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Deteriorating Mental Well-Being of the Young in the UK

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ABSTRACT

Using several data sets for the UK we track rising perceptions of mental well-being among the working-age population in the UK. The trend is apparent among all age groups and for men and women, but it is most pronounced among the young, and especially young women aged under 25. Young men's mental well-being began to fall markedly from 2008 whereas young women's mental ill-health began to deteriorate a few years later. The age profile of mental well-being shifts to the right over time such that the nadir of mental well-being shifts from mid-life, when people are in their late 40s and early 50s, around the time of the Great Recession, to ones early- to mid-20s in 2023.

JEL Classification: I31

1 | Introduction

There is mounting evidence that the well-being of the young has deteriorated, and their mental health has worsened. These trends, which are evident in the United States, the United Kingdom and elsewhere, is particularly marked among young women (Blanchflower et al. 2024; Blanchflower and Bryson 2025a). 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 et al. 2024) no longer holds. Instead, ill-being tends to decline monotonically once people reach their early 20s. The happiness U-shape in age characteristic of so many studies has now been replaced by improving well-being with age. Similarly, the hump shape in unhappiness has been replaced by a linear decline in age.

We examine these trends for the UK in more detail than hitherto with new evidence from five major datasets—the Labour Force Survey, the Annual Population Survey, the Scottish Health Survey, Eurobarometer and Global Minds. We examine multiple variables including depression, anxiety, and happiness. We show the findings are essentially the same whichever variables or data files we examine. Results are not driven by methodological problems such as proxy reporting bias. We find evidence for both "positive affect" (e.g., life satisfaction or happiness) and "negative affect" (e.g., depression or anxiety) that youth well-being has declined sharply in the UK over the last decade or so.

Globally the evidence of declining youth well-being and mental health is also apparent across a range of ill-being metrics including the PHQ, GAD, unhappiness, depression and chronic depression, anxiety, suicidal thoughts and psychological distress. It is also apparent in well-being or positive affect measures such as life satisfaction (Blanchflower and Bryson 2026; Twenge and Blanchflower 2025) for the UK, and in five other English-speaking countries—Australia, Canada, Ireland, New Zealand and the USA. Other studies including Botha et al. (2023) for Australia and Huang et al. (2025), for Canada and the USA find similar results.

Blanchflower and Bryson (2025b, 2025c, 2026) map the relation between age and well-being in Latin America, Africa, the Middle East and Asia and Europe. They note that the evidence is

much less apparent in the developing world, although it is found for youngsters with access to the internet and among those who respond to online surveys such as Global Minds and the OECD's PISA cross-country global survey of 15 year olds (Marquez et al. 2024). As we note below, this evidence is backed up by increased hospitalizations for the young for mental health including self-harm and increased prescribing of anti-depressants.

It is becoming increasingly clear when this shift started, and what might account for it. Blanchflower et al. (2024) suggest the change in the United States and the United Kingdom began around the Great Recession of 2008, or shortly thereafter.[1] 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 et al. (2024) find the worsening in mental health, measured by the GHQ score from the panel UK Household Longitudinal Survey, from 2009 to 2021 during COVID was greatest among the young in the UK. This was not the case in the USA where there is no statistical evidence of a COVID-related effect. Here, we show evidence that the fall in overall perceptions of mental health overall and for the young in particular appears to have started much earlier than hitherto suggested—around 2000. There is a steady upward trend since then with a notable tick-up in the data around 2013.

We contribute to the literature by focusing on trends in well-being and ill-being 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 well-being in the *Scottish Health Surveys* of 2008–2021, the *Annual Population Survey* (APS) from 2012 to 2023, the UK *Global Minds* data from 2020 to 2023, and the UK survey in *Eurobarometer* from 2004 to 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.

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 age of ill-health shifts from around age 50 pre-Great Recession to 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, while WEMWBS—a measure of positive affect—is *rising* with age. And yet, the traditional life satisfaction measure still shows a U-shape in age.[2]

In Section 2, we review the recent literature on the rise of mental ill-health in the UK. Section 3 introduces our data and estimation methods. Section 4 reports results from various UK surveys. Section 5 looks at the UK's ranking of young people in international surveys. Section 6 concludes.

2 | Literature Review of Youth Well-Being in the UK

There is growing evidence for the UK of worsening ill-being and 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.

There is evidence, for example, from the National Health Service study on Mental Health of Children and Young People in England for the period 2017–2023 (Newlove-Delgado et al. 2023). 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.

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. 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*, based both on the mean and the percentage with high levels of distress. 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 et al. (2021) 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 nonmedical prescribers (such as nurses, pharmacists, optometrists, chiropodists and potentially radiographers) who are attached to practices. The data do not cover private prescriptions.

Slee et al. (2021) report evidence of a dramatic rise in anxiety especially among the young since 1998. Annual incidence rates of generalized 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. Generalized 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.
>
> (Slee et al. 2021, 162)

Evidence on the declining well-being of the young has recently become available using data from the Adult Psychiatric Morbidity Survey of England 2023, 2024.[3] Morris et al. (2025) report that young people were more likely to have a Common Mental Health Conditions (CMHCs) which comprise different types of depression and anxiety disorder than older people. CMHCs have increased in prevalence among ages 16–64: from 15.5% in 1993, 17.5% in 2000, 17.6% in 2007, and 18.9% in 2014, to 22.6% in 2023/2024. Among ages 16–24, CMHC prevalence rose from 17.5% in 2007 and 18.9% in 2014, to 25.8% in 2023/2024. Women were more likely than men to have ever made a suicide attempt (8.6% compared with 6.9%) or self-harmed (12.6% compared with 8.5%). Among ages 16–24, 31.7% of women and 15.4% of men reported having ever self-harmed.

Hospital admissions for eating disorders in the UK have increased by 84% in the last 5 years reaching a total of 24,268 admissions. New Royal College of Psychiatrists' analysis of hospital data for eating disorders shows 11,049 more admissions in 2020/2021 compared to 2015/2016. Children and young people with eating disorders are the worst affected with a rise of 90% in the 5 year period, from 3541 to 6713 episodes.[4] Ward et al. (2025) identified 39,925 (11.7%) admissions of children in England ages 5–18 that were for mental health concerns of which (53.4%) were due to self-harm. Between 2012–2013 and 2021–2022, annual admissions for mental health concerns increased by 65.0%. Increases were particularly steep in females aged 11–15 years, rising by 113%, and for eating disorders, by 515%. Rising hospitalizations for mental health among children is repeated in the US. Hospitalizations of children in the US with a diagnosis of attempted suicide or self-injury increased from 49,285 in 2009 to 129,699 in 2019 and comprised 64% of mental health hospitalizations in 2019 (Arakelyan et al. 2023).

In the US between January 2016 and December 2022, the monthly antidepressant dispensing rate increased 66.3%, from 2575.9 to 4284.8. Before March 2020, this rate increased by 17.0 per month (Chua et al. 2024). Jack et al. (2020) provides evidence for young people in England of a continuing rise of antidepressant prescribing in adolescents aged 12–17 years between 2005 and 2017.

There have also been labor market changes alongside the decline in youth well-being. McCurdy and Murphy (2024) from the Resolution Foundation have documented that young people in their early twenties in the UK are now more likely to be economically inactive due to ill health than those in their early 40s. The number of young people aged 18–24 who are economically inactive due to ill health has doubled in the decade between 2013 and 2023, reaching 190,000 people. They also note that young people who are out of work have high rates of common mental disorders.

Several of our own earlier studies have also tracked trends in depression in the *Labour Force Survey*, based on respondent reports of their main health problem. In Bell and Blanchflower (2019) which focuses on workers only during the pre-Covid period (Spring 1997–April 2018), depression was found to be hump-shaped in age, peaking at around age 45. Blanchflower and Oswald (2008) 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, tab. 8) identified a marked increase in depression for the UK beginning in the 1990s using the LFS. There was a six-fold increase between 1997 and 2018 with 3.6% 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 among the unemployed (tab. 8, column 6) its growth is apparent for all regardless of labor market status.[5]

Blanchflower et al. (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 2009–2010 the median was 10 and in 2020–2021 the median was 11 among those aged 18–70. Approximately 8% of all respondents were classed as being in despair in 2009–2010, 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 30 being a bad mental health day.[6] They also reported a dramatic rise in anxiety using the LFS from 2012 to 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 to 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 et al. (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 tab. 5).

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.[7] Blanchflower et al. (2024) extend the analysis to include the period through to 2024 and confirm that COVID raised depression among men and women, with the effect being most pronounced among those aged under-25. The COVID pandemic also precipitated a drop in well-being. The UCL Covid Social Study, which ran from 2020 to 2022, found a big drop in life satisfaction in March 2020, but it did recover, albeit slowly (Fancourt et al. 2022).

Trends in subjective well-being by age in the UK have received less attention. Smith et al. (2020) examined the age profile of the Warwick-Edinburgh Mental Well-being 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.
>
> (Smith et al. 2020, 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.[8] They also reported that in the UK "the old are now significantly happier than the young". Our objective in this paper is to test this apparent change in the age profile of subjective well-being and perceptions of mental health in the UK using a variety of representative datasets that cover Scotland and the UK as a whole. We utilize a variety of indicators, some of which are validated for assessing mental ill-health, and others that are the pre-eminent metrics used in the "happiness" literature.

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 included as part of the Eurobarometer survey series.[9] We briefly describe our estimation methods to establish trends in mental ill-health by age over time. Details of the surveys are available in Appendix 2.

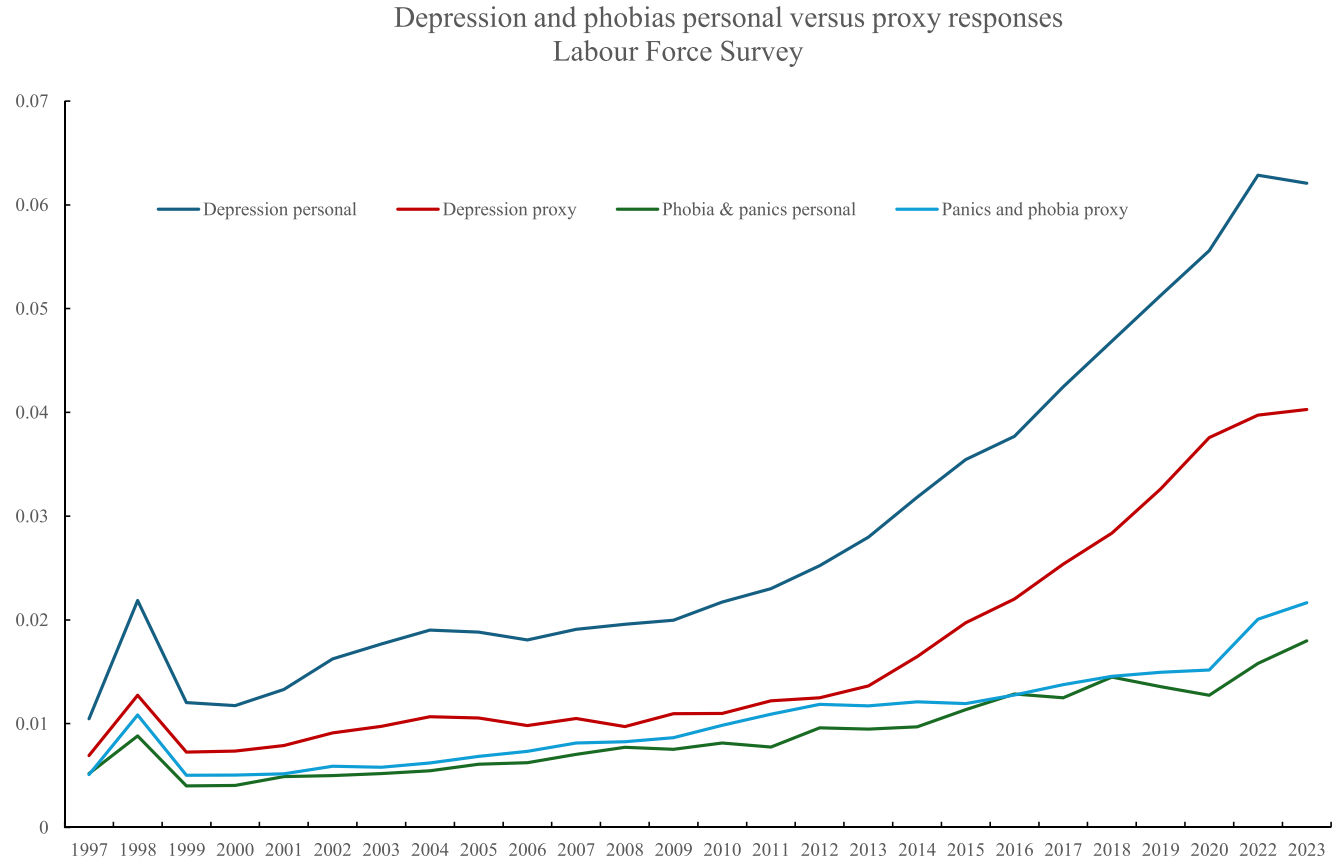

CHART 1 | Depression and phobias personal versus proxy responses, Labour Force Survey.

