8) identified a marked increase in depression for the UK beginning in the 1990s. There was a six-fold increase between 1997 and 2018 with 3.6 percent of the population reporting depression at the end of the period. The rise was not monotonic: depression doubled between 1997 and 2002, and then is roughly flat, only rising again from 2010. Although the incidence of depression is greatest amongst the unemployed (Table 8, column 6) its growth is apparent for all regardless of labor market status.<sup>4</sup>

Blanchflower, Bryson and Xu (2024) examined UK data from Understanding Society and movements in illbeing using the General Health Questionnaire mental health index (GHQ-12) questionnaire which is scored on a scale of 0 to 36 (Likert scale). They treat a score of 20 or higher as ‘despair’. In 2009-10 the median was 10 and in 2020-21 the median was 11 among those aged 18-70. Approximately 8% of all respondents were classed as being in despair in 2009-10, rising to 12% in 2020-2021. The hump-shape in illbeing that was apparent in the earlier period (2009-2018) had disappeared in the later period 2019-2021. This was consistent with evidence for the United States using data on despair from the BRFSS, which was defined as every day in the last thirty being a bad mental health day.<sup>5</sup> They also reported a dramatic rise in anxiety using the LFS from 2012-2021 such that the rapid rise in anxiety among the young resulted in the hump-shaped profile observed in 2012-2017 no longer being seen in 2018-2021. They concluded that in the years from 2018-2021 anxiety “*now broadly declines with age in the UK*”.

A closer look at the data on ill-being and age which disaggregates the young by year indicates that ill-being actually *rises* with age from age 16 or so through the early twenties and then it declines. This is apparent, for example, with regard to anxiety as captured in the UK’s *Annual Population Surveys*. Blanchflower, Bryson and Xu (2024) examine these data for the period 2012-2021 and show that anxiety rises in one’s early 20s, with the rise being more pronounced from 2018 (their Table 5).

Among the small number of surveys that collect data on children and adolescents, it appears there has been an increase in mental ill-health even among the very young in the UK. Blanchflower, Bryson, Lepinteur and Piper (2024) provide evidence to this effect for multiple countries. For the UK they report evidence from the National Health Service study on Mental Health of Children and Young People in England for the period 2017-2023.<sup>6</sup> It shows a rise in the percentage of young people with a “probable disorder” for boys and girls separately for three age groups (8-16; 17-19 and 20-23). Disorders are rising, especially among girls.

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<sup>4</sup> Blanchflower and Oswald (2020) report a near-doubling of those reporting 30 out of 30 bad mental health days in the last month - what they call “extreme distress” - in the United States between 1993 and 2019, from 3.6 percent to 6.4 percent.

<sup>5</sup> “*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?*” Despair is set to one if the answer is 30 and zero if <30.

<sup>6</sup> <https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2023-wave-4-follow-up/data-sets>

Banks and Xu (2020) exploit the UK Household Longitudinal Study (UKHLS) for the period 2009 to April 2020. Focusing on the role of COVID they use the pre-pandemic data to control for pre-existing trends in mental health as captured in the GHQ-12. Mental health was declining pre-pandemic but they find that the first few months of the pandemic negatively impacted mental health, with the biggest effects being for young adults and women.<sup>7</sup> Blanchflower, Bryson and Xu (2024) extend the analysis to include the period through to 2024 and confirm that COVID raised depression amongst men and women, with the effect being most pronounced among those aged under-25. The COVID pandemic also precipitated a drop in wellbeing. The UCL Covid Social Study, which ran from 2020-2022, found a big drop in life satisfaction in March 2020, but it did recover, albeit slowly (Fancourt et al., 2022).

Trends in subjective wellbeing in the UK have received less attention. Smith (2020) examined the age profile of the Warwick-Edinburgh Mental Wellbeing Scale (WEMWEBS) among 932 participants in a study launched on 17 March 2020. The WEMWEBS scores *improved with age*. The scores by age were as follows - 18-24=18.9; 25-34=19.3; 35-44=20.1; 45-54=21.1; 55-64=21.6 and ages 65-74=23.9. The authors note the difference from the earlier literature.

*“Interestingly, the results also do not conform to usual U-shape relationship between age and mental wellbeing. ... The apparent linear relationship between age and mental wellbeing suggests that the current pandemic may be disproportionately affecting young people.” (2020, p.6).*

Helliwell et al (2024) examined life satisfaction using Cantril’s ladder in the Gallup World Poll for the period 2021-2023. The Cantril variable asks respondents to compare their current life with their best possible life.<sup>8</sup> They also reported that in the UK *“the old are now significantly happier than the young”*.

### **3. Data and Estimation**

In this section we describe the data used to analyze trends in mental ill-health in the UK, namely the Labour Force Survey 1997-2024, the Annual Population Survey 2012-2024, Global Minds 2020-2024, the Scottish Health Surveys 2008-2021, and the UK survey in Eurobarometer.<sup>9</sup> We briefly describe our estimation methods to establish trends in mental ill-health by age over time. We note the trends are more marked in negative affect data, such as GHQ and depression than in positive affect measures such as life satisfaction and happiness.

#### **3.1. Labour Force Survey, 1997-2024**

We have obtained access to the Labor Force Survey (LFS) micro data files for the period from the 1997Q2-2024Q1 which contain information on mental health. The information is obtained from

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<sup>7</sup> Zhang et al (2023) examined distress in the UK from 1991-2019 and noted that improvements in life expectancy stalled after the Great Recession. They found evidence that psychological distress, measured as the GHQ-12 score, worsened after 2015 as did Zhou and Khan (2023).

<sup>8</sup> *“Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. Suppose we say that 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. If the top step is 10 and the bottom step is 0, on which step of the ladder do you feel you personally stand at the present time?”*

<sup>9</sup> We would have liked to analyse the Health Survey for England too but the data currently available stop in 2019 so we chose to wait until the more recent data are available.



a variable called health, which refers to the main health problem the respondent has. Seventeen options are available, one of which is “*depression, bad nerves or anxiety*” which we call **depress** and a second is “*mental illness, or suffer from phobia, panics, or other nervous disorders*”, which we call **phobia**.<sup>10</sup> We set these as 1,0 dummies.

### **3.2: Annual Population Survey, 2012-2024**

Since 2012 the Annual Population Survey has included four wellbeing questions. The questions asked are

Q1. “Overall, how satisfied are you with your life nowadays? Where 0 is 'not at all satisfied' and 10 is 'completely satisfied'?”

Q2. “Overall, to what extent do you feel the things you do in your life are worthwhile? Where 0 is 'not at all worthwhile' and 10 is completely worthwhile’?”

Q3 “Overall, how happy did you feel yesterday? Where 0 is 'not at all happy' and 10 is 'completely happy’?”

Q4 “Overall, how anxious did you feel yesterday? Where 0 is 'not at all anxious' and 10 is 'completely anxious’?” Where 0 is 'not at all anxious' and 10 is 'completely anxious’?”

In our analyses we focus on three of these wellbeing measures, namely happiness, life satisfaction and anxiety.

### **3.3: The Scottish Health Survey, 2008-2021**

We obtained access to the Scottish Health Surveys (SHS) from 2008-2021. The 2008 SHS was previously used in Blanchflower, Oswald and Stewart-Brown (2013). Here we examine the same three measures but use data for 2008-2020 and then for 2021. The GHQ36 score is the sum of twelve separate components scored 0 to 3 so that values run between 0 and 36 with a mean of 10.9 (n=64,990).<sup>11</sup> Blanchflower, Oswald and Stewart-Brown (2013) also made use of the WEMWBS score (Tennant et al, 2007) which is a measure of positive affect with a mean of 49.9 with values between 14 and 70 (n=62,713). We also use a 10-step life satisfaction measure “All things considered, how satisfied are you with your life as a whole nowadays?” where 0=extremely dissatisfied and 10=extremely satisfied. The mean is 7.70 and n=70,208. WEMWBS and life satisfaction are not available in the 2020 survey.

### **3.4: Eurobarometer, 2004-2021**

The European Commission’s Eurobarometer survey series has been running since 1974.<sup>12</sup> It provides data on life satisfaction across EU countries plus candidate countries. Data are available one or more times per year. This study has been examined by us in a number of earlier papers (Blanchflower and Bryson 2024). The main variable of interest is 4-step life satisfaction. “On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the life you lead? Not at all satisfied (= 1); not very satisfied (= 2); fairly satisfied (= 3) and very satisfied (= 4).”

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<sup>10</sup> The 17 options are listed in [Appendix 1](#).

<sup>11</sup> The GHQ has been widely used in the mental health literature as an indicator of psychological morbidity (Goldberg et al. 1997; Hu et al. 2007).

<sup>12</sup> Data are available for download at GESIS Leibniz Institute for Social Sciences here <https://www.gesis.org/en/eurobarometer-data-service/about>

### 3.5: Global Minds 2020-2024

We obtained data from the Global Minds Surveys of 2020-2024 available on application from Sapien Labs (<https://sapienlabs.org>) and restricted the sample to the UK only.<sup>13</sup> The data are collected online, and it takes around 15 minutes to complete. In total there were 57,993 observations available, with 7,090 in 2020; 17,057 in 2021, 15,046 in 2022, 11,067 in 2023 and 7,733 in 2024.

A unique feature of the Global Minds data is their construction of a Mental Health Quotient (MHQ) assessment of people's cognitive and emotional capabilities, calculated on a 300-point scale running from -100 to +200 where more positive scores indicate better mental health. The MHQ contains six domains: overall hand function; activities of daily living; work performance; pain; aesthetics and satisfaction. Scores in the normal healthy range spanned from 0 to 200.<sup>14</sup> A negative score suggests poor mental health and is a cause for concern and potentially indicates a need for intervention.

### 3.6: Estimation

Our exploration of the data includes descriptive evidence on trends in mental ill-being and subjective well-being presented in graphical form. All means are weighted. These charts show trends in the mental health indicators described above by age and gender over time. These are supplemented by multivariate analyses which identify the independent correlation between age category and mental health over time, by gender, having controlled for potential confounders such as education, race and region.

We restrict our estimation sample to those of working age, 18-64. Our decision to exclude older people is because of our concerns about mortality selection bias as demonstrated by Hudomiet, Hurd and Rohwedder (2021) since wellbeing at age 65 predicts mortality. We estimate OLS regressions and where we report means we weight the estimates in charts and tables.

## 4. Results

### 4.1: The Labour Force Survey, 1997-2023

The full sample contains 7.6 million observations of those ages 16-64 across these years. However, according to the variable *ioutcome*, overall 2,227,231 are proxy responses and there are also 850,525 that are data brought forward from the previous quarter. Hence, we restricted the sample for analysis to 4,243,915 *personal responses*.

This matters because the incidence of depression, and to a lesser extent phobias and panics, is understated with the proxies. To illustrate this **Chart 1** plots the incidence separately of both phobias and depression based on proxy and personal responses over the period 1997-2023. Depression rises from the late 1990s, but more steeply after the Great Recession and again from around 2016. Including proxy respondents leads to a very large underestimation of the incidence of depression throughout the series, but the scale of that underestimation grows over time. Phobias and panics also rise from the late 1990s, but much less steeply than depression, and throughout their incidence is much lower than depression. The extent of the bias between proxy and non-

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<sup>13</sup> For earlier analysis of the age pattern in wellbeing using Global Minds data see Blanchflower, Bryson and Xu (2024) and their annual report which can be downloaded [here](#).

<sup>14</sup> For details of how the MHQ score is constructed see Newson and Thiagarajan (2020).

proxy respondents for the much more serious mental health outcomes of phobia and panics is much less than for depression.<sup>15</sup>

Furthermore, the bias imparted by proxy respondents is greater for the young. At age 24 11.4% of personal responses reported they were depressed versus 5.6% for proxy responses. In the case of phobias and panics the rates were 3.6% and 2.3% respectively. So, including proxy responses biases estimates downwards and understates the extent of the UK's burgeoning mental health crisis. Hence going forward we restrict our analysis to personal responses only.

**Chart 2** plots depression among women for five age groupings. In the 1990s incidence was low for all age groups (below 3 percent) but has risen subsequently, especially in the period post-Great Recession. The rate of increase is greatest for the youngest such that, by the end of the period, around one-in-ten under-35s have depression. The mental health of females aged under-25 has deteriorated steadily over time with a notable pick-up around 2012.

Comparing **Chart 3** with **Chart 2** the incidence of depression is considerably lower among men compared to women of the same age, consistent with research pointing to sizeable gender gaps in wellbeing (Blanchflower and Bryson, 2024c). By the end of the period between 5-6 percent of men aged under-45 reported depression. The growth rate is greatest for those aged under-25: prior to the Great Recession young men had a lower incidence of depression than other men. However, depression rose precipitately for young men from 2008 such that, by 2023 they are the group with the highest incidence.

Turning to phobias and panics, **Chart 4** indicates that, among women the increase is apparent across the age range but, again, it is most pronounced for young women, such that variance in phobias and panics among women is much larger from around 2013. **Chart 5** reveals similar growth rates among men, though incidence levels are lower. However, the 'fanning out' of phobia and panic incidence by age, apparent for women in **Chart 4**, is less pronounced in the case of men. Of note here is the relatively high, and unexplained, level of phobias and panics of men ages 45-54 by 2023.

The differential rate of growth in depression by age has altered the age profile of depression in the UK, as indicated in **Chart 6**. Across the whole period 1997-2024 depression rises until one's early 20s, then flatlines for 20 years before gradually declining. This pattern is not apparent among proxy respondents where the age profile is much flatter. However, for the period since 2020 we see quite a different pattern with depression rising steeply until age 24, after which point it declines markedly. This pattern is barely discernible among proxy respondents where depression is underestimated across the age-range, but particularly among the young. Peak years of ill-being are around age 24 for men and women in the UK.

**Charts 7 and 8** present the age-profile in depression for four different time periods for women and men respectively. For women in **Chart 7**, in the first two periods (2008-11 and 2012-15) we observe the familiar hump-shape in depression across the life-course, here peaking around age 40.

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<sup>15</sup> For example, if we run an OLS panics equation with controls for age, year and gender the coefficient on a proxy variable is -.0018 (t=21), versus -.008 (=77) with depression as the dependent variable, with a sample size in both of 9,018,250.

But from 2016 the hump shifts left, such that it peaks around age 25 in 2016-19 and age 22 in 2020-2023, monotonically declining thereafter. The rate of depression among women never rises above 4 percent during 2008-2011 and 5 percent in 2012-2015, the peak jumps to 8.6 percent in 2016-19 and is reached at age 25, and then jumps dramatically to 13.8 percent during the COVID period, peaking at age 22. The curve for 2020-2023 lies above the 2016-2019 incidence line for nearly all ages, suggesting a very substantial hike in the rate of depression during COVID among all women of working age.