3.1 | Labor Force Survey, 1997–2024

We have obtained access to the Labor Force Survey (LFS) micro data files for the period from 1997Q2 to 2024Q1 which contain information on mental health. The information is obtained from a variable called health, which refers to the main health problem the respondent has. Eighteen 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**.[10] We set these as 1,0 dummies.

These sorts of data are used by statistical offices and the self-reports are usually highly consistent across surveys. For example, the ONS (2023) recently examined the big rise in the percentage of adults reporting long-term health conditions based on data from this survey. They noted that 36% said that they had at least one long-term health condition in Quarter 1 (Jan to Mar) 2023, up from 31% in the same period in 2019 and 29% in 2016. Over 1.35 million (53%) of those inactive because of long-term sickness reported that they had depression, bad nerves or anxiety in Quarter 12,023.

> In 2023, the most prevalent health condition reported by the working-age population was depression, bad nerves or anxiety (5 million people, 12%). This was also the largest health condition for those who are economically inactive because of long-term sickness, with 53% (1.35 million people in 2023) reporting it as a health condition, higher than the 48% who reported it in January to March 2019. This aligns with the Opinions and Lifestyle Survey results, ...where 59% of those who were inactive because of long-term sickness said they experienced moderate to severe depressive symptoms, far higher than the prevalence for those employed or self-employed (15%), or those inactive but for other reasons excluding being retired (24%). Between 2019 and 2023, the number of people inactive because of long-term sickness who reported depression, bad nerves or anxiety rose by 386,000 (40%).
>
> (ONS, 2023)

3.2 | Annual Population Survey, 2012–2024

Since 2012 the Annual Population Survey has included these three well-being questions. The questions we examine are as follows:

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

Q2 "Overall, how happy did you feel yesterday? Where 0 is 'not at all happy' and 10 is 'completely happy'?"

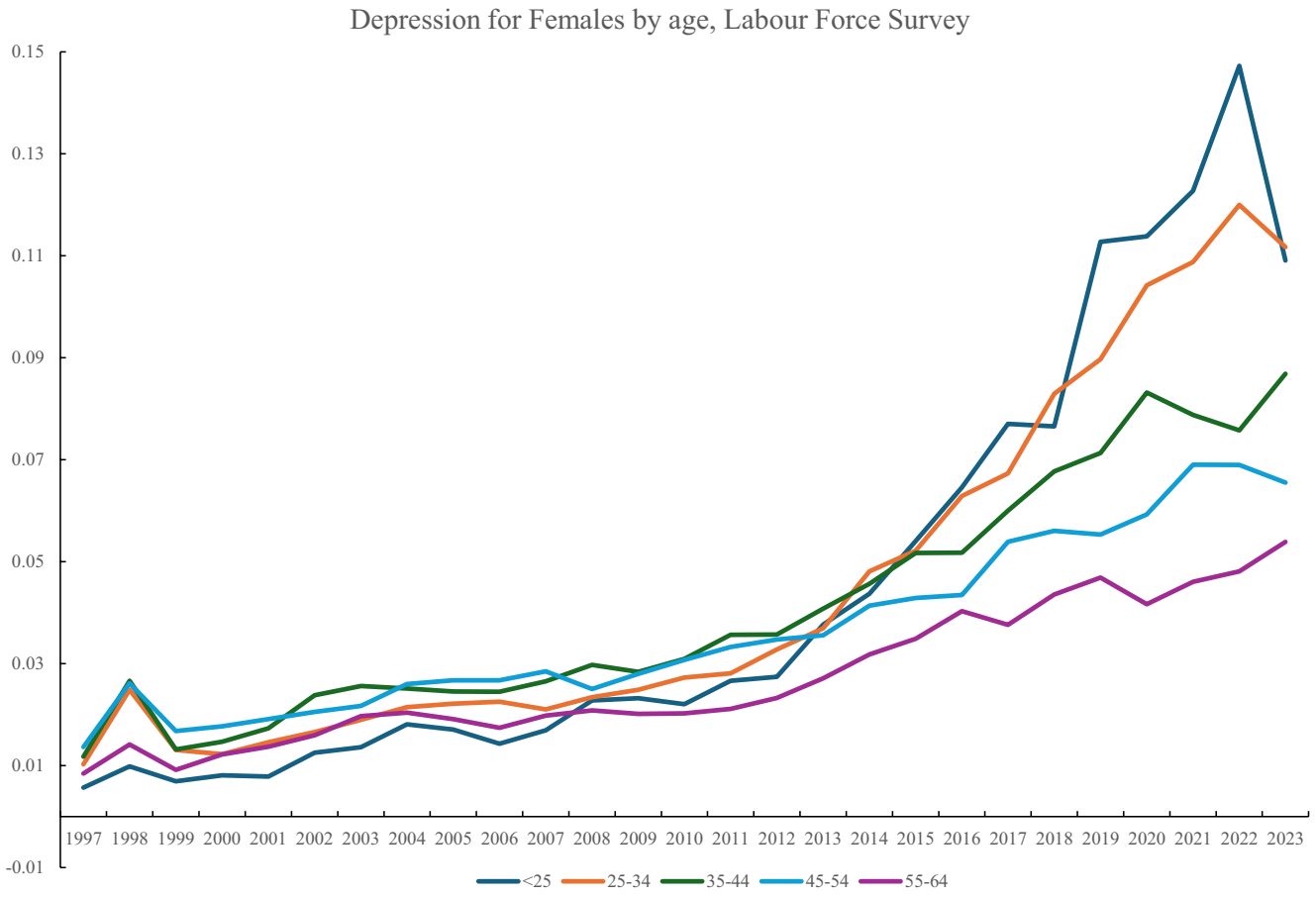

CHART 2 | Depression for females by age, Labour Force Survey.

Q3 "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'?"

3.3 | Scottish Health Survey, 2008–2021

We obtained access to the Scottish Health Surveys (SHS) from 2008 to 2021. The 2008 SHS was previously used in Blanchflower et al. (2013). Here, we examine the same three measures but use data for 2008–2020 and then for 2021.

1. The GHQ36 score is the sum of 12 separate components scored 0 to 3 so that values run between 0 and 36 with a mean of 10.9 ($n = 64{,}990$).[11]
2. The Warwick–Edinburgh Mental Well-being Scale (WEMWBS) is based on a questionnaire designed for the assessment of mental well-being. Recent work by Yadav et al. (2025) recently examined its reliability across three European populations, including the UK. They concluded "the results reinforce the reliability and validity of the WEMWBS as a tool for assessing mental well-being in these contexts and demonstrate its measurement invariance across them", (Yadav et al. 2025, 1) them.[12] Blanchflower et al. (2013) also made use of the WEMWBS score which is a measure of mental well-being focusing entirely on positive aspects of mental health.[13] It has a mean of 49.9 with values between 14 and 70 and $n = 62{,}713$.
3. 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.[14] 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, 2025a). The main variable of interest is 4-step life satisfaction.

Q4. "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)."

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.[15] The data are

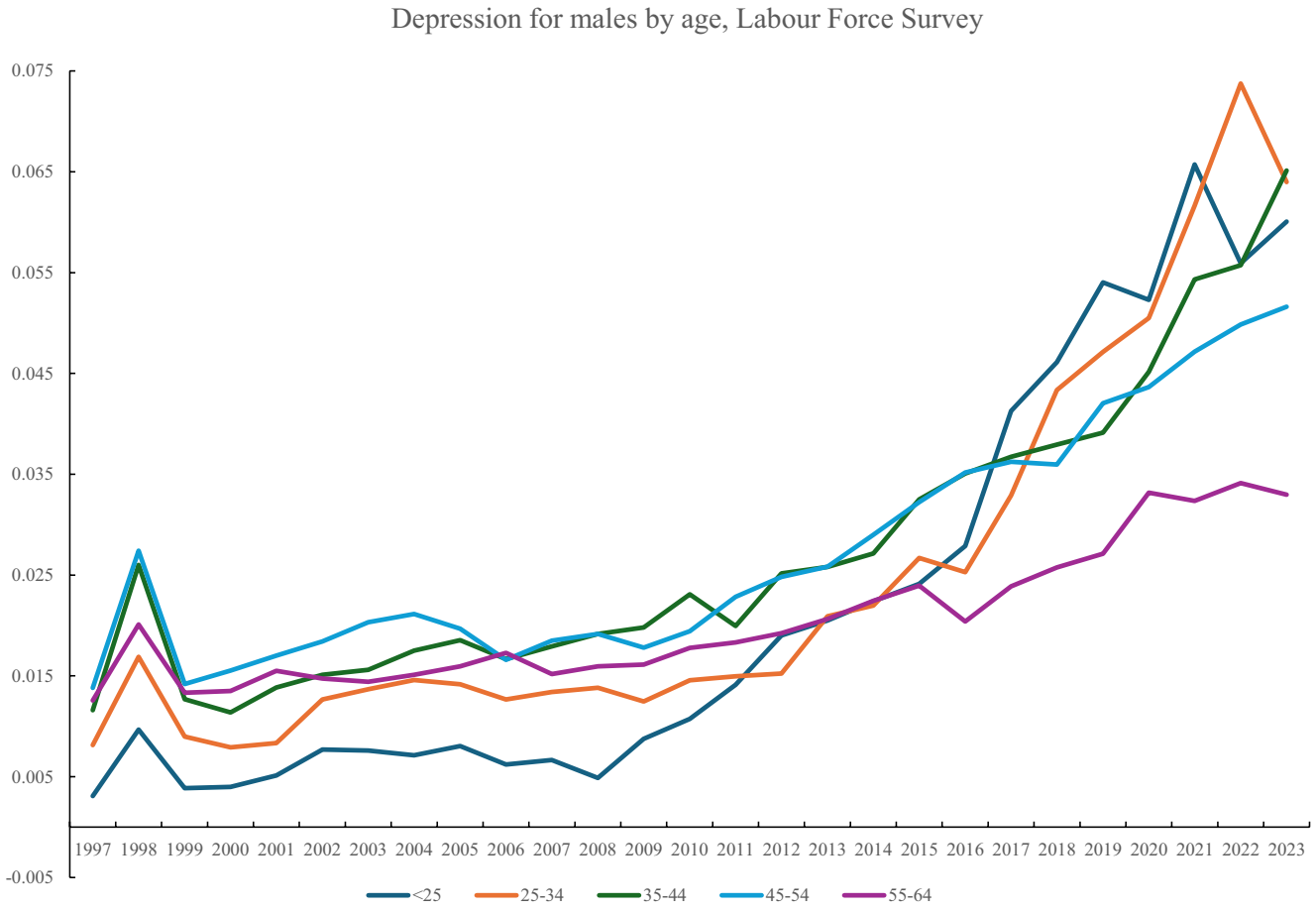

CHART 3 | Depression for males by age, Labour Force Survey.

collected online, and it takes around 15 min to complete. In total, there were 57,993 observations available, with 7090 in 2020, 17,057 in 2021, 15,046 in 2022, 11,067 in 2023 and 7733 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; esthetics and satisfaction. Scores in the normal healthy range spanned from 0 to 200.[16] A negative score suggests poor mental health and is a cause for concern and potentially indicates a need for intervention.