Turning to men in **Chart 8** we see depression is lower in all periods compared to its incidence among women, and across all points in the age range. However, the age profile shifts in a similar way to that for women, with the familiar hump-shape peaking in middle age changing to a hump that peaks early in life – at 4.8 percent for those aged 26 in the period 2016-19 and 8.1 percent among those aged 24 in the COVID era of 2020-2023.

**Chart 9** plots the incidence of phobia and panic for men and women by age for an early (1997-2017) and late (2019-2023) period. Among men and women, we see the familiar hump-shape in the early period, with phobias and panics peaking at 46 for men at 1.6 percent and at age 45 at 1.2 percent among women. In the later period, the curve for women resembles that for depression, peaking when women are in their early 20s, dropping quickly thereafter. Among men the curve is flatter across the life-course with peaks at 21, 42 and 54.

In **Table 1** we report the mean incidence of depression for 2020-2024 using the Labour Force Surveys across a number of characteristics for three age groups whose wellbeing has changed most over the last decade, namely those aged 18-24, 25-34 and 35-44. The table is based on personal responses only. Depression rates are, for the most part, highest for the youngest age groups. We see that depression rates are especially high in the North of England and Strathclyde, which includes Glasgow. Depression is higher among whites and the less educated and lower for workers compared to the unemployed and those who are out of the labour force. Female rates are everywhere higher than for men for each of the three ages – for example for those age 18-24 female depression rates are 12.2%, more than double the rates for young men of 5.8%.

**Table 2** regresses depression on a number of characteristics for those of working age, having dropped proxy respondents, for four time periods – 1997-2010; 2011-2014; 2015-2019 and 2020-2024. In the first two columns depression peaks in mid age but then by 2015-2019 and in 2020 it declines linearly in age. This confirms the findings from the charts reported above, indicating that the age effects are independent of other factors. The female coefficient is positive and statistically significant throughout, confirming the gender wellbeing gap, but the female coefficient is also rising with time, indicating a widening in that gap. It is also notable that depression is more likely to be reported by whites than non-whites, and increasingly so over time.

A similar picture is found in **Table 3** with phobia and panic attacks except that there is evidence that females have *lower* rates than males, though the size of the difference is quite small. This changes by 2020 when the sign switches to positive indicating that since COVID women have had a slightly higher incidence of phobias and panics than men.

**Table 4** pools the data across years and includes interactions with a dummy variable called “new” which is set to one if 2018-2024 and zero otherwise again for those ages 16-64. We interact it with female, age 16-24 and 25-34 age dummies and white. Equations also include a full set of 49 year of age dummies. All four interactions are significant and positive for depression (column 1) and for phobias (column 2). The positive significant female coefficient for depression indicates women in the base period (prior to 2018) were more depressed than men. However, the female coefficient is negative for phobias and panics indicating women were *less* likely than men to suffer from them prior to 2018.

**Table 5** is similar to **Table 4** but splits the sample by gender, again with a full set of 49 year of age dummies. The interaction terms in the depression model are larger for women (column 1) compared with men (column 2) indicating that, whilst the young and whites experienced more rapid growth in depression compared to the young and non-whites since 2018, these trends were more marked among women than they were among men. However, for phobias and panics, the interaction effects were only consistently positive for women. The only age group among men experiencing greater phobias and panics from 2018 were those aged 16-24.

#### **4.2: The Annual Population Surveys, 2012-2024**

**Table 6** presents the mean scores for three of the four wellbeing metrics introduced into the Annual Population Survey in 2012. Full descriptions of these (0,10) coded measures are provided in Section 3.2. The official data release from the Office for National Statistics<sup>16</sup> does not suggest that any of the three series moved that much over this period. However, changes in the mean by age category show substantial change in the age distribution of the three measures at the beginning and end of the series. Anxiety rose across all age groups, but mainly among those aged under-45 (and those aged 85 plus). The age pattern in anxiety was hump-shaped in 2012-13 but declined with age among the working age population in 2022-24. Happiness fell over the period among those aged under-35 but rose among older people. Life satisfaction follows no obvious pattern in age, but fell markedly since 2012-13 among those aged under-25 over the period. Life satisfaction is different.

**Table 7** examines the correlates of anxiety, happiness and life satisfaction over the period 2020-2024 for those of working age running linear regression estimations for over 250,000 survey respondents to the APS. There is a decline in anxiety with age having controlled for race, gender and region. Column 2 indicates two low points for happiness – those aged under-25 and those aged 45-54 years. Column 3 for life satisfaction indicates that the U-shape in life satisfaction persists, reaching its low point when aged 45-54 years.

#### **4.3: Scottish Health Surveys, 2008-2021**

In **Charts 10a, 10b and 10c** we plot means of the GHQ36, WEMWBS and life satisfaction respectively by age for the pooled Scottish Health Surveys (SHS) for the years 2008-2020. We then repeat the exercise in **Charts 11a, 11b and 11c** for 2021 only. In **Chart 10a** we see a hump shape in age in the GHQ and an initial hump followed by a U-shape in WEMWBS in **Chart 10b** there is an obvious U-shape in life satisfaction in **Chart 10c**. By 2021 things had changed a lot. The GHQ is declining in age (**Chart 11a**) while WEMWBS is rising in age (**Chart 11b**). But the

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<sup>16</sup><https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/datasets/quarterlypersonalwellbeingestimatesnonseasonallyadjusted>

age profile of life satisfaction has not changed: it remains U-shaped. An obvious question is why did the former two variables show marked changes whereas the life satisfaction variable did not?

**Table 8** uses the SHS data and estimates four regressions, two for the GHQ36 variable and two for WEMWBS. It is confined to those of working age. In columns 1 and 3 we include age and its square for the period 2008-2019. In both instances there is a well-defined curvilinear relationship. The GHQ rises with age, but subsequently falls as indicated by the quadratic term, indicating a hump-shape which maximizes at age 41. With WEMWBS the reverse is the case: wellbeing falls initially with age, then rises subsequently in a U-shape which minimizes at age 41. But by 2021 the curvilinear relationships have been replaced by linear trends: the negative affect GHQ depression indicator falls with age, while, analogously the positive affect WEMWBS wellbeing indicator rises with age.

#### **4.4: The Eurobarometer Survey for the UK, 2004-2023**

We examine Eurobarometer data for the UK since 2004. Due to Brexit the UK has been dropped from the survey series going forward. It seems that the age distribution has changed sharply over time. In **Table 9** we report regressions of life satisfaction on age, gender and year for the period 2004-2020 and then again for the years 2021-2023; they each contain gender and sweep dummies. We use the Eurobarometer Harmonised 2004-2021 data file and pool the eight most recent sweeps available from GESIS - #94.3; #95.1; #95.3; #96.3; #97.3; #97.5; #98.2 and #99.4 for 2021-2023. T-statistics are in parentheses. In column 1 for the period 2004-2020 for the UK there is an obvious U-shape with all of the age variables being significantly lower than the excluded category of 15-24 and with a minimum at age 45-54. In the later period in column 2 life satisfaction rises with age and with the exception, of the 45-54 variable, the coefficients are significantly higher than for the young. There is no U-shape. Thus, in contrast to the Scottish Health Surveys and the Annual Population Surveys, the age profile of life satisfaction in Eurobarometer changed in a way that is consistent with other wellbeing and mental health metrics.

In **Chart 12** we simply plot the two series against age and the U-shape is present in the earlier period and, as confirmed in the regression above, the U-shape disappears in the later period.

Unfortunately, we don't have a recent measure of mental health from the Eurobarometers for the UK since Brexit. We do have a recent survey across 27 EU countries for June 2023 and ten mental health measures from Flash Eurobarometer 530 (n=19,098). For each of the ten measures mental ill-being, including sadness, excessive fear or worry, low self-esteem, problems with alcohol or drugs, declines by age. The results are reported in **Appendix 2**. This contrasts with the results in the third column of **Table 9** for Europe minus the UK using 4-step life satisfaction again which declines in age. So, life satisfaction continues to be puzzling, at least in the rest of Europe, since the decline (increase) in illbeing (wellbeing) by age apparent in other metrics is not apparent for life satisfaction.

#### **4.5: Global Minds, 2020-2024**

To get another perspective on the age profile of mental health in the UK in 2020-2024 we turn to the Global Minds Survey. **Table 10** presents regression analyses showing the age profile for four wellbeing metrics for just over 40,000 respondents (half that in the case of life satisfaction), having

controlled from gender and, year.<sup>17</sup> The metrics are 1) the *MHQ* score explained in Section 3.5 2) 9-step *life satisfaction* 3) 9-step Fear and anxiety - "Being scared or worried and experiencing feelings and sensations of nervousness or panic in your mind or body" scored on a scale of 1-9 (mean=5.25) and 4) 9-step *Suicidal thoughts*- "Thinking or feeling like you want to kill or physically harm yourself" also scored on a scale of 1-9 (mean=2.63). The 1 to 9 scale ranges from 1 never causes me any problems: 5 sometimes causes me difficulties or distress but I can manage; 9=has a constant and severe impact on my ability to function.

Across all four, wellbeing metrics, *wellbeing rises with age*. The younger the respondent, the more likely they are to express fear and anxiety, aggression, anger and irritability, and to have suicidal thoughts. The *MHQ* mental health rating also rises with age. Only one metric – life satisfaction – is common to both the APS and Global Minds. Whereas the APS continues to exhibit a U-shaped age profile, this is not the case in Global Minds. Instead, among the Global Minds sample, life satisfaction rises with age, consistent with the other metrics in the survey.

### **5: Where does this leave the UK in the global rankings of young people’s mental health?**

We have demonstrated that mental ill-health has deteriorated in the UK, especially among the young such that, in many instances, mental ill-health is most prevalent among those aged under-25. One question prompted by this finding is: where does this put the UK today in terms of rankings in the mental ill-health of the young? Ranking countries is tricky methodologically, especially if social norms lead citizens in different countries to rate similar or identical affective states rather differently. And rankings can vary markedly with the metrics used, especially when comparing subjective well-being with ill-being (Blanchflower and Bryson, 2023). However, such an exercise appears worthwhile, especially given evidence from other countries of a similar relative decline in the wellbeing of the young (Blanchflower, Bryson, Lepinteur and Piper, 2024; Blanchflower, Bryson and Xu, 2024).

In **Table 11** we compare two data sources which rank the wellbeing of under-25s. In their ‘The Mental State of the World, 2023’ Sapien Labs (2024) examined mental health in 73 countries and ranked them using their *MHQ* positive affect measure. They found that the UK ranked next to bottom of the 73 countries across all ages using the *MHQ* score, just above Uzbekistan. We downloaded the micro data and pooled the years 2020-2024 together and calculated mean *MHQ* scores having restricted the sample to young people ages 18-24 for countries that had at least 1000 youth observations. We found the UK ranked second worst behind Brazil.

In the World Happiness Report Helliwell et al (2024) ranked countries using Cantril’s Ladder for respondents aged under-30 using the Gallup World Poll (GWP) and the UK ranked 32/143. In the same report Marquez et al (2024) ranked young people ages 15-24 and placed the UK 26<sup>th</sup> out of 141 countries with a score of 6.92. This is illustrated in the first column of **Appendix 3**. In **Table 11** we take these Cantril 10-step scores for the 38 countries in the GM that have at least 975 observations on young people and report the *MHQ* and GWP Cantril score. The GM ranks the UK 37/38 while the GWP ranks it 2/38.

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<sup>17</sup> These variables were also used in Blanchflower, Bryson and Xu (2024) for multiple countries but not explicitly for the UK.

Marquez et al (2024) also report a UK ranking using the Health Behavior in School-aged Children (HBSC) survey. This used a version of Cantril's ladder global life satisfaction question for school children ages 15, 13 and 11. They also report life satisfaction data from the OECD's Programme for International Student Assessment (PISA) survey for children, age fifteen which also uses a measure relating to overall life satisfaction. In Appendix 3 we report the scores for all four measures along with country ranks. In the case of PISA for 2022 for children, age 15, there are 71 countries. In the case of HSBC, we restricted the sample to the 42 countries that had responses for all three ages. On PISA the UK ranked 67th/71 with a score of 6.07. For HSBC separate estimates are available for Scotland, Wales and England separately. For those age 15 Scotland ranks 35/42; Wales #36, England #38. At age 13 the ranks are Scotland #37; Wales #33 and England #39. At age 11 the ranks are Scotland ranks #36; Wales #33, England #40. These rankings are much more in line with estimates from Global Minds than they are from those obtained from the Gallup World Poll which appears to be an outlier. This is not consistent with the GWP score but is consistent with Global Minds.

It is hard to draw conclusions on the UK's ranking of wellbeing among young people based on this analysis since the rankings are so discrepant. Further investigation will be needed to establish the source of these differences in ranking which may relate to the wellbeing metrics used, or differences survey design, survey samples or response rates.

## 6. Conclusions

In this paper we have extended the recent literature on the age profile of mental ill-health and subjective wellbeing. Our analysis is confined to the UK. We confirm findings from earlier studies showing an increase in depression and anxiety, adding to this new evidence on a growth in the incidence of phobias and panics. We extend the time-series both backwards and forwards, which allows us to establish that the rise in depression goes back to the 1990s, though the increased incidence in depression which accelerated rapidly after the Great Recession then again during COVID. Although the rise in depression, phobias and panics is apparent among all age groups and for men and women, it is most pronounced among the young, and especially young women aged under 25. This is consistent with the findings of Slee, Nazareth, Freemantle and Horsfall (2021) who reported a big rise since 2000 in anxiety diagnoses, especially among the young.

**Chart 13** for the young puts our results in context. It plots the time series from the LFS of percent depressed in Scotland and the rest of the UK. In both there is a rise in the percent depressed – from 1.3% in Scotland in 2000 and 0.6% in the Rest of the UK to 15.7% and 7.8% respectively in 2023. The rise is especially marked in Scotland.<sup>18</sup>

But what is notable is the sharp pickup around 2012 in both. This looks awfully like what we observed for the US in Blanchflower, Bryson and Xu (2024) using data from the Behavioral Risk

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<sup>18</sup> In 2022, the rate of drug poisoning deaths in Scotland was more than double the rates of other UK countries. This is similar to the longer term trend, with Scotland having a higher drug death rate than other parts of the UK for the last decade. After adjusting for age, the drug poisoning mortality rates in Scotland was 2.7 times as high as the rates in England and Northern Ireland and 2.1 times as high as the rate in Wales. See 'Drug related deaths in Scotland in 2023' National Records of Scotland, 20 August 2024. Based on 2021 data, Scotland had the second highest rate of suicide deaths of all countries in the UK (13.7 deaths per 100,000 population) after Northern Ireland (14.3 deaths per 100,000). Wales (12.7 deaths per 100,000) and England (10.5 deaths per 100,000) had the two lowest rates of suicides of all countries in the UK. 'Probable suicides, 2022', National Records of Scotland, 5 September 2023.