We note the trends we observe below are more marked in negative affect data, such as GHQ and depression than in positive affect measures such as life satisfaction and happiness. This is a general pattern found in the literature.

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 et al. (2021) since well-being 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 | 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 observations 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

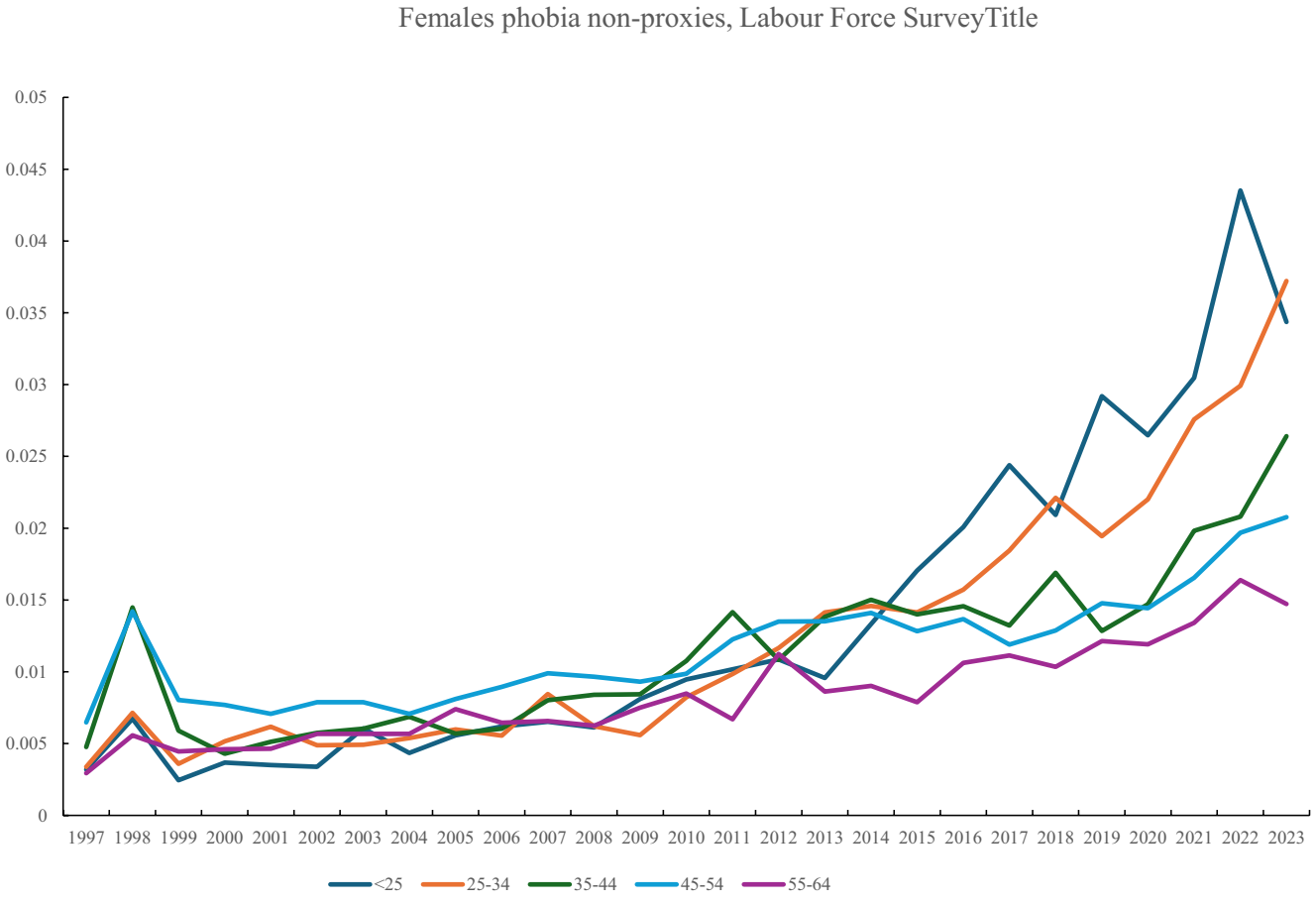

CHART 4 | Females phobia non-proxies, Labour Force Survey.

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 nonproxy respondents for the much more serious mental health outcomes of phobia and panics is much less than for depression.[17]

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, the incidence of depression was low for all age groups (below 3%) 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 well-being. By the end of the period between 5% and 6% 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.

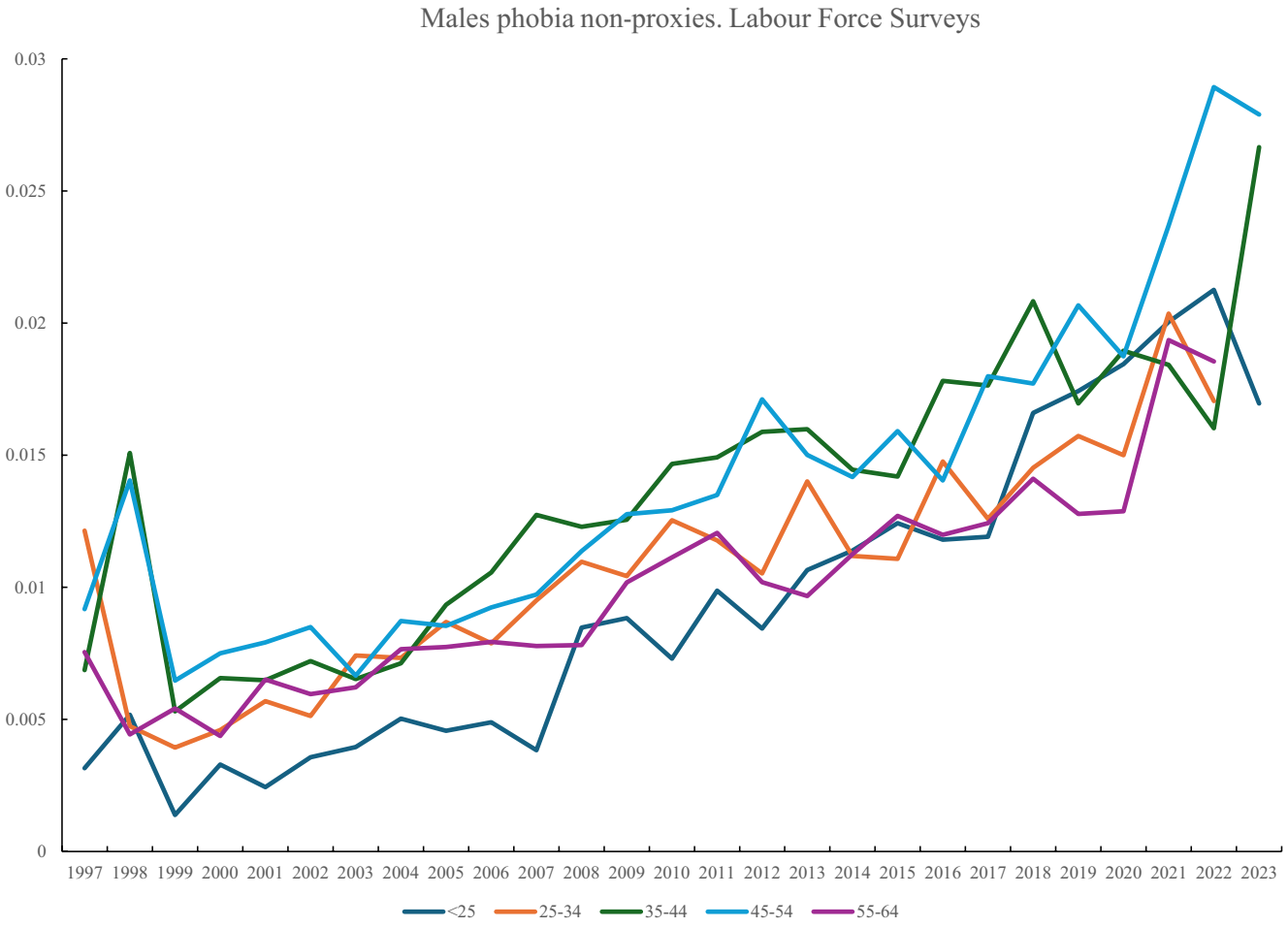

CHART 5 | Males' phobia nonproxies. Labour Force Surveys.

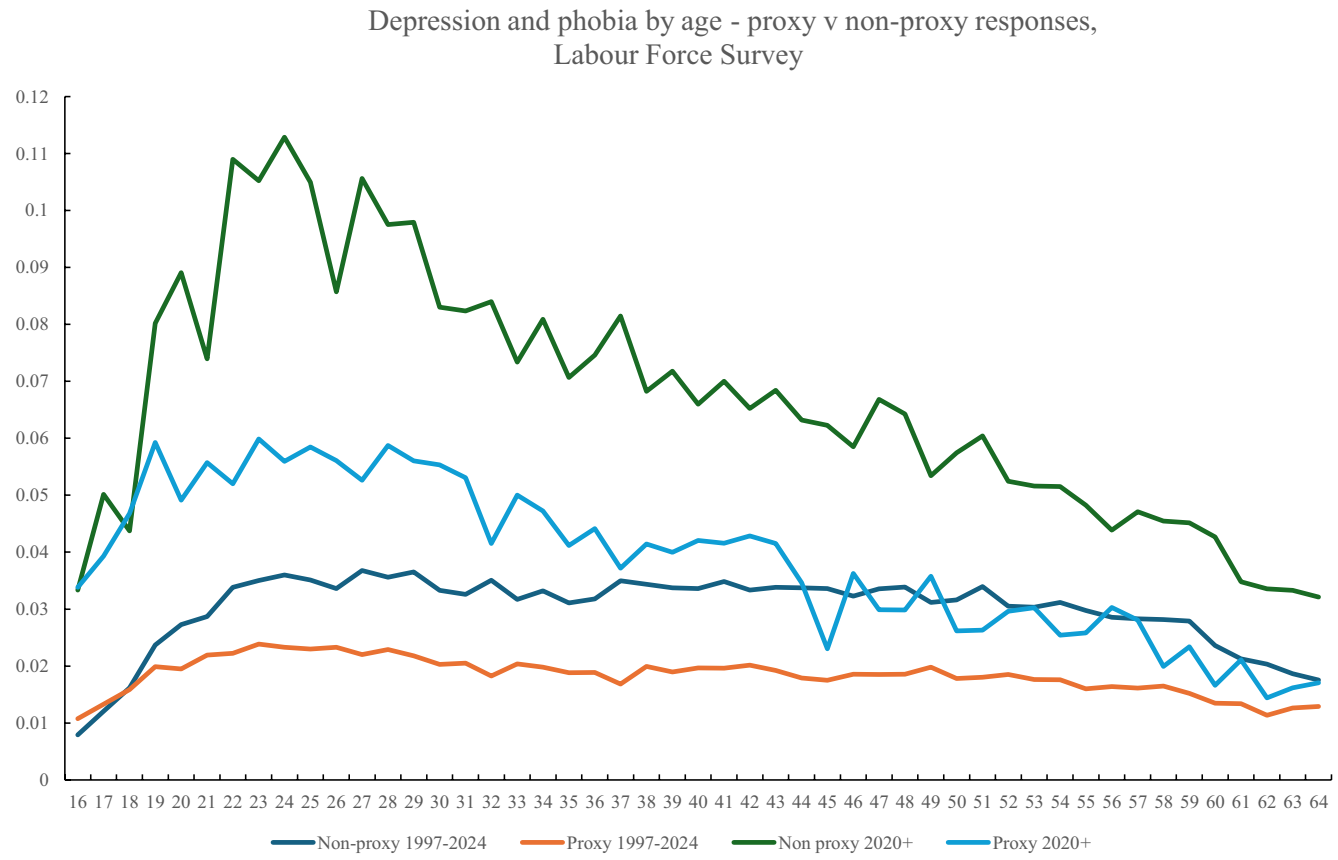

CHART 6 | Depression and phobia by age—proxy v nonproxy responses, Labour Force Survey.