Factor Surveillance System (BRFSS) data conducted by the Centers for Disease Control (<https://www.cdc.gov/brfss/index.html>) . The BRFSS is the US's premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. We then added to **Chart 13** the proportion of respondents ages 18-24, versus ages 16-24 for the UK, that reported that they were in despair, which as we noted above is defined as which was defined as, a 1,0 dummy, set to 1 if respondents reported that every day in the last thirty had been a bad mental health day. Of note is the sharp pickup in the data for the US around 2014 compared with 2012 or so for the UK.

We documented the declining well-being of the young and the disappearance of the hump-shape in ill-being and the U-shape in well-being in the UK. This is easier to see in ill-being data than in life satisfaction or happiness data. As a consequence of these changes the age profile of mental ill-health shifts to the left ,over time, such that the peak of depression shifts from mid-life, when people are in their late 40s and early 50s, around the time of the Great Recession, to one's early to mid-20s by 2023. It seems from **Chart 3** for young men that there is a notable uptick around the Great Recession which is not apparent for women in **Chart 2**.

Methodologically, we sound a cautionary note with respect to reliance on proxy respondents. The trends we observe are much more pronounced if one drops the large number of proxy respondents in the Labour Force Survey, indicating fellow family members understate the poor mental health of respondents, especially if those respondents are young.

Patterns are less clear-cut when one switches to measures of subjective wellbeing. Life satisfaction and happiness have not shifted markedly since they were first collected in the Annual Populations Survey (APS) in 2012, and do not follow the same age profile as anxiety in the APS, which has changed such that anxiety falls with age. However, there is evidence of a change in the age profile of life satisfaction and wellbeing in other data for the UK. In the UK data from Eurobarometer, life satisfaction has shifted such that in the most recent data it is no longer U-shaped. Instead, it maximizes at age 55 and above. In the Scottish Health Surveys, we see WEMWBS switching from a hump-shape in age to a situation in 2021 when it rose linearly with age. And in Global Minds both life satisfaction and MHQ are rising in age for the period 2020-2024. So, the evidence on the changes in the age pattern of subjective wellbeing in the UK is somewhat mixed but, on balance, seems to mirror the patterns we see in ill-being.

We are limited in what we can say about the causes of the growth in mental ill-being among the young. In earlier papers we have noted the correlation between spending substantial amounts of time in front of a screen and poor mental health, especially among the young (Blanchflower, Bryson, Lepinteur, and Piper, 2024).

The fact that the growth in mental ill-being in the UK began in the 1990s suggests that, although smartphone technologies may have impacted individuals' ill-being, they cannot account for all of the increases in mental ill-health from the late 1990s, suggesting other factors may be at play. There are likely multiple forces at work here. But the facts to be explained are that the well-being of the young started declining sharply around 2013 or so, and has especially impacted women, and this is a global phenomenon. The increasing use of the internet and smartphones and the rise in cyberbullying and body shaming seems to fit the ticket especially given the timing.

Smartphone technology really took off in the UK with the launch of the iPhone in 2007, even though cellular smartphone subscriptions were common and growing as early as 2000.<sup>19</sup> The acceleration in the incidence of depression and anxiety, particularly among the young in the UK, in the period shortly after the Great Recession is consistent with smartphone technologies playing a role from that point, although it also coincides with the very substantial economic effects of that recession, which may also have been important.

In the United States the U.S. Surgeon General recently issued an advisory on the current evidence.<sup>20</sup> He said:

*“More research is needed to fully understand the impact of social media; however, the current body of evidence indicates that while social media may have benefits for some children and adolescents, there are ample indicators that social media can also have a profound risk of harm to the mental health and well-being of children and adolescents. At this time, we do not yet have enough evidence to determine if social media is sufficiently safe for children and adolescents. We must acknowledge the growing body of research about potential harms, increase our collective understanding of the risks associated with social media use, and urgently take action to create safe and healthy digital environments that minimize harm and safeguard children’s and adolescents’ mental health and well-being during critical stages of development.”*

Our findings suggest that there has been a steady rise in the mental ill-health of all age groups in the UK since the late 1990s. There are signs of a structural break, or uptick, around the Great Recession, and during the period 2010-2020 with the arrival of smartphones. The mental health of the young has declined most, falling rapidly among young men starting around 2008 with the Great Recession, and a few years later among young women. It is indisputable that the young in the UK are experiencing a mental health crisis. The big question then is what to do about it?

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<sup>19</sup> See <https://www.uswitch.com/mobiles/studies/mobile-statistics/> for cellular phone subscriptions over time.

<sup>20</sup> U.S. Surgeon General (2024), *Social Media and Youth mental Health: The U.S. Surgeon General’s Advisory*. <https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf>

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Table 1. Depression by age, 2020-2024 (weighted) – non proxies only personal responses %

2020-2024	Females			Males		
	18-24	25-34	35-44	18-24	25-34	35-44
Tyne & Wear	20.4	14.4	10.7	5.1	7.6	6.8
Rest of Northern	17.9	13.2	10.7	3.6	9.5	5.4
South Yorkshire	15.2	11.8	9.5	8.8	8.5	7.5
West Yorkshire	10.8	13.3	9.6	6.7	4.2	8.2
Rest of Yorks & Humberside	13.4	13.4	10.3	10.0	6.2	8.6
East Midlands	10.7	10.7	9.1	4.5	6.4	5.9
East Anglia	11.4	11.4	6.8	6.0	10.7	6.5
Inner London	5.9	5.9	5.4	3.4	4.3	3.3
Outer London	9.0	9.0	5.8	6.9	3.6	2.6
Rest of South-East	10.7	10.7	6.7	4.3	5.9	5.0
South-West	12.5	12.5	9.2	7.6	6.9	5.7
West Midlands	8.7	08.7	7.5	3.4	3.1	5.6
Rest of West Midlands	11.8	11.7	7.2	2.0	5.3	6.7
Greater Manchester	13.8	13.8	9.7	5.2	7.9	6.0
Merseyside	14.2	14.1	9.6	7.7	11.0	6.5
Rest of North-West	11.2	11.2	9.4	5.1	8.5	7.5
Wales	11.9	11.8	9.7	5.0	8.0	6.9
Strathclyde	13.6	13.6	10.7	4.8	6.6	6.9
Rest of Scotland	12.8	12.7	9.6	7.7	7.9	5.7
Northern Ireland	11.5	11.5	10.8	4.1	7.9	7.1
White	13.7	12.1	4.5	6.7	6.9	6.3
Non-white	6.3	6.2	9.0	2.4	2.7	2.9
Degree	10.7	5.2	6.0	5.1	4.7	3.8
Higher education	16.2	8.6	8.9	6.4	6.6	4.7
A-level	10.9	13.1	9.5	4.9	6.8	5.5
O-level	13.2	15.9	11.4	7.0	1.6	6.9
Other	19.2	12.7	9.9	11.7	8.0	3.8
No qualifications	19.2	14.9	15.6	9.7	12.6	5.8
Worker	11.5	9.8	6.8	5.8	5.1	4.6
Unemployed	14.0	16.3	11.3	5.5	11.2	11.6
OLF	13.2	16.5	14.7	6.0	19.4	14.9
All	12.2	11.1	8.2	5.8	6.2	5.6

Source: Labour Force Surveys

Table 2. Depression OLS regression by year. All personal responses/non-proxy, ages 16-64

	1997-2010	2011-2014	2015-2019	2020-2024
25-34	.0057 (17.93)	.0029 (3.17)	-.0013 (1.11)	-.0068 (2.89)
35-44	.0094 (29.94)	.0070 (7.86)	-.0070 (5.91)	-.0254 (11.02)
45-54	.0102 (32.03)	.0051 (5.78)	-.0140 (11.95)	-.0382 (16.76)
55-64	.0050 (15.54)	.0029 (3.33)	-.0256 (21.74)	-.0554 (24.70)
Female	.0048 (29.05)	.0118 (26.93)	.0221 (39.99)	.0240 (28.85)
White	.0039 (11.13)	.0116 (4.95)	.0275 (6.40)	.0497 (9.18)
Rest of Northern	-.0057 (7.87)	.0017 (0.89)	-.0045 (1.81)	-.0012 (0.33)
South Yorkshire	-.0033 (4.20)	.0000 (0.05)	.0016 (0.60)	-.0021 (0.50)
West Yorkshire	-.0088 (12.32)	.0055 (2.98)	-.0079 (3.27)	-.0055 (1.46)
Rest Yorks & Humber	-.0138 (18.26)	.0108 (5.46)	-.0140 (5.49)	-.0104 (2.67)
East Midlands	-.0121 (18.35)	.0080 (4.69)	-.0137 (6.16)	-.0124 (3.66)
East Anglia	-.0135 (18.83)	.0066 (3.57)	-.0130 (5.39)	-.0097 (2.65)
Inner London	-.0096 (13.40)	.0149 (8.01)	-.0317 (13.21)	-.0277 (7.35)
Outer London	-.0142 (21.08)	.0163 (9.32)	-.0338 (14.92)	-.0301 (8.60)
Rest of South-East	-.0146 (23.78)	.0109 (6.80)	-.0203 (9.68)	-.0200 (6.29)
South-West	-.0134 (20.76)	.0084 (4.93)	-.0155 (7.07)	-.0113 (3.42)
West Midlands	-.0081 (11.25)	.0069 (3.67)	-.0172 (7.04)	-.0172 (4.50)
Rest of West Midlands	-.0123 (17.65)	.0129 (7.00)	-.0172 (7.26)	-.0157 (4.37)
Greater Manchester	-.0051 (7.18)	.0014 (0.80)	-.0069 (2.90)	-.0000 (0.02)
Merseyside	-.0022 (2.75)	.0001 (0.05)	-.0013 (0.47)	-.0026 (0.59)
Rest of North-West	-.0106 (14.83)	.0084 (4.48)	-.0144 (5.87)	-.0078 (2.08)
Wales	-.0029 (4.12)	.0031 (1.72)	-.0018 (0.79)	-.0045 (1.27)
Strathclyde	.0031 (4.37)	.0079 (4.12)	-.0007 (0.32)	.0012 (0.32)
Rest of Scotland	-.0096 (14.10)	.0083 (4.63)	-.0099 (4.23)	-.0056 (1.56)
Northern Ireland	-.0012 (1.61)	.0051 (2.74)	-.0018 (0.81)	.0048 (1.46)
_cons	.0070	.0116	.0246	.0382
Year dummies	10	3	4	3
N	2,587,514	593,154	584,838	319,521
Adj R-squared	.0033	.0034	.0076	.0105
Mean of dep var	.0178	.0288	.0438	.0627

Also includes year dummies; excluded, 16-24, Tyne and Wear. Source: LFS.



Table 3. Mental illness, or suffers from phobia, panics or other nervous disorders OLS regression by year ages 16-64. All personal responses/non-proxy

	1997-2010	2011-2014	2015-2019	2020-2024
25-34	.0014 (6.63)	.0021 (3.59)	-.0016 (2.43)	-.0032 (2.56)
35-44	.0029 (14.39)	.0032 (5.62)	-.0022 (3.36)	-.0075 (6.11)
45-54	.0039 (19.47)	.0034 (5.88)	-.0031 (4.77)	-.0078 (6.43)
55-64	.0012 (5.91)	-.0012 (2.12)	-.0066 (9.93)	-.0132 (1.03)
Female	-.0010 (11.13)	-.0014 (5.19)	-.0005 (1.62)	.0004 (11.07)
White	.0013 (5.97)	.0025 (1.69)	.0083 (3.44)	.0108 (3.73)
Rest of Northern	-.0017 (3.59)	.0017 (1.36)	-.0008 (0.57)	-.0034 (1.73)
South Yorkshire	-.0018 (3.50)	.0040 (2.95)	.0019 (1.24)	.0005 (0.25)
West Yorkshire	-.0014 (3.07)	.0027 (2.28)	-.0017 (1.29)	-.0064 (3.19)
Rest Yorks & Humber	-.0025 (5.15)	.0005 (0.43)	-.0026 (1.82)	-.0031 (1.49)
East Midlands	-.0023 (5.49)	-.0003 (0.28)	-.0034 (2.72)	-.0039 (2.16)
East Anglia	-.0022 (4.81)	-.0020 (1.71)	.0005 (0.41)	-.0050 (2.55)
Inner London	.0015 (3.13)	.0028 (2.36)	-.0016 (1.22)	-.0046 (2.32)
Outer London	-.0006 (1.52)	-.0008 (0.74)	-.0046 (3.63)	-.0086 (4.59)
Rest of South-East	-.0029 (7.58)	-.0011 (1.05)	-.0035 (2.97)	-.0060 (3.55)
South-West	-.0025 (6.09)	.0002 (0.22)	-.0029 (2.39)	-.0035 (2.01)
West Midlands	-.0003 (0.77)	.0058 (4.74)	-.0014 (1.08)	-.0023 (1.13)
Rest of West Midlands	-.0025 (5.78)	.0012 (1.08)	-.0051 (3.80)	-.0075 (3.92)
Greater Manchester	.0001 (0.59)	.0061 (5.08)	-.0015 (1.10)	-.0018 (0.93)
Merseyside	-.0001 (0.07)	.0039 (2.84)	.0053 (3.33)	.0000 (0.03)
Rest of North-West	-.0012 (2.65)	.0013 (1.14)	-.0019 (1.41)	-.0034 (1.70)
Wales	-.0003 (0.71)	.0020 (1.71)	.0007 (0.57)	-.0022 (1.16)
Strathclyde	.0028 (6.09)	.0076 (6.15)	.0044 (3.17)	.0013 (0.64)
Rest of Scotland	-.0013 (2.93)	.0022 (1.88)	.0026 (2.01)	.0022 (1.15)
Northern Ireland	-.0012 (1.95)	-.0020 (1.66)	.0015 (1.14)	-.0048 (2.73)
_cons	.0038	.0068	.0094	.0153
Year dummies	10	3	4	3
N	2,587,514	593,154	584,838	319,521
Adj R-squared	.0010	.0009	.0008	.0048
Mean of dep var	.0068	.0102	.0348	.0464

Also includes year dummies; excluded 16-24, Tyne and Wear. Source: LFS.