Over the 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 (2008–2011 and 2012–2015) we observe the familiar hump-shape in depression across the life-course, here peaking around age 40. But from 2016 the hump shifts left, such that it peaks around age 25 in 2016–2019 and age 22 in 2020–2023, monotonically declining thereafter. The rate of depression among women never rises above 4% during 2008–2011 and 5% in 2012–2015; the peak jumps to 8.6% in 2016–2019 and is reached at age 25 and then jumps dramatically to 13.8% 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% for those aged 26 in the period 2016–2019 and 8.1% 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% and at age 45 at 1.2% 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.

Table 1 reports the results of running a series of OLS regressions on depression including 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 well-being 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 white people than non-whites, and increasingly so over time.

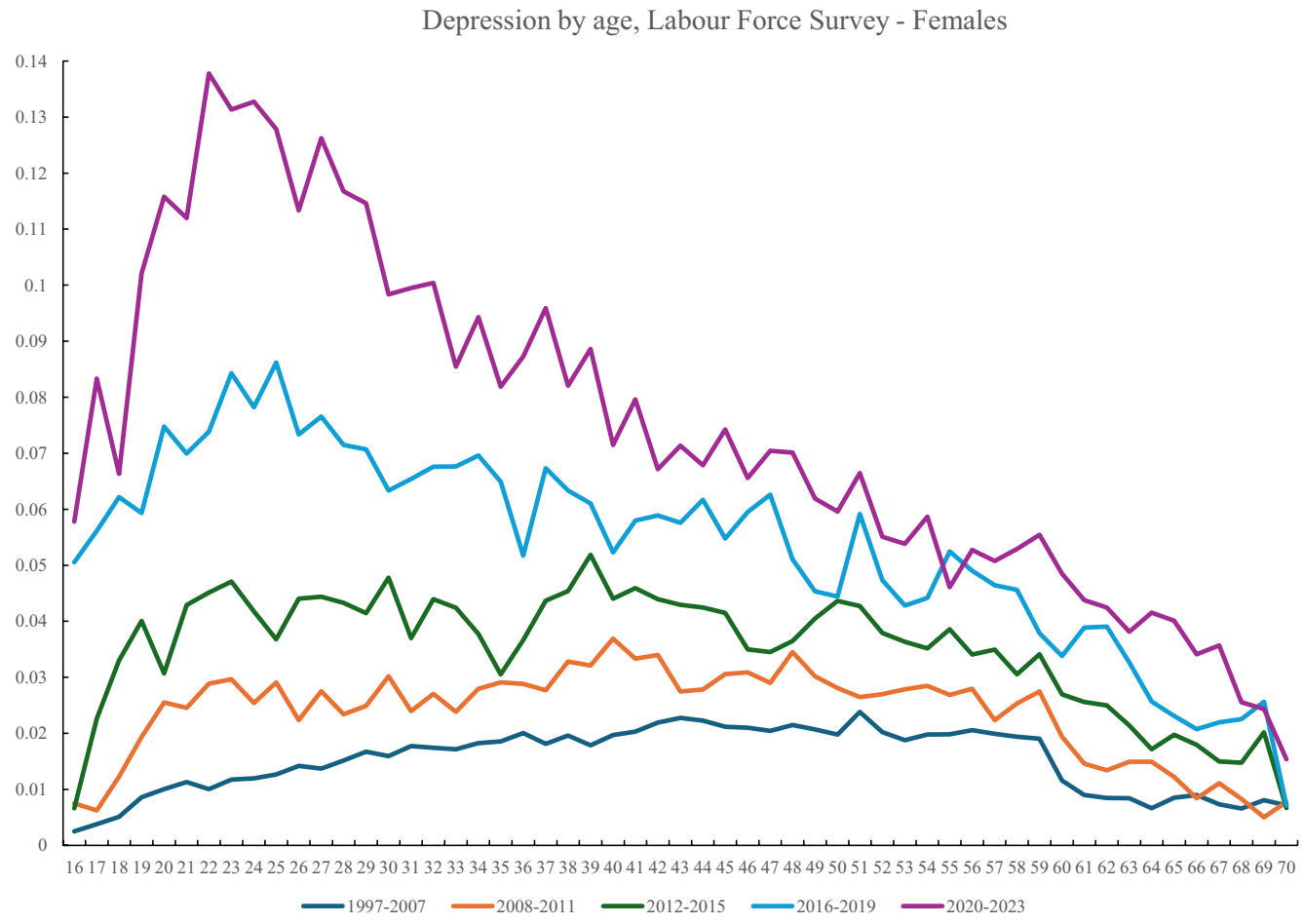

CHART 7 | Depression by age, Labour Force Survey—Females.

A similar picture is found in Table 2 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 3 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 people. 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 4 is similar to Table 3 but now 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 white people 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 | Annual Population Surveys, 2012–2024

Table 5 presents the mean scores for three of the four well-being metrics—life satisfaction, happiness and anxiety—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[18] does not suggest that any of the three series moved that much over this period. Cotofan (2024) examines trends in these data and notes that between April 2019 and March 2022 mean life satisfaction declined in all four Home Countries—Scotland, England, Northern Ireland and Wales. Blanchflower et al. (2024) also examine the anxiety data.

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 2012–2013 but declined with age among the working age population in 2022–2024. Happiness fell over the period among those aged under-35 but rose among older people. Life satisfaction follows no obvious

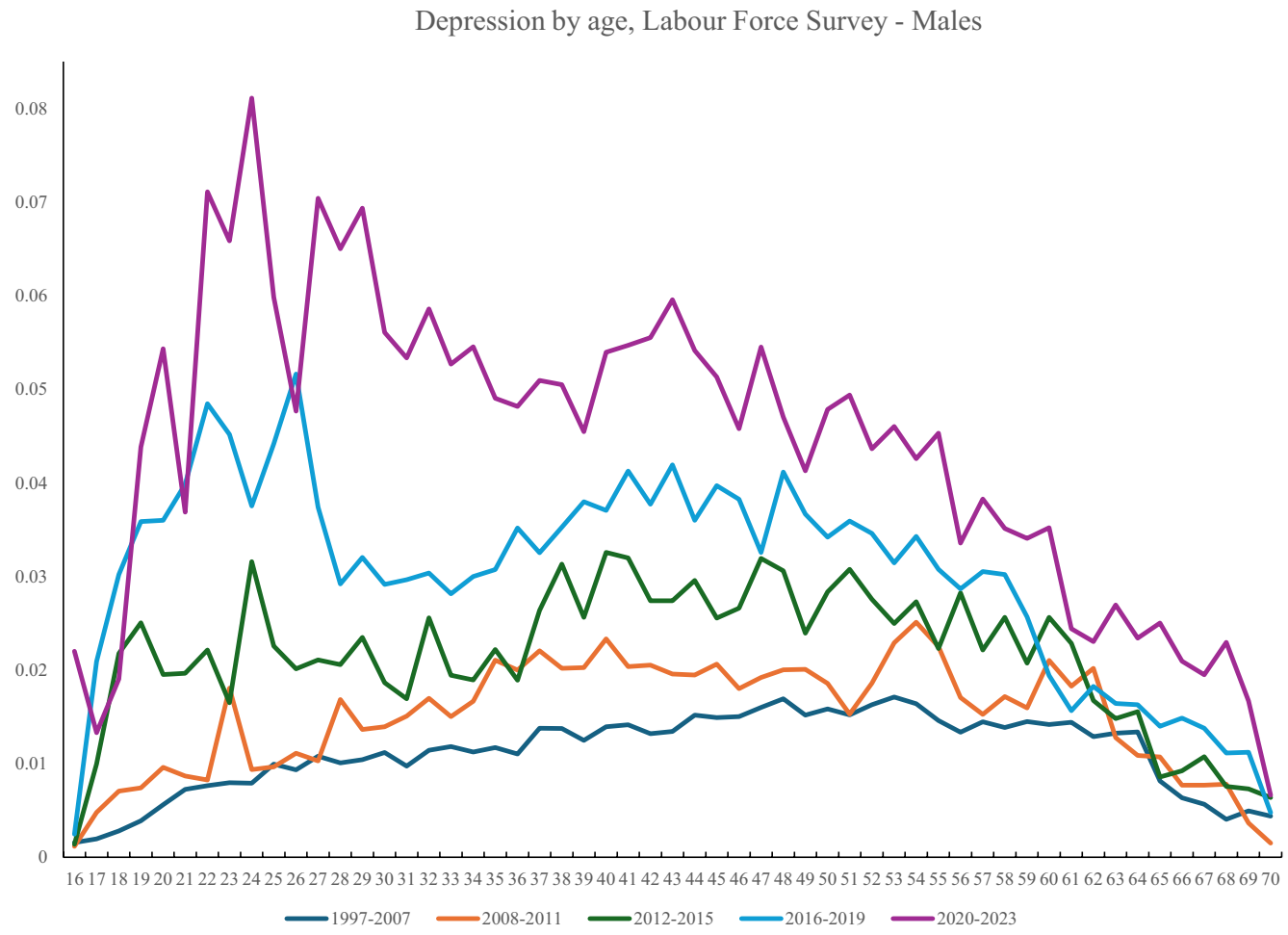

CHART 8 | Depression by age, Labour Force Survey—Males.

pattern in age, although it fell markedly since 2012–2013 among those aged under-25 over the period.

Table 6 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 (SHS), 2008–2021

In Chart 10a–c, 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 Chart 11a–c 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 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 7 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: well-being 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 the positive-affect variable, WEMWBS well-being indicator rises with age.

4.4 | Eurobarometer Survey for the UK, 2004–2023

We examine Eurobarometer Survey 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 8, 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

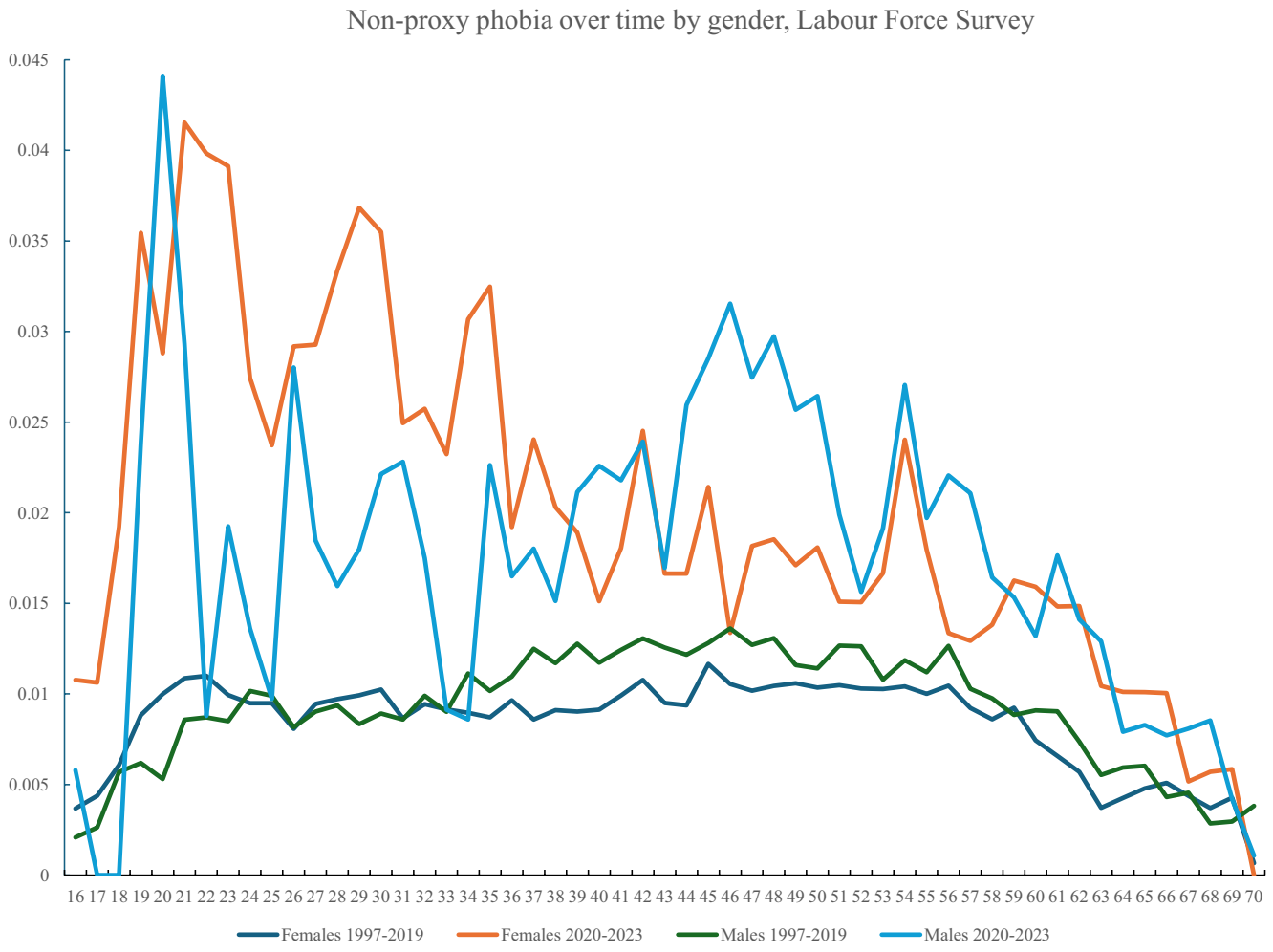

CHART 9 | Nonproxy phobia over time by gender, Labour Force Survey.

gender and sweep dummies. In a recent paper, Blanchflower and Bryson (2025a) and found that in 13 European countries including the UK plus Turkey in recent years since 2015 the young had seen declines in their happiness and were now the least happy age group. In contrast, in Spain, Greece, Italy and Portugal life satisfaction had risen, as the economies improved as youth unemployment rates tumbled.

We use the Eurobarometer Harmonized 2004–2021 data file and add to it 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 well-being 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 do not 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 10 mental health measures from Flash Eurobarometer 530 ($n = 19{,}098$) that excludes the UK due to Brexit. For each of the 10 measures of 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 8 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 (well-being) 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, which is an internet-based survey. Table 9 presents regression analyses showing the age profile for four well-being metrics for just over 40,000 respondents (half that in the case of life satisfaction), having controlled from gender and, year.[19] The metrics are (1) the *MHQ* score explained in Section 3.5 (2) 9-step *life satisfaction*

TABLE 1 | Depression OLS regression by year. All personal responses/nonproxy, ages 16–64.

	1997–2010	2011–2014	2015–2019	2020–2024
25–34	0.0057 (17.93)	0.0029 (3.17)	−0.0013 (1.11)	−0.0068 (2.89)
35–44	0.0094 (29.94)	0.0070 (7.86)	−0.0070 (5.91)	−0.0254 (11.02)
45–54	0.0102 (32.03)	0.0051 (5.78)	−0.0140 (11.95)	−0.0382 (16.76)
55–64	0.0050 (15.54)	0.0029 (3.33)	−0.0256 (21.74)	−0.0554 (24.70)
Female	0.0048 (29.05)	0.0118 (26.93)	0.0221 (39.99)	0.0240 (28.85)
White	0.0039 (11.13)	0.0116 (4.95)	0.0275 (6.40)	0.0497 (9.18)
Rest of Northern	−0.0057 (7.87)	0.0017 (0.89)	−0.0045 (1.81)	−0.0012 (0.33)
South Yorkshire	−0.0033 (4.20)	0.0000 (0.05)	0.0016 (0.60)	−0.0021 (0.50)
West Yorkshire	−0.0088 (12.32)	0.0055 (2.98)	−0.0079 (3.27)	−0.0055 (1.46)
Rest Yorks & Humber	−0.0138 (18.26)	0.0108 (5.46)	−0.0140 (5.49)	−0.0104 (2.67)
East Midlands	−0.0121 (18.35)	0.0080 (4.69)	−0.0137 (6.16)	−0.0124 (3.66)
East Anglia	−0.0135 (18.83)	0.0066 (3.57)	−0.0130 (5.39)	−0.0097 (2.65)
Inner London	−0.0096 (13.40)	0.0149 (8.01)	−0.0317 (13.21)	−0.0277 (7.35)
Outer London	−0.0142 (21.08)	0.0163 (9.32)	−0.0338 (14.92)	−0.0301 (8.60)
Rest of South–East	−0.0146 (23.78)	0.0109 (6.80)	−0.0203 (9.68)	−0.0200 (6.29)
South–West	−0.0134 (20.76)	0.0084 (4.93)	−0.0155 (7.07)	−0.0113 (3.42)
West Midlands	−0.0081 (11.25)	0.0069 (3.67)	−0.0172 (7.04)	−0.0172 (4.50)
Rest of West Midlands	−0.0123 (17.65)	0.0129 (7.00)	−0.0172 (7.26)	−0.0157 (4.37)
Greater Manchester	−0.0051 (7.18)	0.0014 (0.80)	−0.0069 (2.90)	−0.0000 (0.02)
Merseyside	−0.0022 (2.75)	0.0001 (0.05)	−0.0013 (0.47)	−0.0026 (0.59)
Rest of North–West	−0.0106 (14.83)	0.0084 (4.48)	−0.0144 (5.87)	−0.0078 (2.08)
Wales	−0.0029 (4.12)	0.0031 (1.72)	−0.0018 (0.79)	−0.0045 (1.27)
Strathclyde	0.0031 (4.37)	0.0079 (4.12)	−0.0007 (0.32)	0.0012 (0.32)
Rest of Scotland	−0.0096 (14.10)	0.0083 (4.63)	−0.0099 (4.23)	−0.0056 (1.56)
Northern Ireland	−0.0012 (1.61)	0.0051 (2.74)	−0.0018 (0.81)	0.0048 (1.46)
_cons	0.0070	0.0116	0.0246	0.0382
Year dummies	10	3	4	3
N	2,587,514	593,154	584,838	319,521
Adjusted R^2	0.0033	0.0034	0.0076	0.0105
Mean of dep var	0.0178	0.0288	0.0438	0.0627

Note: Also includes year dummies; excluded, 16–24, Tyne and Wear. *t*-Statistics in parentheses.
Source: LFS.

(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, well-being metrics, *well-being 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.

TABLE 2 | Mental illness, or suffers from phobia, panics or other nervous disorders OLS regression by year ages 16–64. All personal responses/nonproxy.

	1997–2010	2011–2014	2015–2019	2020–2024
25–34	0.0014 (6.63)	0.0021 (3.59)	−0.0016 (2.43)	−0.0032 (2.56)
35–44	0.0029 (14.39)	0.0032 (5.62)	−0.0022 (3.36)	−0.0075 (6.11)
45–54	0.0039 (19.47)	0.0034 (5.88)	−0.0031 (4.77)	−0.0078 (6.43)
55–64	0.0012 (5.91)	−0.0012 (2.12)	−0.0066 (9.93)	−0.0132 (1.03)
Female	−0.0010 (11.13)	−0.0014 (5.19)	−0.0005 (1.62)	0.0004 (11.07)
White	0.0013 (5.97)	0.0025 (1.69)	0.0083 (3.44)	0.0108 (3.73)
Rest of Northern	−0.0017 (3.59)	0.0017 (1.36)	−0.0008 (0.57)	−0.0034 (1.73)
South Yorkshire	−0.0018 (3.50)	0.0040 (2.95)	0.0019 (1.24)	0.0005 (0.25)
West Yorkshire	−0.0014 (3.07)	0.0027 (2.28)	−0.0017 (1.29)	−0.0064 (3.19)
Rest Yorks & Humber	−0.0025 (5.15)	0.0005 (0.43)	−0.0026 (1.82)	−0.0031 (1.49)
East Midlands	−0.0023 (5.49)	−0.0003 (0.28)	−0.0034 (2.72)	−0.0039 (2.16)
East Anglia	−0.0022 (4.81)	−0.0020 (1.71)	0.0005 (0.41)	−0.0050 (2.55)
Inner London	0.0015 (3.13)	0.0028 (2.36)	−0.0016 (1.22)	−0.0046 (2.32)
Outer London	−0.0006 (1.52)	−0.0008 (0.74)	−0.0046 (3.63)	−0.0086 (4.59)
Rest of South–East	−0.0029 (7.58)	−0.0011 (1.05)	−0.0035 (2.97)	−0.0060 (3.55)
South–West	−0.0025 (6.09)	0.0002 (0.22)	−0.0029 (2.39)	−0.0035 (2.01)
West Midlands	−0.0003 (0.77)	0.0058 (4.74)	−0.0014 (1.08)	−0.0023 (1.13)
Rest of West Midlands	−0.0025 (5.78)	0.0012 (1.08)	−0.0051 (3.80)	−0.0075 (3.92)
Greater Manchester	0.0001 (0.59)	0.0061 (5.08)	−0.0015 (1.10)	−0.0018 (0.93)
Merseyside	−0.0001 (0.07)	0.0039 (2.84)	0.0053 (3.33)	0.0000 (0.03)
Rest of North–West	−0.0012 (2.65)	0.0013 (1.14)	−0.0019 (1.41)	−0.0034 (1.70)
Wales	−0.0003 (0.71)	0.0020 (1.71)	0.0007 (0.57)	−0.0022 (1.16)
Strathclyde	0.0028 (6.09)	0.0076 (6.15)	0.0044 (3.17)	0.0013 (0.64)
Rest of Scotland	−0.0013 (2.93)	0.0022 (1.88)	0.0026 (2.01)	0.0022 (1.15)
Northern Ireland	−0.0012 (1.95)	−0.0020 (1.66)	0.0015 (1.14)	−0.0048 (2.73)
Constant	0.0038	0.0068	0.0094	0.0153
Year dummies	10	3	4	3
N	2,587,514	593,154	584,838	319,521
Adjusted R^2	0.0010	0.0009	0.0008	0.0048
Mean of dep var	0.0068	0.0102	0.0348	0.0464

Note: Also includes year dummies; excluded 16–24, Tyne and Wear. *t*-Statistics in parentheses.
Source: LFS.

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 well-being of the young (Blanchflower et al. 2024, Blanchflower, 2025).

In Table 10, we compare two data sources which rank the well-being of under-25s. In their "The Mental State of the World, 2023" Sapien Labs (2023) 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 26th out of 141 countries with a score of 6.92. This is illustrated in the first column of Appendix 3. In Table 10, 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.

Marquez et al. (2024) also reports 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. The authors also report life satisfaction data from the OECD's Programme for International Student Assessment (PISA) survey for children age 15 which also uses a measure relating to overall life satisfaction. In Appendix 4, 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, Wakes 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 well-being among young people based on this analysis since the rankings

TABLE 3 | Depression, phobias and panics, and recent interactions, 1997–2024, nonproxy.