Table 4. Depression, phobias and panics and recent interactions, 1997-2024, non-proxy

	Depression	Mental health, phobias and panics
White	.0058 (14.99)	.0008 (3.36)
Female	.0075 (43.68)	-.0012 (11.55)
Female*new	.0182 (38.58)	.0015 (5.14)
16-24*new	.0379 (35.30)	.0104 (15.97)
25-34*new	.0297 (47.34)	.0057 (15.13)
White*new	.0181 (6.10)	.0069 (3.87)
_cons	-.0167	-.0010
N	4,085,027	4,085,027
Adjusted R <sup>2</sup>	.0108	.0019

Notes: equations also include a full set of age, year and region dummies excluded age 16. T-statistics in parentheses. New=2018-2024. Source: LFS

Table 5. Gender differences of depression, phobias and panics and recent interactions, 1997-2024, non-proxy

	Depression		Mental health, phobias and panics	
	Female	Male	Female	Male
White	.0069 (12.20)	.0047 (9.19)	.0008 (2.60)	.0008 (2.22)
16-24*new	.0506 (32.84)	.0219 (15.22)	.0150 (17.73)	.0045 (4.53)
25-34*new	.0376 (42.89)	.0183 (21.03)	.0100 (20.87)	-.0005 (0.77)
White*new	.0208 (4.80)	.0149 (3.85)	.0120 (5.03)	.0011 (0.41)
_cons	.0147	-.0096	.0018	1.0014
N	2,357,345	1,727,682	2,357,345	1,727,682
Adjusted R <sup>2</sup>	.0128	.0052	.0022	.0018

Notes: equations also include a full set of age, year and region education and region dummies; excluded age 16. T-statistics in parentheses. New=2018-2024. Source: LFS

Table 6. Well-being changes in the APS 2012-13 vs 2023/24

	Anxiety		Happiness		Life satisfaction	
	2012-13	2022-24	2012-13	2022-24	2012-13	2022-24
<25	2.81	3.44	7.36	7.21	7.62	7.39
25-34	2.92	3.41	7.33	7.26	7.56	7.49
35-44	3.15	3.33	7.21	7.33	7.33	7.39
45-54	3.27	3.32	7.09	7.25	7.17	7.27
55-64	3.11	3.14	7.32	7.39	7.41	7.40

Table 7. APS well-being regressions 2020-2024, ages 16-64

	Anxious	Happiness	Life satisfaction
25-34	-.0601 (1.88)	.0618 (2.67)	.0972 (4.92)
35-44	-.0885 (2.85)	.0424 (1.89)	-.0058 (0.31)
45-54	-.1010 (3.29)	-.0304 (1.37)	-.1427 (7.52)
55-64	-.2484 (8.21)	.1230 (5.61)	-.0303 (1.62)
White	.0931 (4.70)	-.1233 (8.58)	.0427 (3.48)
Female	.4910 (3.13)	-.0218 (2.64)	.0030 (0.44)
North-West	.0469 (1.61)	.0396 (1.88)	.0379 (2.11)
Merseyside	.1384 (3.11)	-.0855 (2.65)	-.1196 (4.34)
Yorkshire & Humber	.0574 (1.93)	.0556 (2.58)	.0370 (2.01)
East Midlands	-.0294 (0.90)	.0899 (3.82)	.0576 (2.86)
West Midlands	.0072 (0.24)	.0674 (3.08)	.0577 (3.09)
Eastern	-.0338 (1.11)	.0964 (4.35)	.0970 (5.13)
London	.1677 (5.55)	-.0406 (1.86)	-.0545 (2.92)
South-East	.0597 (2.20)	.0802 (4.07)	.0883 (5.25)
South-West	-.0091 (0.32)	.0864 (4.13)	.0829 (4.65)
Wales	.0765 (2.71)	.0508 (2.49)	.0188 (1.08)
Scotland	-.0650 (2.37)	.0573 (2.87)	.0532 (3.13)
Northern Ireland	-.2208 (6.64)	.2276 (9.45)	.1765 (8.58)
Constant	3.1235	7.3240	7.4057
N	253,991	254,049	254,089
Adj R-squared	.0096	.0019	.0029

Also includes year dummies; excluded 16-24 and North-East.

Source: Annual Population Surveys

Table 8. Scottish well-being regressions 2008-2021, ages 16-64

	GHQ36		WEMWBS	
	2008-2019	2021	2008-2020	2021
Age	+ .1154 (9.40)	-.0307 (4.26)	-.1061 (5.26)	.0983 (6.81)
Age squared	-.0013 (8.71)		+.0013 (5.46)	
Female	.8760 (17.14)	.5856 (2.89)	-.2907 (3.46)	-.6604 (1.72)
Constant	8.0942	12.5067	51.9231	44.1748
Adj R-squared	.0101	.0180	.0012	.0236
N	43948	3547	43806	2400

Where new is a 1,0 dummy where 1=2019-2021, Columns 1 and 3 include year dummies; excluded 16-24. WEMWBS not available in 2020. Source Scottish Health Surveys, 2008-2021.

Table 9. Life satisfaction using the Eurobarometers, 2004-2023.

	UK	UK	Europe minus UK
	2004-2020	2021-2023	2021-2023
Age 25-34	-.0649 (4.86)	+.0950 (2.82)	-.0911 (15.62)
Age 35-44	-.1142 (8.72)	+.0907 (2.70)	-.1371 (24.31)
Age 45-54	-.1600 (12.06)	+.0393 (1.17)	-.1884 (33.69)
Age 55-64	-.0724 (5.56)	+.1617 (4.82)	-.2164 (38.82)
Adjusted R <sup>2</sup>	.0215	.1018	.1219
N	28,056	4933	178,281

Equations also include female and year dummies and country dummies in column 3  
Source: Eurobarometers.

Table 10. Well-being in the UK in Global Minds, 2020-2024

	MHQ	Life satisfaction	Fear & anxiety	Suicidal thoughts
25-34	12.4937 (11.47)	.2673 (5.30)	-.0419 (1.32)	-.8940 (20.30)
35-44	21.3018 (18.72)	.5470 (10.53)	-.3292 (8.65)	-1.2597 (27.38)
45-54	29.6000 (29.90)	.7044 (16.43)	-.6150 (18.57)	-1.4518 (36.28)
55-64	46.4933 (51.56)	1.1881 (28.99)	-1.0729 (35.57)	-1.8853 (51.73)
N	43,367	19,377	43,367	43,367
Adjusted R <sup>2</sup>	.0694	.0485	.0532	.0820
Mean	48.6	5.04	5.68	3.35

Equations include gender and year (3). Life satisfaction only available in 2021 (47726), 2021 (226435) and 2022 (461). and 2021. T-statistics in parentheses. Source GlobalMinds, 2020-2024.

Notes: MHQ scored -100 to 200. The other three variables scored 1 to 9.

Table 11. Countries ranked for ages 18-24 by MHQ worst to best (correlation= -.369).

Rank MHQ		MHQ	N	Rank GWP		GWP
12	Algeria	30.1	8,048	28	Algeria	5.54
18	Argentina	22.5	7,760	15	Argentina	6.55
32	Australia	13.6	5,679	1	Australia	6.94
29	Bangladesh	16.4	1,667	35	Bangladesh	4.72
38	Brazil	3.7	5,039	17	Brazil	6.46
22	Canada	20.4	4,896	9	Canada	6.70
31	Chile	14.7	1,006	11	Chile	6.65
24	Colombia	19.6	15,899	24	Colombia	5.95
2	Congo	49.2	2,170	25	Congo	5.78
27	Ecuador	17.6	2,702	20	Ecuador	6.40
20	Egypt	20.9	12,715	37	Egypt	4.38
19	El Salvador	21.6	1,188	7	El Salvador	6.72
35	France	11.7	5,375	5	France	6.83
25	Germany	18.3	2,828	14	Germany	6.58
21	Guatemala	20.9	2,289	10	Guatemala	6.66
15	Honduras	24.2	1,230	16	Honduras	6.47
30	India	16.3	47,642	36	India	4.53
17	Iraq	23.0	7,383	27	Iraq	5.61
1	Italy	61.0	,975	8	Italy	6.71
8	Jordan	35.3	2,690	34	Jordan	4.86
28	Mexico	16.8	29,667	6	Mexico	6.77
9	Morocco	34.3	3,715	29	Morocco	5.34
4	Mozambique	44.5	2046	30	Mozambique	5.32
34	New Zealand	12.3	1,553	3	New Zealand	6.85
14	Nicaragua	24.7	1,319	4	Nicaragua	6.84
6	Nigeria	36.8	2,059	31	Nigeria	5.28
16	Pakistan	24.2	5,613	32	Pakistan	5.17
11	Paraguay	30.7	1,702	22	Paraguay	6.18
33	Peru	13.6	7,574	21	Peru	6.23
3	Philippines	44.6	2,276	23	Philippines	6.12
23	Singapore	20.0	1,673	19	Singapore	6.45
36	South Africa	10.1	5,310	26	South Africa	5.75
26	Spain	17.8	9,506	18	Spain	6.46
10	Tunisia	34.0	1,201	33	Tunisia	4.87
37	UK	9.2	9,947	2	UK	6.92
13	USA	27.6	15,736	12	USA	6.61
7	Venezuela	35.5	9,768	13	Venezuela	6.59
5	Yemen	39.7	6,954	38	Yemen	3.93

Rankings of countries in Global Minds using MHQ scores and with GWP data from Marquez et al, 2024. Table 3.2

Chart 1. Depression and phobias personal versus proxy responses  
Labour Force Survey