	Depression	Mental health, phobias and panics
White	0.0058 (14.99)	0.0008 (3.36)
Female	0.0075 (43.68)	−0.0012 (11.55)
Female × new	0.0182 (38.58)	0.0015 (5.14)
16–24 × new	0.0379 (35.30)	0.0104 (15.97)
25–34 × new	0.0297 (47.34)	0.0057 (15.13)
White × new	0.0181 (6.10)	0.0069 (3.87)
_cons	−0.0167	−0.0010
N	4,085,027	4,085,027
Adjusted R^2	0.0108	0.0019

Note: Equations also include a full set of age, year, and region dummies. *t*-Statistics in parentheses. New = 2018–2024.
Source: LFS.

TABLE 5 | Well-being changes in the APS 2012–2013 vs. 2023/2024.

	Anxiety		Happiness		Life satisfaction	
	2012–2013	2022–2024	2012–2013	2022–2024	2012–2013	2022–2024
< 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 4 | Gender differences of depression, phobias and panics, and recent interactions, 1997–2024, nonproxy.

	Depression		Mental health, phobias and panics	
	Female	Male	Female	Male
White	0.0069 (12.20)	0.0047 (9.19)	0.0008 (2.60)	0.0008 (2.22)
16–24 × new	0.0506 (32.84)	0.0219 (15.22)	0.0150 (17.73)	0.0045 (4.53)
25–34 × new	0.0376 (42.89)	0.0183 (21.03)	0.0100 (20.87)	−0.0005 (0.77)
White × new	0.0208 (4.80)	0.0149 (3.85)	0.0120 (5.03)	0.0011 (0.41)
_cons	0.0147	−0.0096	0.0018	1.0014
N	2,357,345	1,727,682	2,357,345	1,727,682
Adjusted R^2	0.0128	0.0052	0.0022	0.0018

Note: 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 | APS well-being regressions 2020–2024, ages 16–64.

	Anxious	Happiness	Life satisfaction
25–34	−0.0601 (1.88)	0.0618 (2.67)	0.0972 (4.92)
35–44	−0.0885 (2.85)	0.0424 (1.89)	−0.0058 (0.31)
45–54	−0.1010 (3.29)	−0.0304 (1.37)	−0.1427 (7.52)
55–64	−0.2484 (8.21)	0.1230 (5.61)	−0.0303 (1.62)
White	0.0931 (4.70)	−0.1233 (8.58)	0.0427 (3.48)
Female	0.4910 (3.13)	−0.0218 (2.64)	0.0030 (0.44)
North–West	0.0469 (1.61)	0.0396 (1.88)	0.0379 (2.11)
Merseyside	0.1384 (3.11)	−0.0855 (2.65)	−0.1196 (4.34)
Yorkshire & Humber	0.0574 (1.93)	0.0556 (2.58)	0.0370 (2.01)
East Midlands	−0.0294 (0.90)	0.0899 (3.82)	0.0576 (2.86)
West Midlands	0.0072 (0.24)	0.0674 (3.08)	0.0577 (3.09)
Eastern	−0.0338 (1.11)	0.0964 (4.35)	0.0970 (5.13)
London	0.1677 (5.55)	−0.0406 (1.86)	−0.0545 (2.92)
South–East	0.0597 (2.20)	0.0802 (4.07)	0.0883 (5.25)
South–West	−0.0091 (0.32)	0.0864 (4.13)	0.0829 (4.65)
Wales	0.0765 (2.71)	0.0508 (2.49)	0.0188 (1.08)
Scotland	−0.0650 (2.37)	0.0573 (2.87)	0.0532 (3.13)
Northern Ireland	−0.2208 (6.64)	0.2276 (9.45)	0.1765 (8.58)
Constant	3.1235	7.3240	7.4057
N	253,991	254,049	254,089
Adjusted R^2	0.0096	0.0019	0.0029

Note: Also includes year dummies; excluded 16–24 and North–East. *t*-Statistics in parentheses.
Source: Annual Population Surveys.

are so discrepant. Further investigation will be needed to establish the source of these differences in ranking which may relate to the well-being metrics used, or different 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 well-being. 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 backward and forward, 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 et al. (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.[20]

But what is notable is the sharp pickup around 2012 in both. This looks awfully like what we observed for the US in Blanchflower et al. (2024) using data from the Behavioral Risk 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 is despair. As we noted above, despair is here 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.

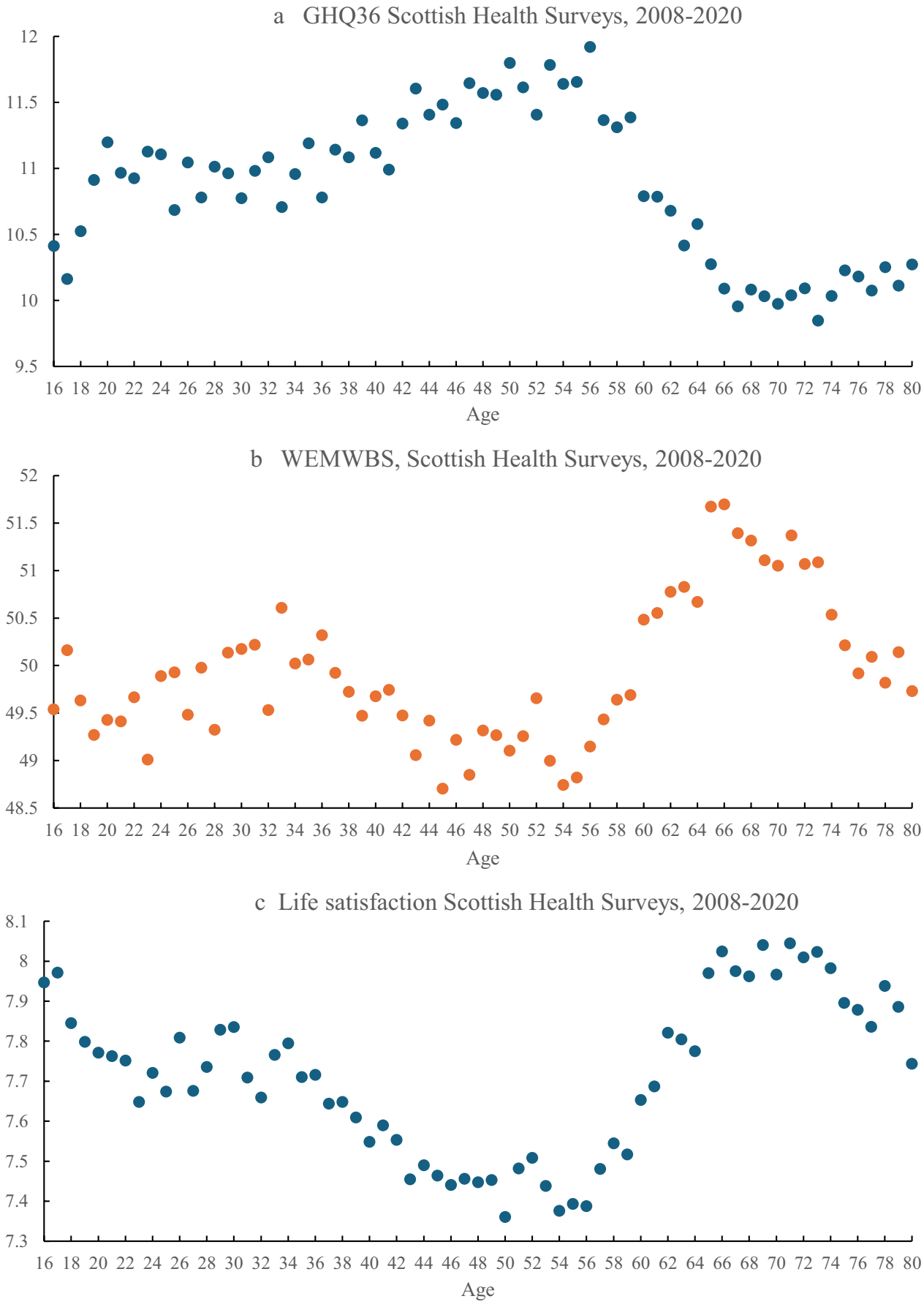

CHART 10 | (a) GHQ36 Scottish Health Surveys, 2008–2020. (b) WEMWBS, Scottish Health Surveys, 2008–2020. (c) Life satisfaction, Scottish Health Surveys, 2008–2020.

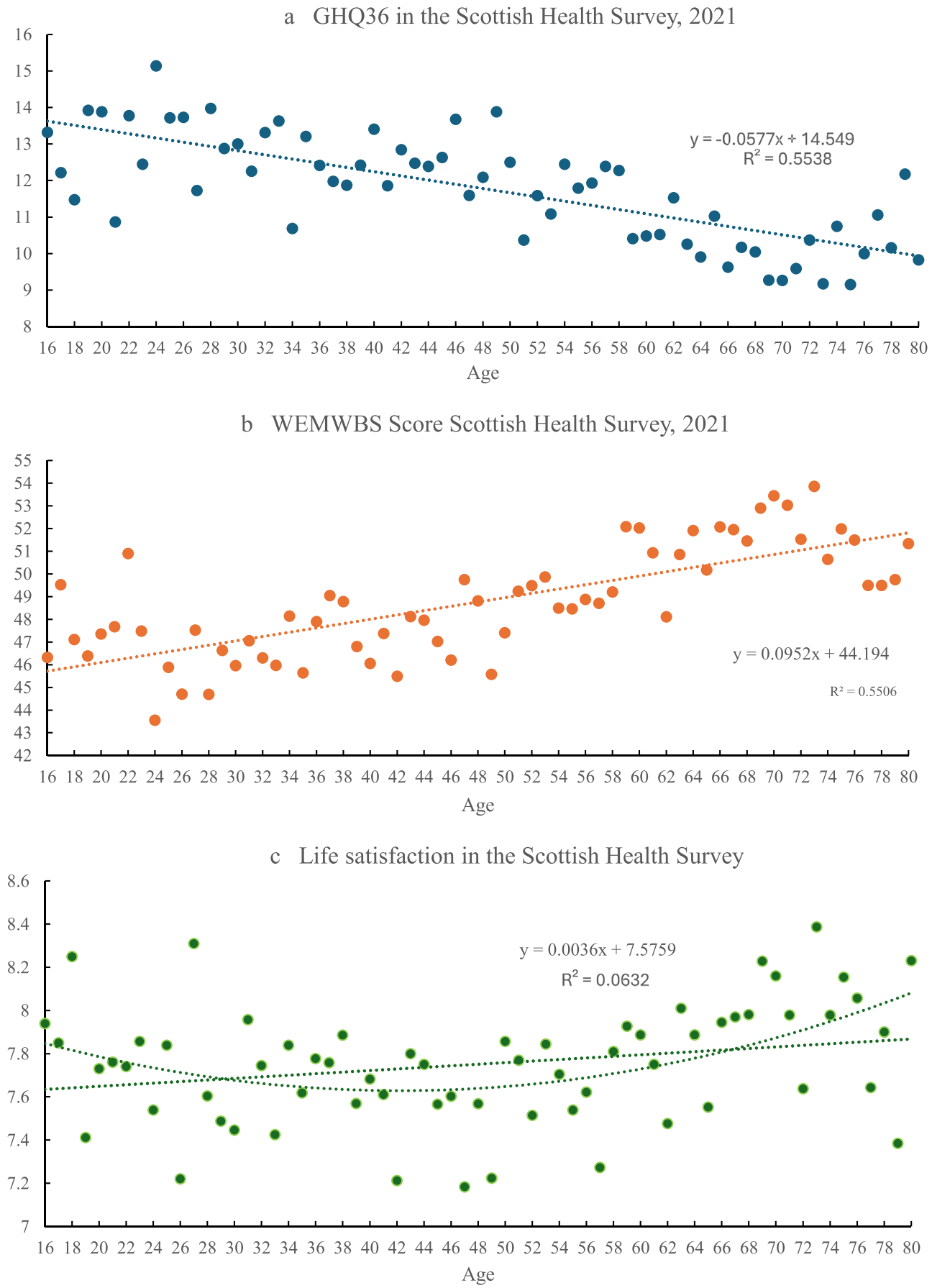

CHART 11 | (a) GHQ36 in the Scottish Health Survey, 2021. (b) WEMWBS Score Scottish Health Survey, 2021. (c) Life satisfaction in the Scottish Health Survey.