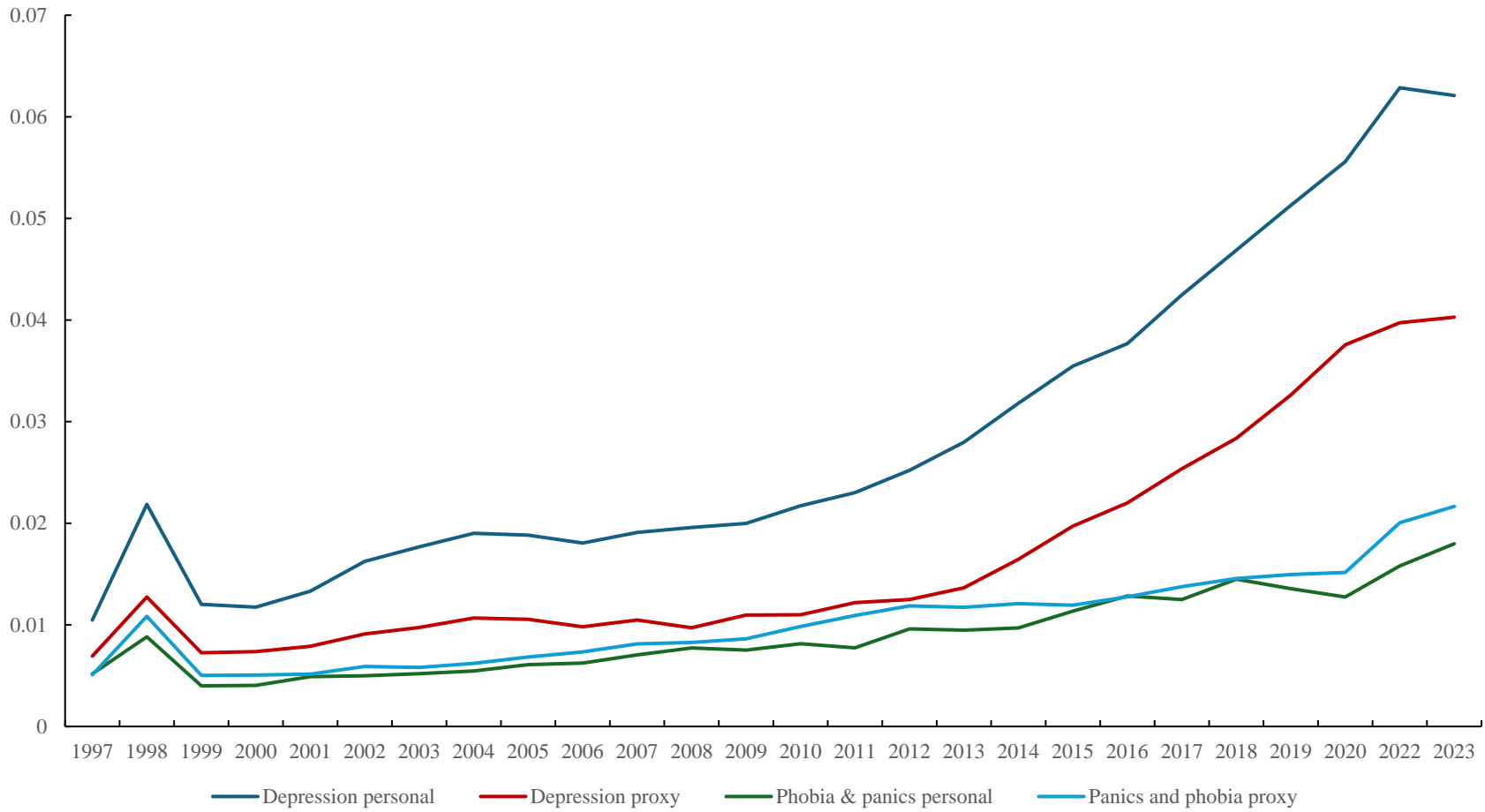


Chart 2. Depression for Females by age, Labour Force Survey

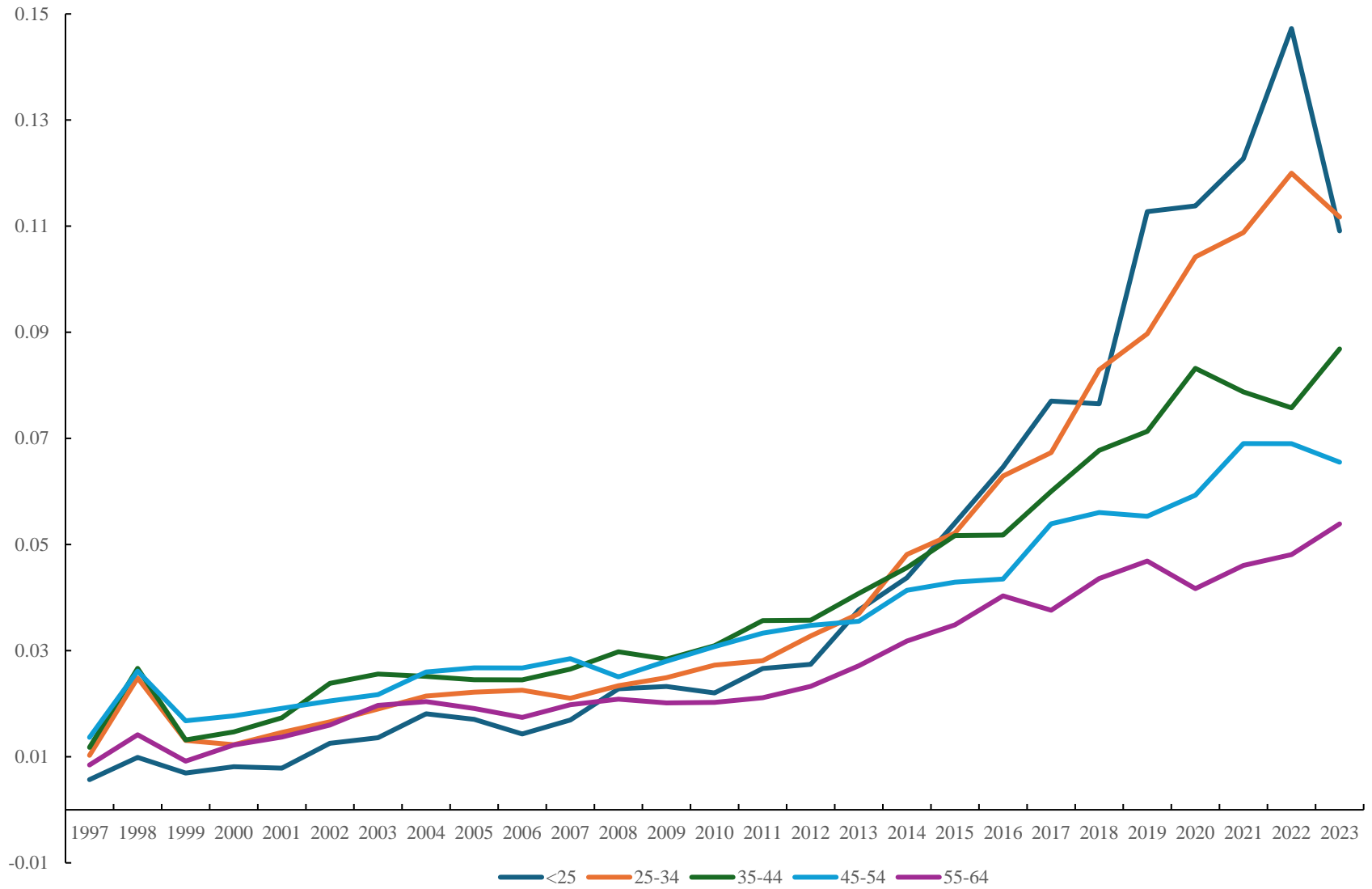


Chart 3. Depression for males by age, Labour Force Survey

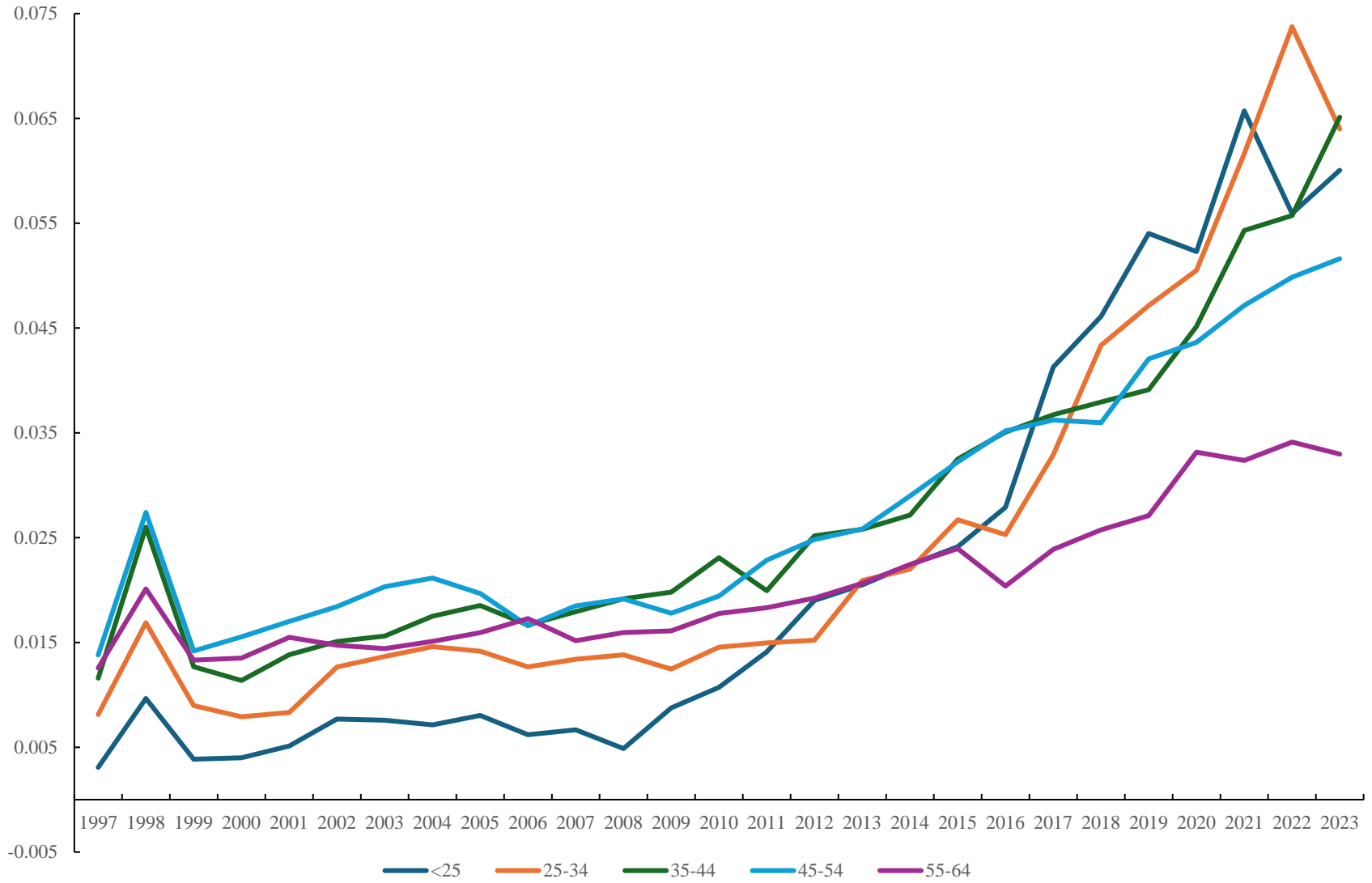




Chart 4. Females phobia non-proxies, Labour Force SurveyTitle

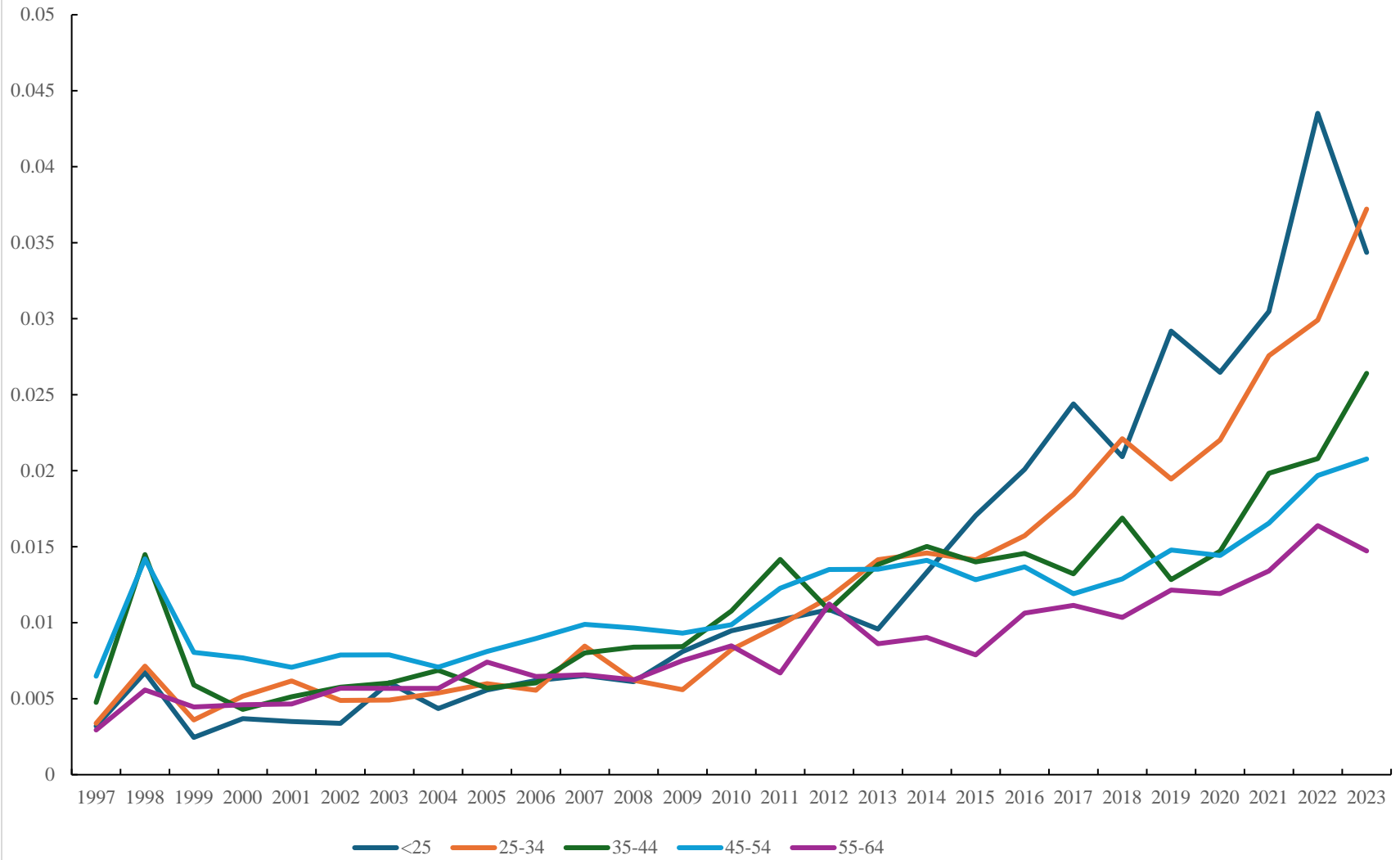


Chart 5. Males phobia non-proxies. Labour Force Surveys



Chart 6. Depression and phobia by age - proxy v non-proxy responses, Labour Force Survey

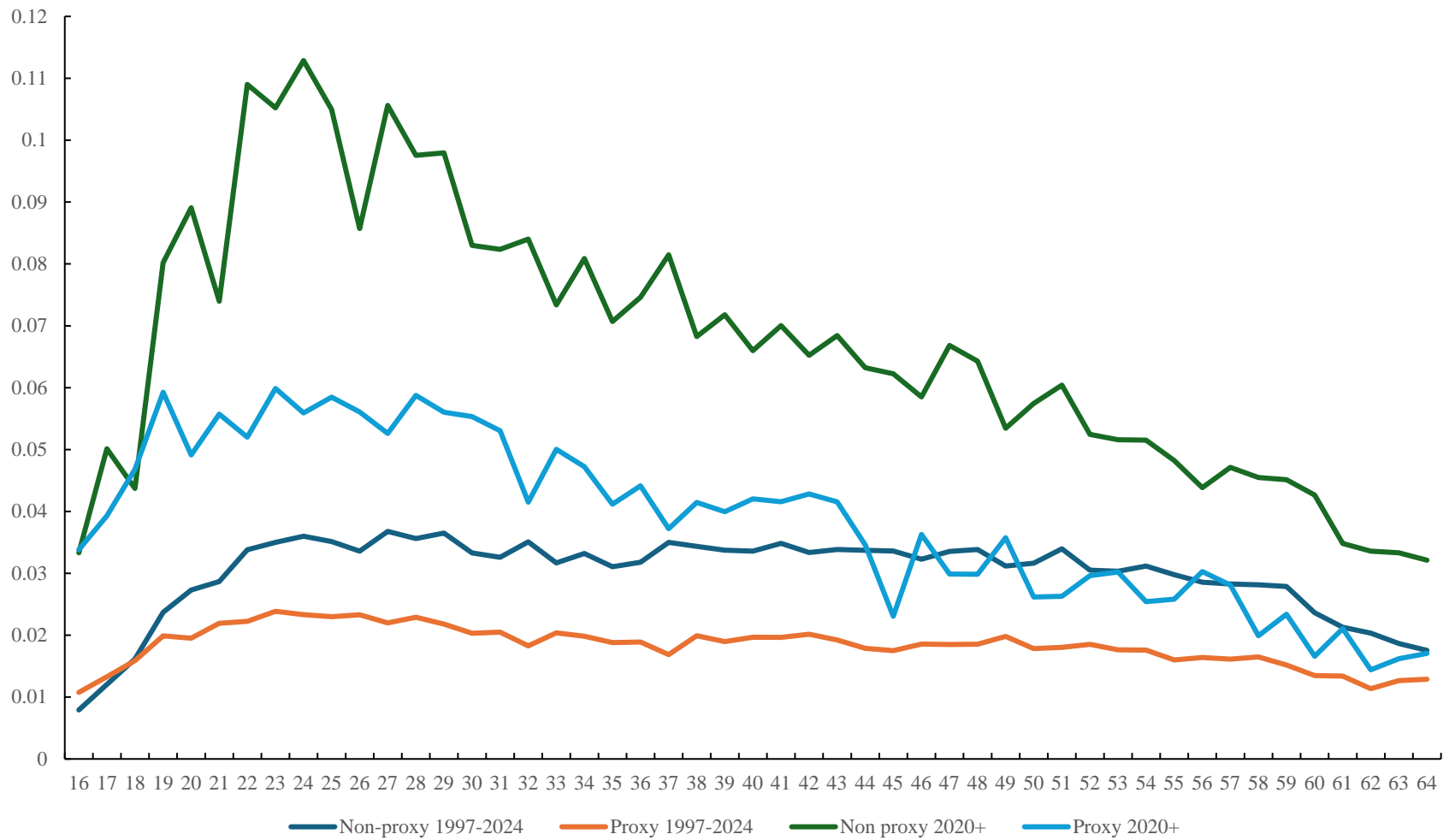


Chart 7. Depression by age, Labour Force Survey - Females

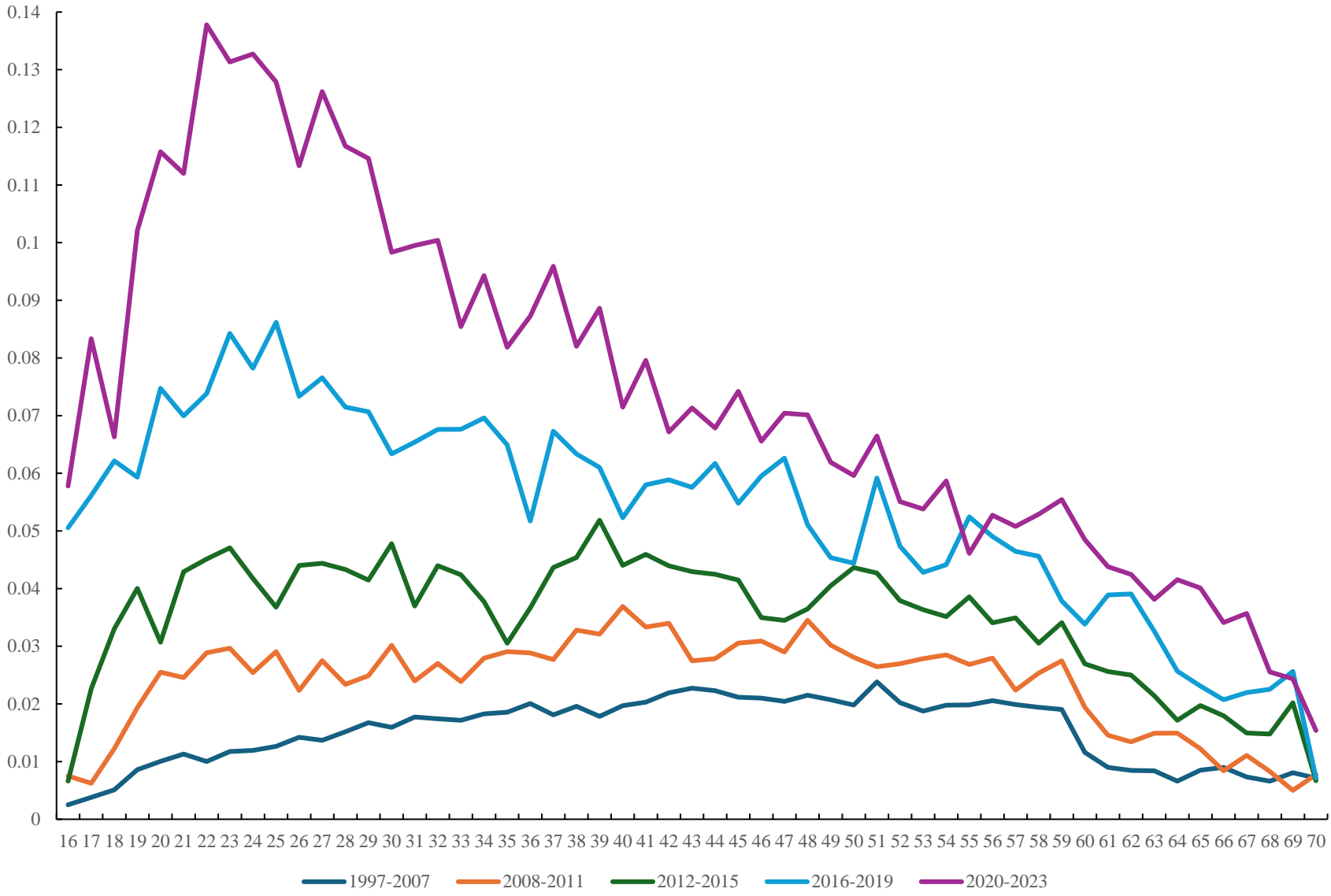


Chart 8. Depression by age, Labour Force Survey - Males

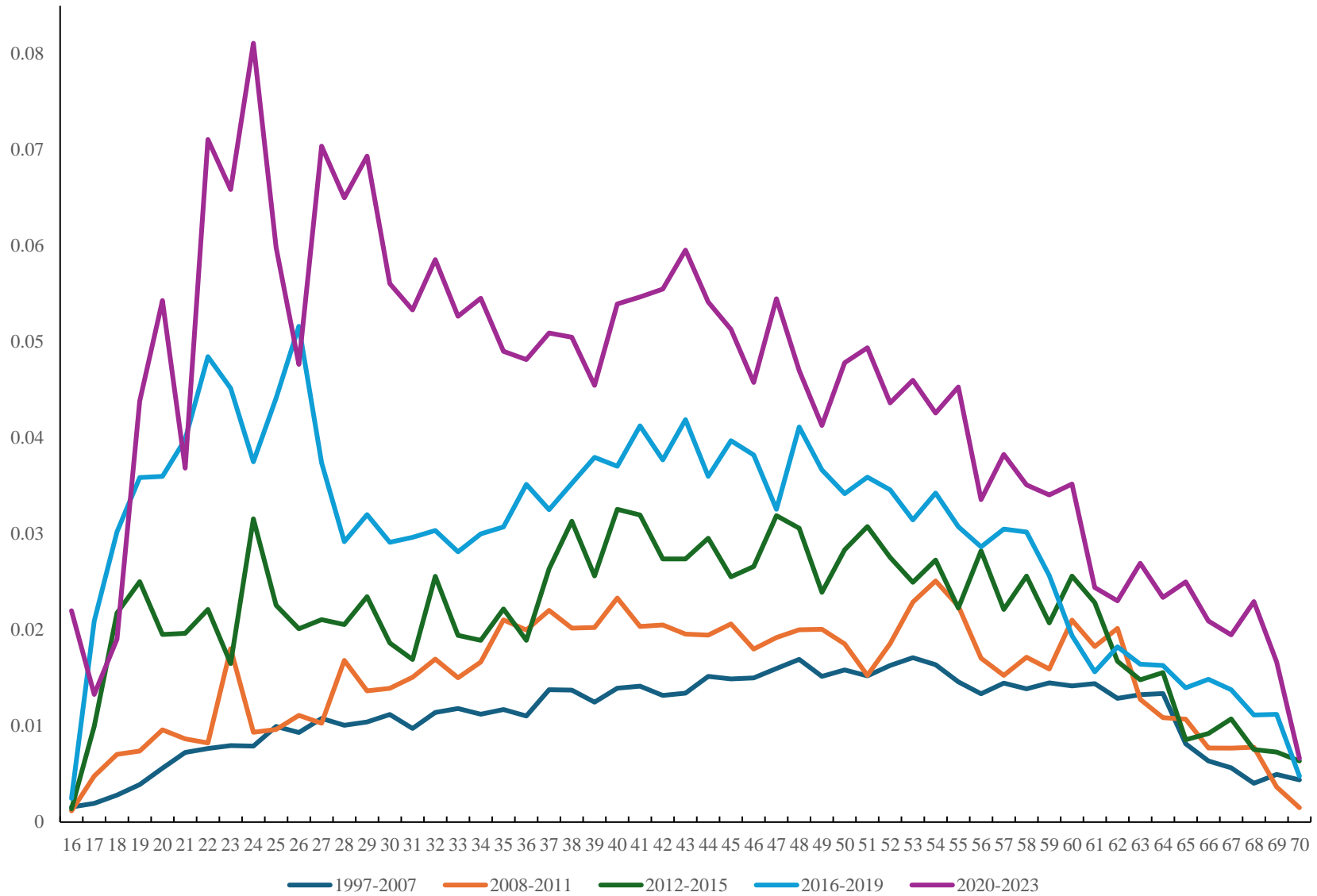


Chart 9. Non-proxy phobia over time by gender, Labour Force Survey

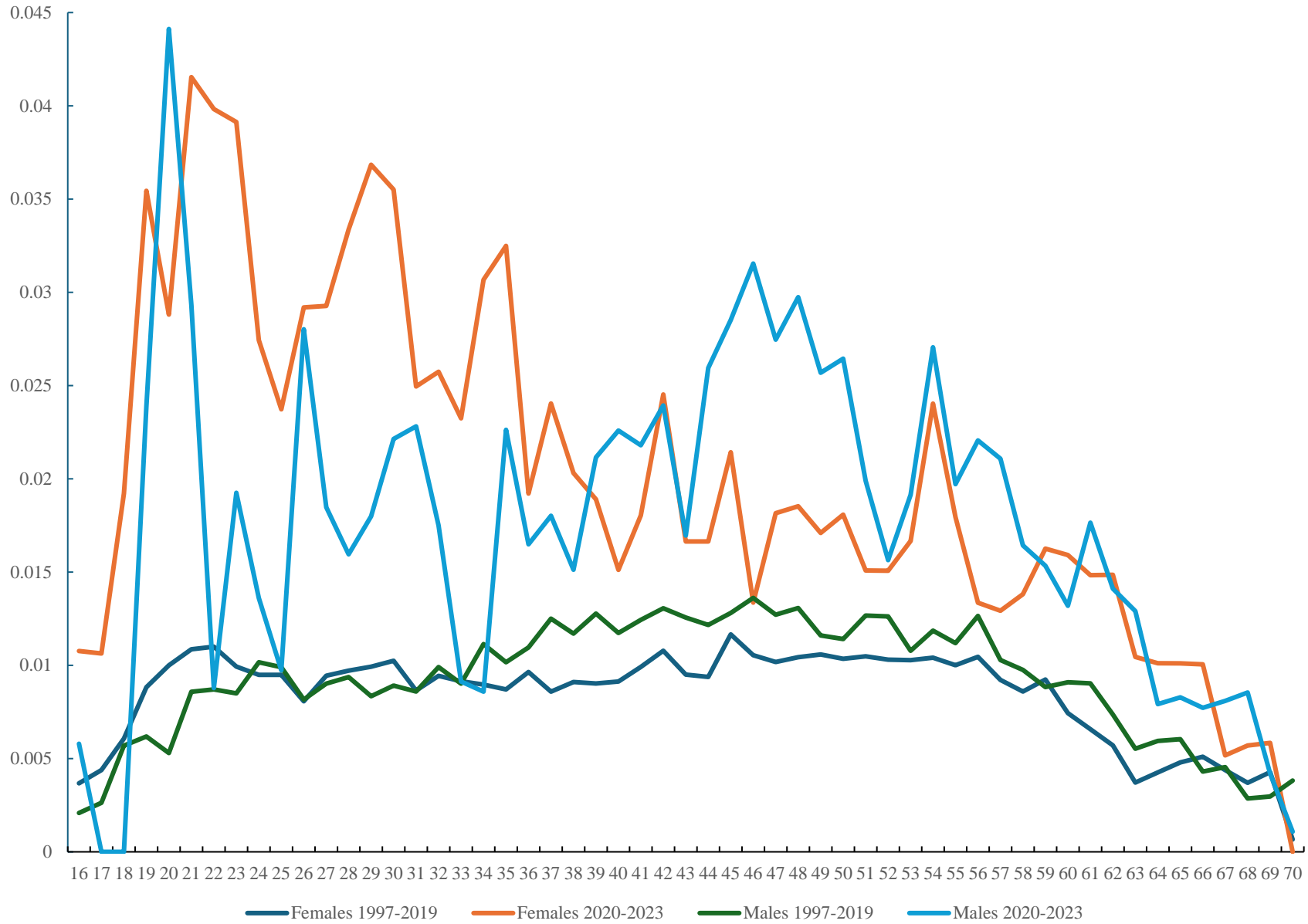


Chart 10a. GHQ36 Scottish Health Surveys, 2008-2020

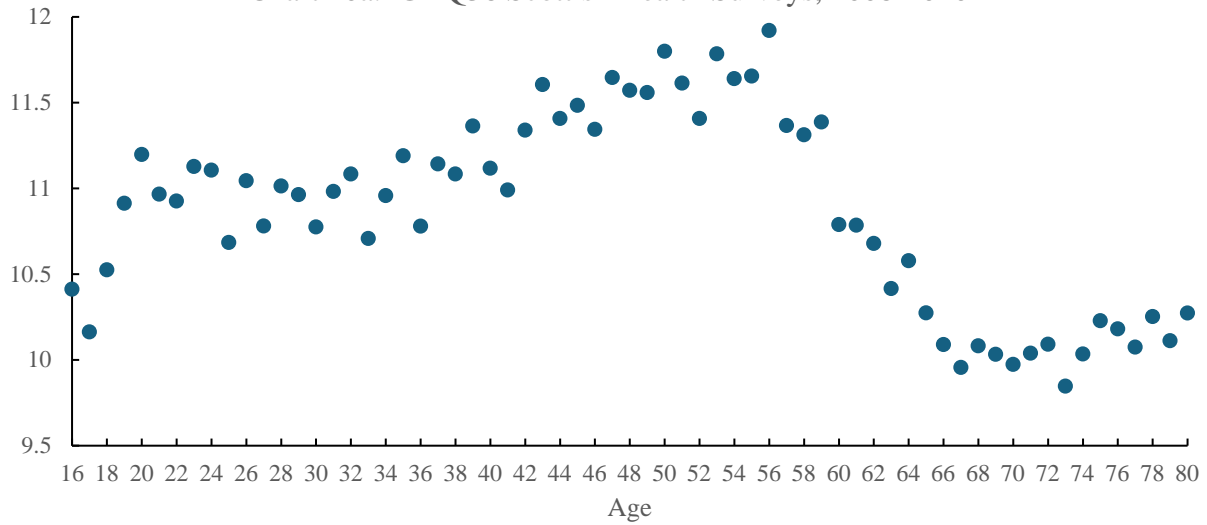


Chart 10b. WEMWBS, Scottish Health Surveys, 2008-2020

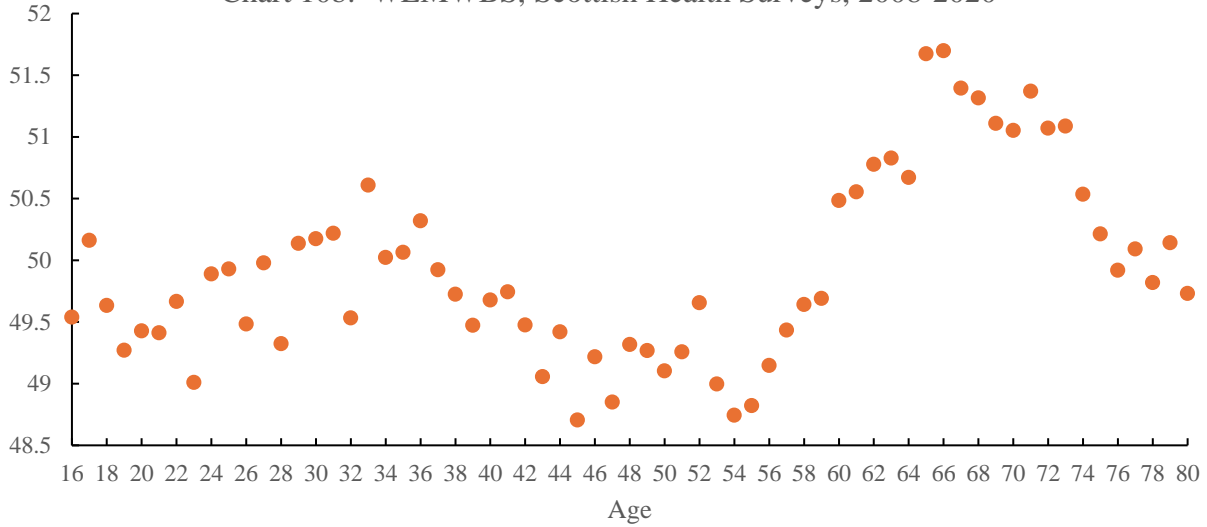
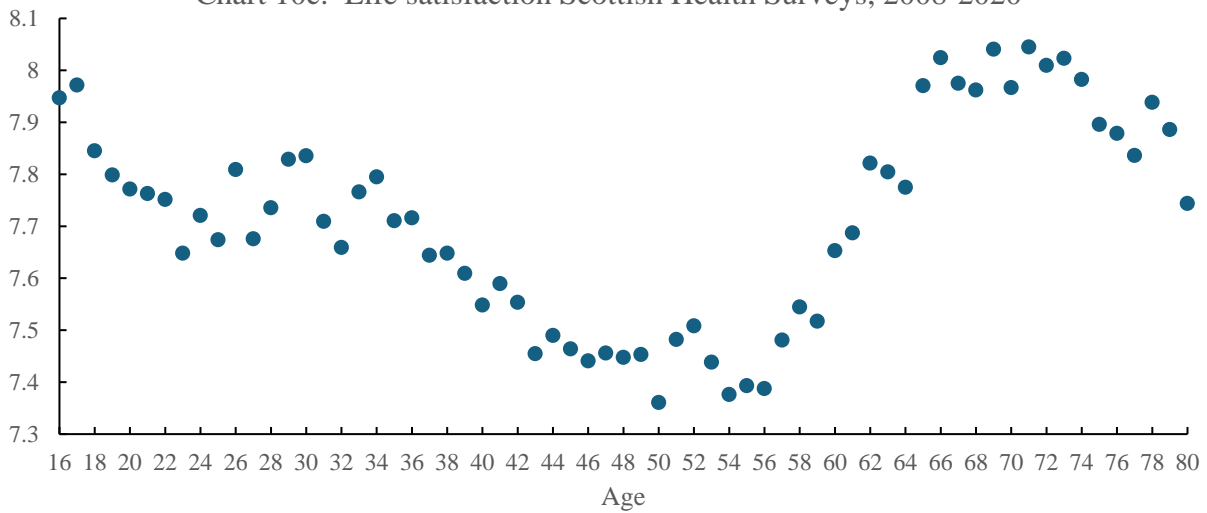