TABLE 7 | Scottish well-being regressions 2008–2021, ages 16–64.

	GHQ36		WEMWBS	
	2008–2019	**2021**	**2008–2020**	**2021**
Age	+0.1154 (9.40)	−0.0307 (4.26)	−0.1061 (5.26)	0.0983 (6.81)
Age squared	−0.0013 (8.71)		+0.0013 (5.46)	
Female	0.8760 (17.14)	0.5856 (2.89)	−0.2907 (3.46)	−0.6604 (1.72)
Constant	8.0942	12.5067	51.9231	44.1748
Adjusted R^2	0.0101	0.0180	0.0012	0.0236
N	43,948	3547	43,806	2400

Note: 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. *t*-Statistics in parentheses.

TABLE 8 | Life satisfaction using the Eurobarometers, 2004–2023.

	UK	UK	Europe minus UK
	2004–2020	**2021–2023**	**2021–2023**
Age 25–34	−0.0649 (4.86)	+0.0950 (2.82)	−0.0911 (15.62)
Age 35–44	−0.1142 (8.72)	+0.0907 (2.70)	−0.1371 (24.31)
Age 45–54	−0.1600 (12.06)	+0.0393 (1.17)	−0.1884 (33.69)
Age 55–64	−0.0724 (5.56)	+0.1617 (4.82)	−0.2164 (38.82)
Adjusted R^2	0.0215	0.1018	0.1219
N	28,056	4,933	178,281

Note: Equations also include female and year dummies and country dummies in column 3. *t*-Statistics in parentheses.
Source: Eurobarometers.

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 well-being. 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 well-being 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 well-being 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. Of course, economic precarity, housing instability, social media, climate anxiety, changes in benefits, talking about mental health being more socially acceptable, etc., all add to the concerns of 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. Of relevance is that the decline in well-being (i) started in 2015, (ii) applies especially to the young in general and females in particular and (iii) is global. Climate anxiety, housing instability, for example, likely apply to all age groups and did not have a kink point in 2015. Changes in regulations and laws need to be global to fit the data.

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

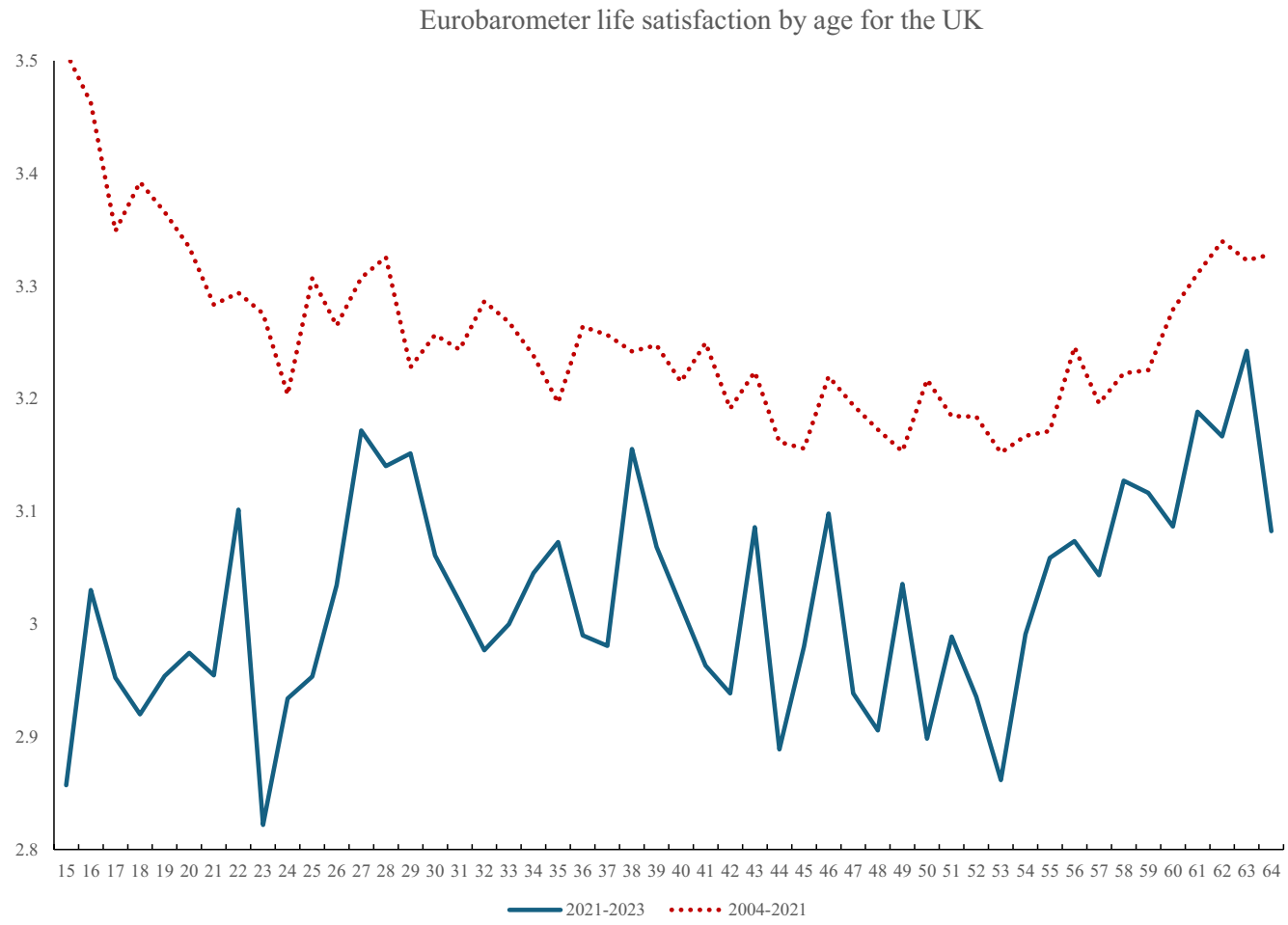

CHART 12 | Eurobarometer life satisfaction by age for the UK.

TABLE 9 | Well-being in the UK in Global Minds, 2020–2024.

	MHQ	Life satisfaction	Fear and anxiety	Suicidal thoughts
25–34	12.4937 (11.47)	0.2673 (5.30)	−0.0419 (1.32)	−0.8940 (20.30)
35–44	21.3018 (18.72)	0.5470 (10.53)	−0.3292 (8.65)	−1.2597 (27.38)
45–54	29.6000 (29.90)	0.7044 (16.43)	−0.6150 (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^2	0.0694	0.0485	0.0532	0.0820
Mean	48.6	5.04	5.68	3.35

Note: Equations include gender and year (3). Life satisfaction only available in 2021 ($n = 47{,}726$), 2021 (226,435), 2022 (461), and 2021. *t*-Statistics in parentheses. Source GlobalMinds, 2020–2024. MHQ scored −100 to 200. The other three variables scored 1 to 9.

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.[21] 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.

Our findings suggest that there has been a steady deterioration 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

TABLE 10 | Countries ranked for ages 18–24 by MHQ worst to best (correlation = −0.369).

Rank MHQ		MHQ	*N*	Rank GWP		GWP
12	Algeria	30.1	8048	28	Algeria	5.54
18	Argentine	22.5	7760	15	Argentine	6.55
32	Australia	13.6	5679	1	Australia	6.94
29	Bangladesh	16.4	1667	35	Bangladesh	4.72
38	Brazil	3.7	5039	17	Brazil	6.46
22	Canada	20.4	4896	9	Canada	6.70
31	Chile	14.7	1006	11	Chile	6.65
24	Colombia	19.6	15,899	24	Colombia	5.95
2	Congo	49.2	2170	25	Congo	5.78
27	Ecuador	17.6	2702	20	Ecuador	6.40
20	Egypt	20.9	12,715	37	Egypt	4.38
19	El Salvador	21.6	1188	7	El Salvador	6.72
35	France	11.7	5375	5	France	6.83
25	Germany	18.3	2828	14	Germany	6.58
21	Guatemala	20.9	2289	10	Guatemala	6.66
15	Honduras	24.2	1230	16	Honduras	6.47
30	India	16.3	47,642	36	India	4.53
17	Iraq	23.0	7383	27	Iraq	5.61
1	Italy	61.0	975	8	Italy	6.71
8	Jordan	35.3	2690	34	Jordan	4.86
28	Mexico	16.8	29,667	6	Mexico	6.77
9	Morocco	34.3	3715	29	Morocco	5.34
4	Mozambique	44.5	2046	30	Mozambique	5.32
34	New Zealand	12.3	1553	3	New Zealand	6.85
14	Nicaragua	24.7	1319	4	Nicaragua	6.84
6	Nigeria	36.8	2059	31	Nigeria	5.28
16	Pakistan	24.2	5613	32	Pakistan	5.17
11	Paraguay	30.7	1702	22	Paraguay	6.18
33	Peru	13.6	7574	21	Peru	6.23
3	Philippines	44.6	2276	23	Philippines	6.12
23	Singapore	20.0	1673	19	Singapore	6.45
36	South Africa	10.1	5310	26	South Africa	5.75
26	Spain	17.8	9506	18	Spain	6.46
10	Tunisia	34.0	1201	33	Tunisia	4.87
37	UK	9.2	9947	2	UK	6.92
13	USA	27.6	15,736	12	USA	6.61
7	Venezuela	35.5	9768	13	Venezuela	6.59
5	Yemen	39.7	6954	38	Yemen	3.93

Note: Rankings of countries in Global Minds using MHQ scores and with GWP data from Marquez et al. (2024, tab. 3.2).