Chart 10c. Life satisfaction Scottish Health Surveys, 2008-2020



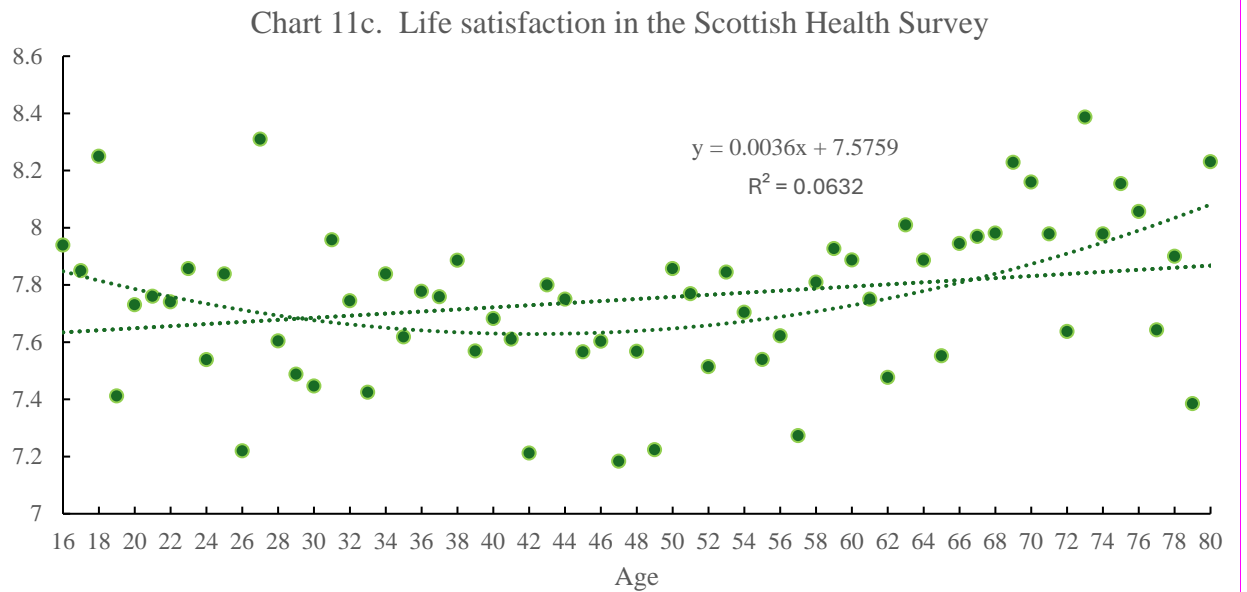
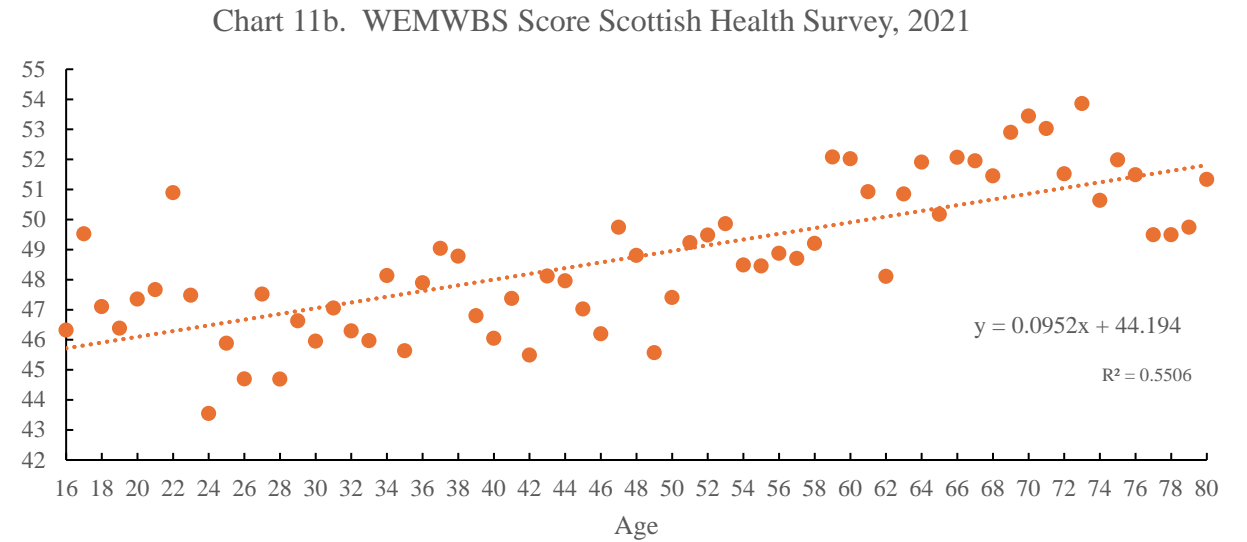
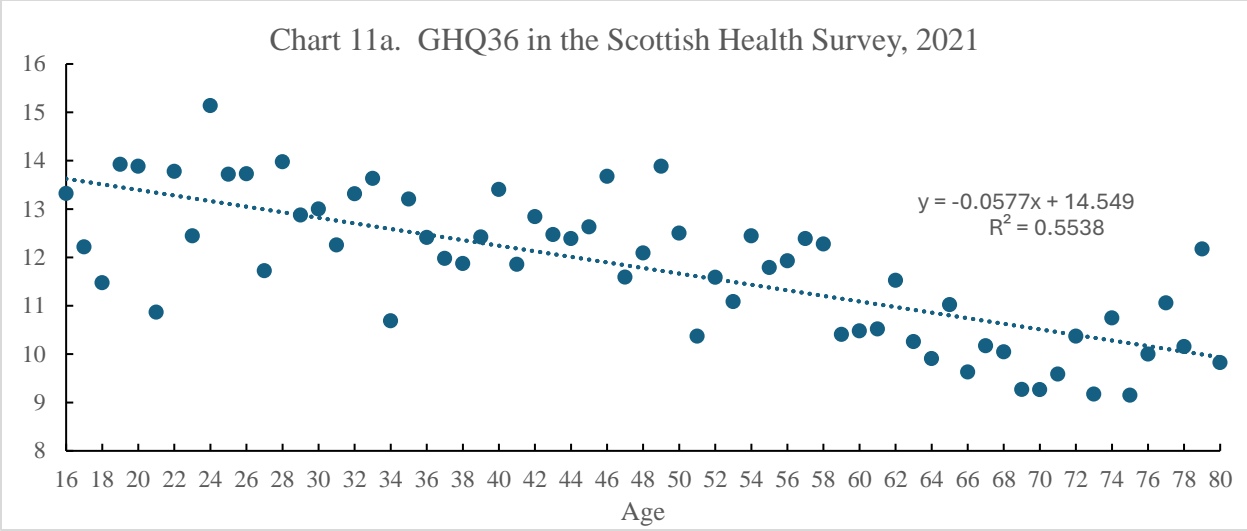




Chart 12. Eurobarometer life satisfaction by age for the UK

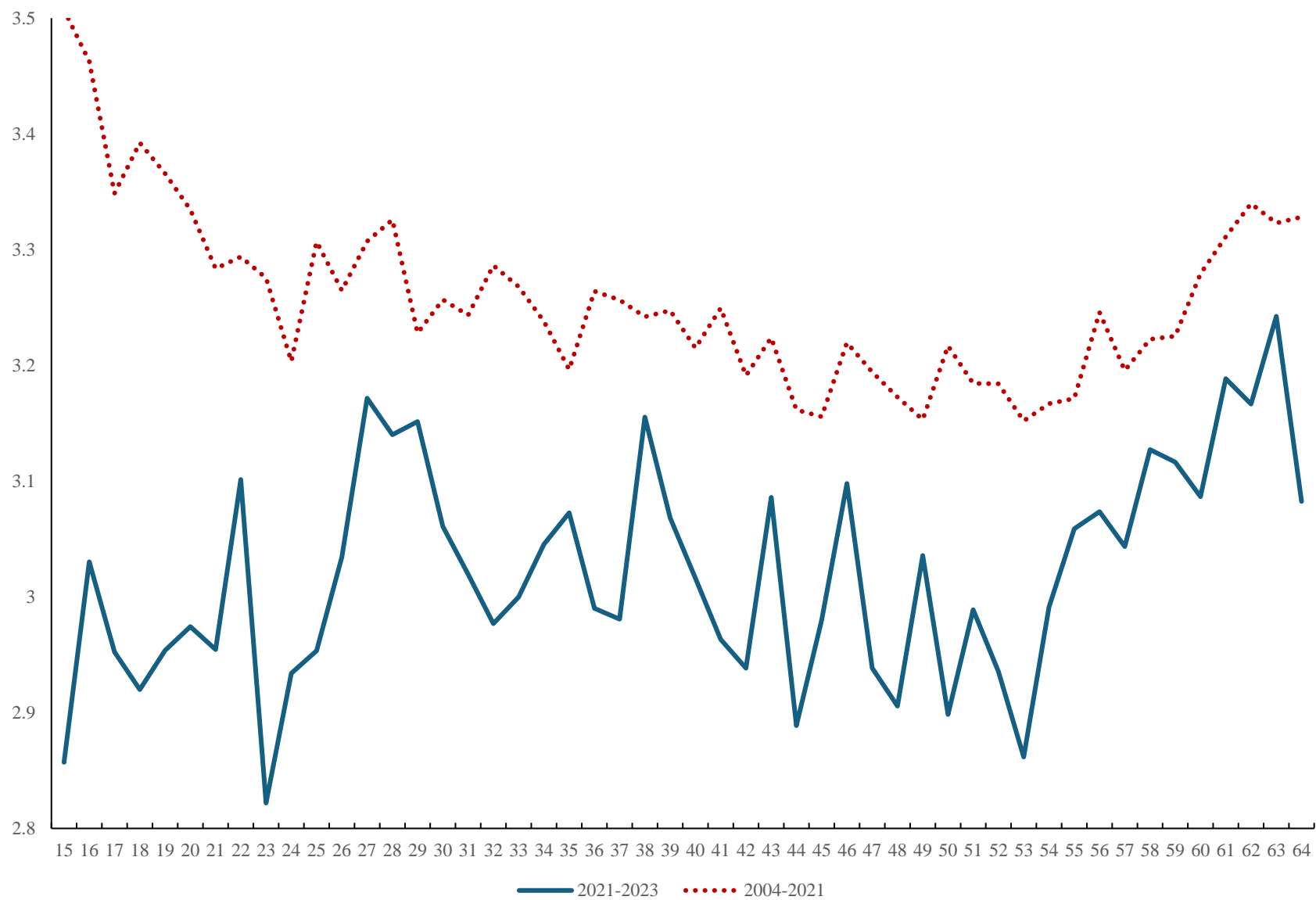
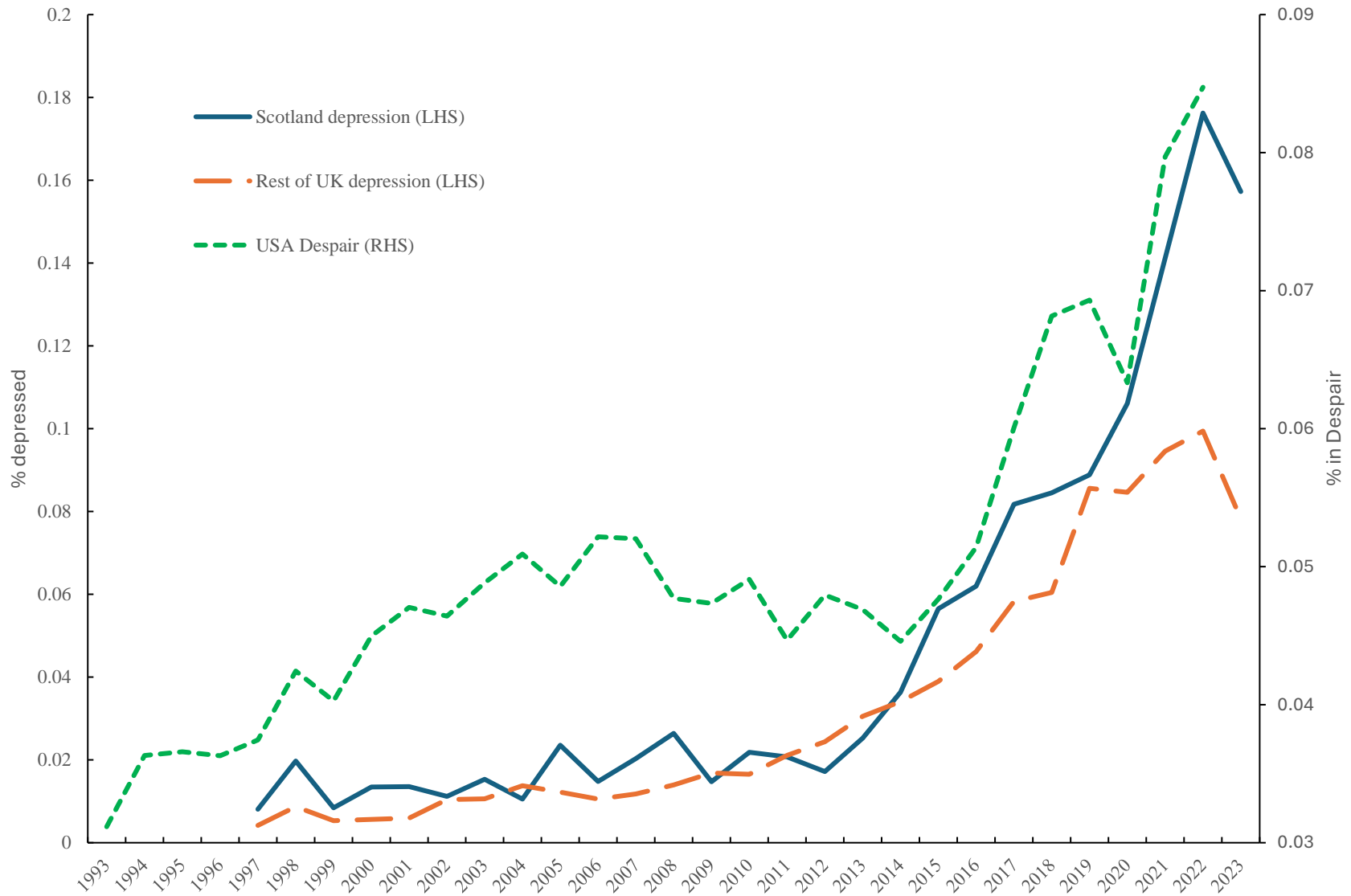


Chart 13. Ill-being of the young, UK (ages 16-24) and USA (ages 18-24)



## Appendix 1 – Health options from LFS, GHQ36 and WEMWBS definitions

### 1) 17 Main health problems in the LFS

The seventeen options are

- (1) Problems or disabilities (including arthritis or rheumatism) connected with...arms or hands
- (2) ...legs or feet
- (3) ...back or neck
- (4) Difficulty in seeing (while wearing spectacles or contact lenses)
- (5) Difficulty in hearing
- (6) A speech impediment
- (7) Severe disfigurement, skin conditions, allergies
- (8) Chest or breathing problems, asthma, bronchitis
- (9) Heart, blood pressure or blood circulation problems
- (10) Stomach, liver kidney or digestive problems
- (11) Diabetes
- (12) Depression, bad nerves or anxiety
- (13) Epilepsy
- (18) Autism (including Autism Spectrum Condition, Asperger syndrome)
- (14) Severe or specific learning difficulties
- (15) Mental illness, or suffer from phobia, panics or other nervous disorders
- (16) Progressive illness not included elsewhere (e.g. cancer, multiple sclerosis, symptomatic HIV, Parkinson's disease, muscular dystrophy)
- (17) Other health problems or disabilities

### 2) GHQ36

For the GHQ36 measure, individuals answer 12 separate mental-distress questions:

*“These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. 0= none of the time; 1= a little of the time; 2= some of the time; 3= most of the time; 4= all of the time?”*

Have you lost much sleep over worry?

Been able to concentrate on things?

Felt you are playing a useful part in things?

Felt capable of making decisions about things?

Felt constantly under strain?

Felt you could not overcome your difficulties?

Been able to enjoy your normal day-to-day activities

Been able to face up to your problems

Been feeling unhappy and depressed?

Been losing confidence in yourself?

Been thinking of yourself as a worthless person?

Been feeling reasonably happy all things considered?

### 3) WEMWBS

*“Below are some statements about feelings and thoughts. Please tick the box that best describes your experience of each over the last 2 weeks 1= None of the time 2=rarely 3=some of the time 4=often 5=all of the time.”*

I've been feeling optimistic about the future  
I've been feeling useful  
I've been feeling relaxed  
I've been feeling interested in other people  
I've had energy to spare  
I've been dealing with problems well  
I've been thinking clearly  
I've been feeling good about myself  
I've been feeling close to other people  
I've been feeling confident  
I've been able to make up my own mind about things  
I've been feeling loved  
I've been interested in new things  
I've been feeling cheerful

Appendix 2. Mental health in Europe from Flash Eurobarometer 530.

	Sad	Worries	Difficulty Concentrating	Moods	Eat and sleep	Social Withdrawal
Age 25-34	-.0013 (0.11)	-.0150 (1.40)	-.0625 (6.06)	-.0457 (4.95)	-.0472 (5.69)	-.0239 (2.33)
Age 35-44	-.0511 (4.50)	-.0497 (4.76)	-.1070 (10.63)	-.0797 (8.86)	-.0573 (7.09)	-.0725 (7.25)
Age 45-54	-.0807 (7.11)	-.0981 (9.42)	-.1317 (13.09)	-.1163 (12.95)	-.0932 (11.55)	-.1016 (10.17)
Age 55-64	-.1405 (12.17)	-.1386 (13.08)	-.1829 (17.86)	-.1733 (18.95)	-.1294 (15.76)	-.1423 (14.00)
Female	.1463 (21.29)	.1200 (19.03)	.0809 (13.28)	.0818 (15.04)	.0523 (10.69)	.0851 (14.08)
Adjusted R <sup>2</sup>	.0609	.0483	.0389	.0434	.0273	.0393
N	19098	19098	19098	19098	19098	19098

	Low self- Esteem	Detachment from reality	Unable to cope	Problems alcohol or drugs
Age 25-34	-.0623 (6.08)	-.0351 (8.63)	-.0149 (1.52)	-.0004 (0.09)
Age 35-44	-.1159 (11.58)	-.0453 (11.42)	-.0677 (7.07)	-.0041 (0.84)
Age 45-54	-.1685 (16.85)	-.0586 (14.79)	-.1043 (10.91)	-.0227 (4.66)
Age 55-64	-.2357 (23.16)	-.0631 (15.66)	-.1591 (16.35)	-.0336 (6.77)
Female	.1111 (18.35)	-.0000 (0.01)	.0921 (15.90)	-.0215 (7.25)
Adjusted R <sup>2</sup>	.0653	.0173	.0400	.0124
N	19098	19098	19098	19098

T-statistics in parentheses. Also includes country dummies.

Q14. In the last 12 months, have you had any emotional or psychosocial problems (such as feeling depressed or feeling anxious)?

Yes/No. If yes Q15. Which of the following symptoms have you experienced?

Feeling sad/down

Excessive fears or worries

Difficulty to concentrate

Extreme mood changes

Extreme changes in eating and or sleeping habits

Social withdrawal, loss of interest/enjoyment from activities previously enjoyed

Low self-esteem

Detachment from reality, paranoia or hallucinations (visual or audio)

Inability to cope with daily problems or stress

Problems with alcohol or drug use

Appendix Table 3. Country rankings of life satisfaction for the young from Marquez et al (2024)

	GWP 2020-2024 Age 15-24	PISA 2022 Age 15	HBSC 2021/22 Age 15	HBSC 2021/22 Age 13	HBSC 2021/22 Age 11					
1	Israel	7.98	Kazakhstan	8.41	Armenia	8.15	Albania	8.67	Albania	9.18
2	Iceland	7.76	Albania	8.01	Albania	8.14	Armenia	8.52	Serbia	8.84
3	Romania	7.62	Kosovo	7.87	Tajikistan	8.00	Serbia	8.30	Armenia	8.80
4	Serbia	7.53	Guatemala	7.72	Kazakhstan	7.97	Kazakhstan	8.30	Romania	8.67
5	Croatia	7.51	N. Macedonia	7.65	Kyrgyz	7.95	Kyrgyz	8.30	Kyrgyz	8.60
6	Denmark	7.45	Cambodia	7.65	Serbia	7.89	Tajikistan	8.07	Kazakhstan	8.49
7	Finland	7.41	Georgia	7.62	Romania	7.76	Romania	8.06	Croatia	8.47
8	Lithuania	7.39	Romania	7.53	Moldova	7.70	Moldova	8.02	Moldova	8.47
9	Kuwait	7.39	Montenegro	7.52	Croatia	7.57	Cyprus	7.99	Cyprus	8.46
10	Austria	7.34	Serbia	7.48	Belgium (Fl)	7.46	Croatia	7.91	Greece	8.43
11	Netherlands	7.30	Dominican	7.44	Finland	7.46	N. Macedonia	7.79	N. Macedonia	8.42
12	Norway	7.28	Finland	7.41	Cyprus	7.45	Belgium (Fl)	7.78	Austria	8.36
13	Sweden	7.24	El Salvador	7.40	N. Macedonia	7.42	Austria	7.70	Spain	8.25
14	Czechia	7.17	Croatia	7.37	Czechia	7.26	Finland	7.66	Portugal	8.21
15	Slovenia	7.17	Saudi Arabia	7.36	Austria	7.20	Portugal	7.54	Germany	8.17
16	Luxembourg	7.12	Vietnam	7.35	Germany	7.12	Czechia	7.51	Finland	8.13
17	Taiwan	7.12	Costa Rica	7.32	Iceland	7.12	Germany	7.50	Luxembourg	8.12
18	Ireland	7.08	Paraguay	7.32	Denmark	7.10	Luxembourg	7.46	Tajikistan	8.10
19	Hungary	7.03	Netherlands	7.29	Luxembourg	7.10	Bulgaria	7.34	Belgium (Fl)	8.05
20	Belgium	6.95	Mexico	7.26	Bulgaria	7.10	Slovenia	7.34	Slovenia	8.05
21	Kosovo	6.94	Indonesia	7.22	Slovenia	7.08	Hungary	7.33	Czechia	8.04
22	Moldova	6.94	Hungary	7.21	Norway	7.05	Denmark	7.32	Netherlands	7.95
23	Panama	6.94	Mongolia	7.20	Portugal	7.05	Iceland	7.28	Switzerland	7.95
24	Australia	6.94	Denmark	7.19	Switzerland	6.99	Estonia	7.26	Hungary	7.92
25	Costa Rica	6.93	Lithuania	7.14	Hungary	6.99	Norway	7.24	Estonia	7.91
26	UK	6.92	Thailand	7.12	Estonia	6.95	Netherlands	7.22	Sweden	7.83
27	Cyprus	6.88	Portugal	7.06	Lithuania	6.95	Switzerland	7.21	Malta	7.81
28	Bosnia/Herz	6.88	Swiss	7.06	France	6.91	Lithuania	7.21	Belgium	7.80
29	Latvia	6.86	Bulgaria	7.04	Netherlands	6.90	Belgium	7.2	Iceland	7.79

30	New Zealand	6.85	Panama	7.04	Belgium	6.81	France	7.16	Denmark	7.76
31	Nicaragua	6.84	Uruguay	7.03	Sweden	6.80	Italy	7.16	Ireland	7.73
32	France	6.83	Slovakia	7.02	Spain	6.77	Spain	7.13	Lithuania	7.71
33	Portugal	6.83	Moldova	7.01	Latvia	6.73	Wales	7.09	Wales	7.70
34	Estonia	6.79	Colombia	6.96	Greece	6.70	Greece	7.09	France	7.68
35	Mexico	6.77	Sweden	6.91	Scotland	6.66	Latvia	7.06	Norway	7.67
36	Uruguay	6.77	Estonia	6.91	Wales	6.61	Malta	7.00	Scotland	7.64
37	Thailand	6.75	Iceland	6.90	Italy	6.55	Scotland	6.97	Bulgaria	7.64
38	El Salvador	6.72	Spain	6.88	England	6.51	Sweden	6.91	Latvia	7.64
39	Italy	6.71	Taiwan	6.85	Malta	6.48	England	6.89	Italy	7.55
40	Slovakia	6.70	Brazil	6.85	Ireland	6.22	Ireland	6.87	England	7.37
41	Canada	6.70	UAE	6.85	Poland	6.20	Poland	6.28	Poland	7.06
42	Malta	6.69	Azerbaijan	6.80	Slovakia	6.00	Slovakia	6.28	Slovakia	6.91
43	Greece	6.66	France	6.77						
44	Chile	6.65	Jordan	6.77						
45	Guatemala	6.65	Qatar	6.77						
46	U.S.	6.61	Latvia	6.76						
47	South Korea	6.59	Japan	6.76						
48	Germany	6.58	Austria	6.69						
49	N. Macedonia	6.58	Malaysia	6.63						
50	Montenegro	6.56	Greece	6.62						
51	Poland	6.55	Slovenia	6.61						
52	Argentina	6.55	Ireland	6.59						
53	UAE	6.54	Czechia	6.56						
54	Kazakhstan	6.52	Italy	6.53						
55	Bahrain	6.52	Germany	6.51						
56	Albania	6.51	N. Ireland	6.50						
57	Japan	6.51	Hong Kong	6.49						
58	Honduras	6.47	Scotland	6.48						
59	Spain	6.46	Macao	6.41						
60	Brazil	6.46	Chile	6.41						
61	Saudi Arabia	6.45	Peru	6.37						
62	Singapore	6.45	South Korea	6.36						

63	Malaysia	6.41	New Zealand	6.27
64	Ecuador	6.4	Poland	6.26
65	Dominican	6.38	Malta	6.24
66	Russia	6.34	Wales	6.16
67	Bulgaria	6.29	UK	6.07
68	Ukraine	6.23	England	6.01
69	Bolivia	6.23	Brunei	5.86
70	Peru	6.23	Jamaica	5.83
71	Paraguay	6.18	Türkiye	4.9

GWP 2020-2024 Age 15-24 continued

72	Armenia	6.16	92	Gabon	5.52	112	Ghana	4.84	132	Botswana	4.09
73	Kyrgyz c	6.15	93	Iran	5.46	113	Sri Lanka	4.80	134	Comoros	4.01
74	Philippines	6.12	94	Cameroon	5.36	114	Kenya	4.78	135	Eswatini	3.84
75	Georgia	6.08	95	Azerbaijan	5.34	115	Liberia	4.73	136	Malawi	3.83
76	Vietnam	6.06	96	Morocco	5.34	116	Bangladesh	4.72	137	Lesotho	3.8
77	China	6.05	97	Hong Kong	5.33	117	Uganda	4.69	138	Zimbabwe	3.77
78	Mauritius	6.03	98	Turkish Cyprus	5.32	118	Niger	4.63	139	Congo	3.37
79	Uzbekistan	5.98	99	Côte d'Ivoire	5.32	119	Cambodia	4.62	140	Sierra Leone	3.19
80	Colombia	5.95	100	Mozambique	5.32	120	Mauritania	4.61	141	Lebanon	2.93
81	Mongolia	5.94	101	Nigeria	5.28	121	Chad	4.56	142	Afghanistan	1.96
82	Libya	5.93	102	Palestine	5.25	122	Benin	4.52			
83	Jamaica	5.81	103	Pakistan	5.17	123	Gambia	4.52			
84	Indonesia	5.81	104	Türkiye	5.07	124	Ethiopia	4.48			
85	Congo	5.78	105	Senegal	5.06	125	Mali	4.47			
86	South Africa	5.75	106	Guinea	5.05	126	Myanmar	4.40			
87	Nepal	5.67	107	Namibia	5.05	127	Egypt	4.38			
88	Tajikistan	5.61	108	Burkina Faso	4.98	128	Togo	4.34			
89	Iraq	5.61	109	Lao P.D.R.	4.90	129	India	4.33			
90	Venezuela	5.59	110	Tunisia	4.87	130	Madagascar	4.17			
91	Algeria	5.54	111	Jordan	4.86	131	Tanzania	4.15			

Ranks and life satisfaction scores. Belgium (Fl) means Belgium (Flemish).