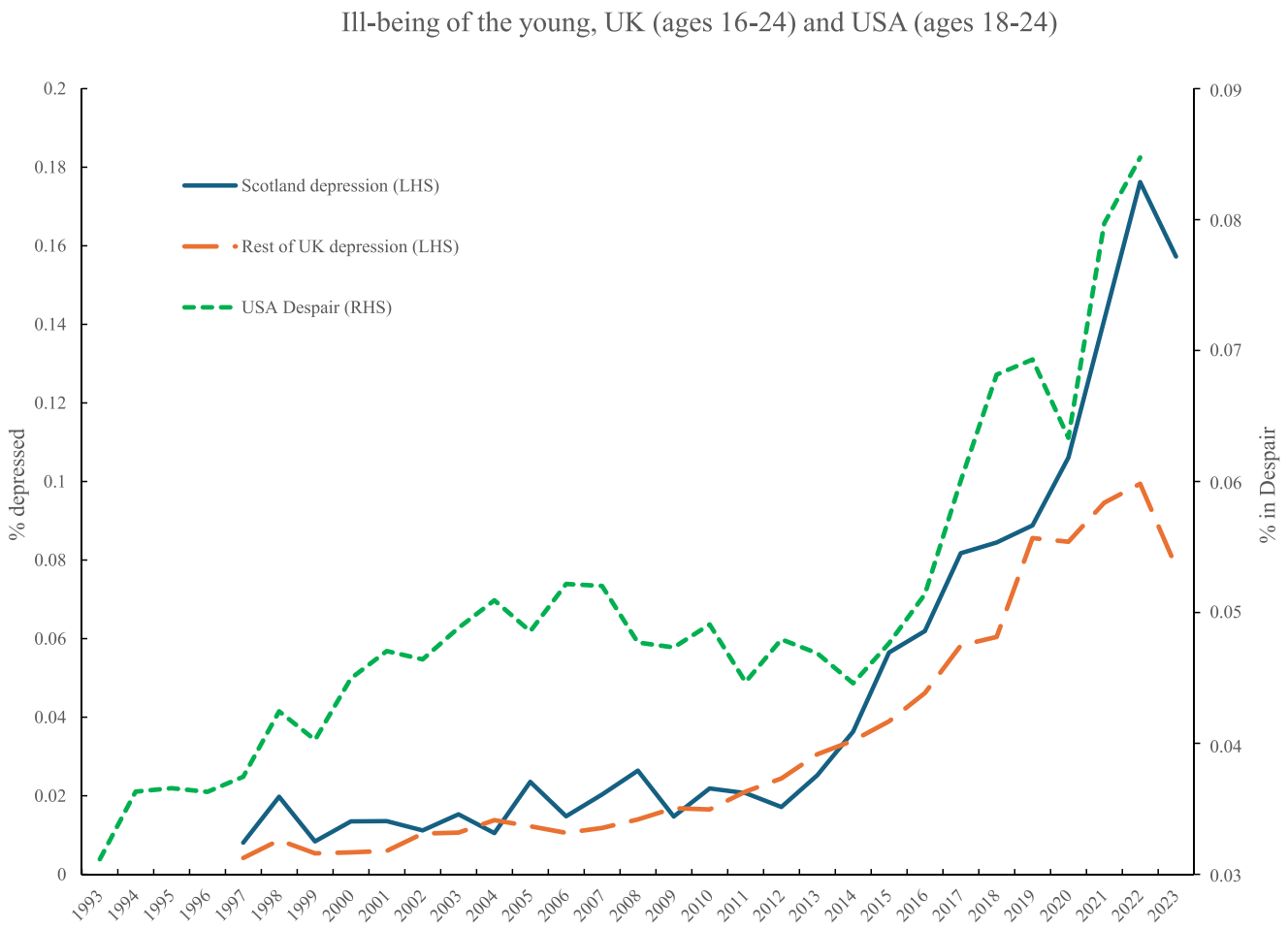

CHART 13 | Ill-being of the young, UK (ages 16–24) and USA (ages 18–24).

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?

The evidence though is that the labour market position of the young may in part be to blame. In the recent data we have shown that since 2020 in the UK phobias and panics, depression, anxiety and GHQ scores are the highest among the young. In addition, life satisfaction, happiness, WEMWBS, and MHQ are the lowest for the young. Some of that story could be to do with the labor market. As Chart 14 illustrates, based on data from the ONS (spreadsheet A01, Table 1), this well-being decline tracks the deterioration in the relative labor market position of the young. It shows the seasonally adjusted 18–24 unemployment rate but also the ratio between that and the 16+ rate, and this ratio has climbed steadily since 1992. One policy fix then would be to subsidize youth employment as was done in prior recessions.

Other possibilities include limiting time spent in front of phones as suggested by Haidt (2024). Pugno (2025) has noted that the evidence does suggest that a particular problem is that time on the phone takes time away from beneficial activities. Young people are not bowling alone (Putnam 2000) they are not bowling at all as the number of bowling alleys declines. Time spent on the phone takes away from activities that are known to be positively associated with well-being. Youngsters are not going to the library or the swimming pool. Geraci et al. (2022) find in the UK that internet use has a negative effect on participation in scout organizations, political parties and voluntary organizations. Lohmann (2015) shows, using data from the World Values surveys across 26 countries including the UK, that material aspirations tend to be significantly positively related to computer access in areas with advanced Internet infrastructure. McDool et al. (2020) showed that access to high-speed Internet reduces the number of children's activities, such as playing sports, face-to-face interaction with friends and family, attending youth clubs or other organized events, undertaking voluntary or community work, and attending classes outside of school such as art and music classes.

Suggestions for solutions involve finding ways to get young people away from their phones and certainly to cut durations. Examples of programs that seem to work involve greater use of outdoor activities. Global programs such as https://grassrootsoccer.org/ for example, appear to have positive impacts on mental health. Their mental health programs cut the number of participants with depression nearly in half (UNICEF 2022). Other programs that appear to improve youth mental health include https://www.childrenandnature.org/.[22]

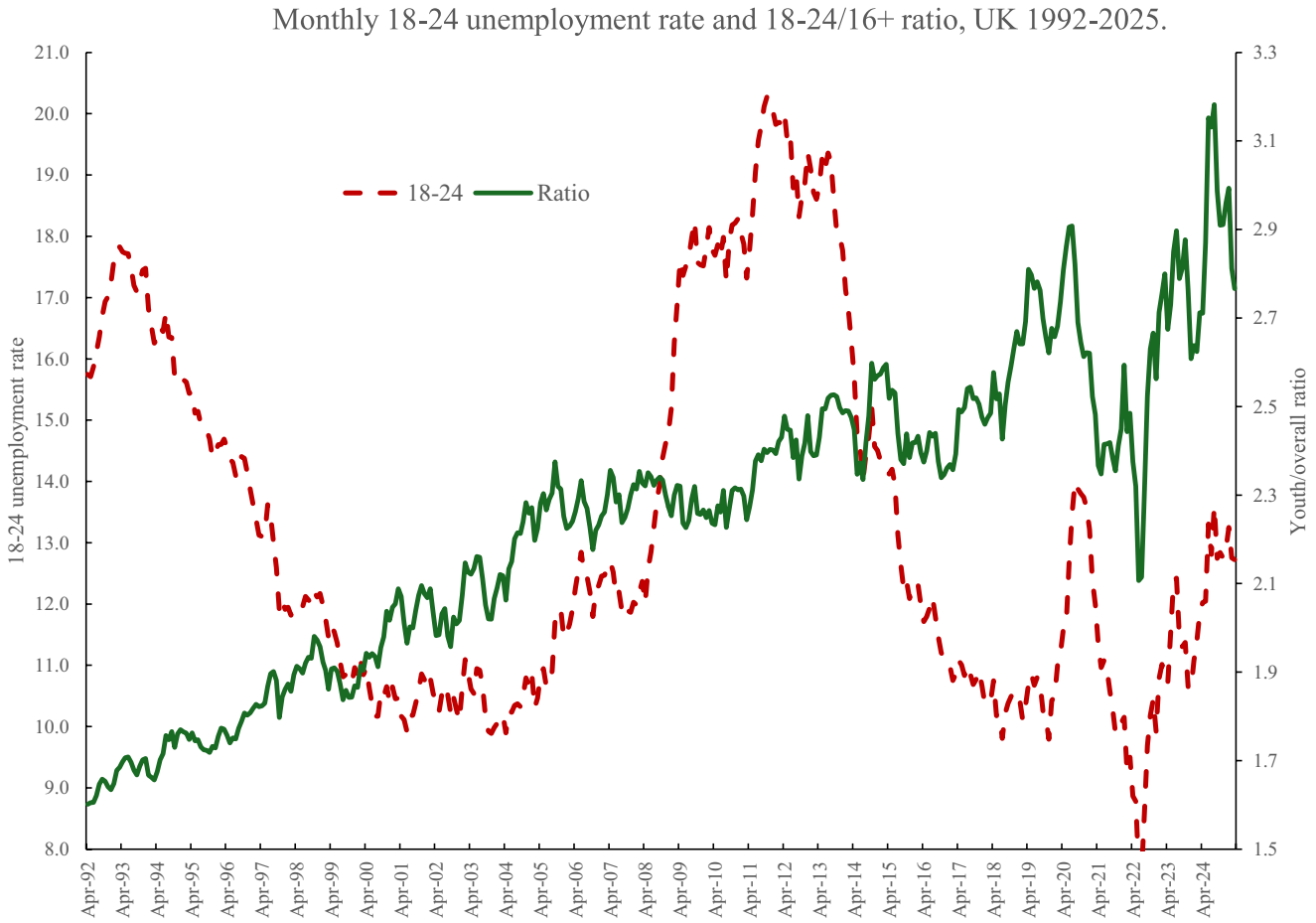

CHART 14 | Monthly 18–24 unemployment rate and 18–24/16+ ratio, UK 1992–2025.

Our results do not seem to depend on the dataset used, or whether the variable used is a validated mental health measure such as the GHQ score or the WEMWBS measure of mental health. Or indeed if it is based on self-reports of being depressed, having a phobia or anxiety or if it relates to life satisfaction or happiness. All confirm there is a rapidly emerging youth well-being and/or mental health crisis in the UK.

Author Contributions

Blanchflower conceived of the presented idea. Bryson and Blanchflower performed the computations. Bryson and Blanchflower mainly contributed to the text. All authors discussed the results and contributed to the final manuscript. Bell was the corresponding author.

Acknowledgments

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Endnotes

[1] See Blanchflower and Bryson (2024), examining the impact on well-being 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.

[2] Both the happiness and anxiety questions in the APS refer to 'yesterday' whereas the life satisfaction question refers to 'nowadays—see below.

[3] Sample sizes were very small with only 6912 respondents. Younger age groups were underrepresented in the achieved sample. An estimated 13% of England's population were aged 16–24 in 2022, whereas 4.6% of survey responses. https://digital.nhs.uk/data-and-information/publications/statistical/adult-psychiatric-morbidity-survey/survey-of-mental-health-and-wellbeing-england-2023-24/methods.

[4] https://www.rcpsych.ac.uk/news-and-features/latest-news/detail/2022/05/18/hospital-admissions-for-eating-disorders-increased-by-84-in-the-last-five-years.

[5] 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% to 6.4%.

[6] "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.

[7] Zhang et al. (2023) examined distress in the UK from 1991 to 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 Kan (2023).

[8] "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?"

[9] We would have liked to analyze 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.

[10] The 17 options are listed in Appendix 1.

[11] 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).

[12] Appendix 1 provides further references to studies that validate WEMWBS.

[13] https://warwick.ac.uk/services/innovations/wemwbs.

[14] Data are available for download at GESIS Lebniz Institute for Social Sciences here https://www.gesis.org/en/eurobarometer-data-service/about.

[15] For earlier analysis of the age pattern in wellbeing using Global Minds data see Blanchflower et al. (2024) and their annual report which can be downloaded here.

[16] For details of how the MHQ score is constructed see Newson and Thiagarajan (2020).

[17] For example, if we run an OLS panics equation with controls for age, year and gender the coefficient on a proxy variable is −0.0018 ($t = 21$), versus −0.008 (= 77) with depression as the dependent variable, with a sample size in both of 9,018,250.

[18] https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/datasets/quarterlypersonalwellbeingestimatesnonseasonallyadjusted.

[19] These variables were also used in Blanchflower et al. (2024) for multiple countries but not explicitly for the UK.

[20] 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.

[21] See https://www.uswitch.com/mobiles/studies/mobile-statistics/ for cellular phone subscriptions over time.

[22] On their website they say—'children won't remember their best day on youtube'!

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Appendix 1

Health Options From LFS, GHQ36 and WEMWBS Definitions

1. Eighteen Main health problems in the LFS

The eighteen 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
14. Autism (including Autism Spectrum Condition, Asperger syndrome)
15. Severe or specific learning difficulties
16. Mental illness, or suffer from phobia, panics or other nervous disorders
17. Progressive illness not included elsewhere (e.g., cancer, multiple sclerosis, symptomatic HIV, Parkinson's disease, muscular dystrophy)
18. 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

Sample and variable details

1. The UK Labour Force Survey details are here

   https://www.ons.gov.uk/surveys/informationforhouseholdsandindividuals/householdandindividualsurveys/labourforcesurvey

2. Annual Population Survey details are here

   https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/annualpopulationsurveyapsqmi

3. Eurobarometer survey series details are here

   https://www.gesis.org/en/eurobarometer-data-service

4. Scottish heath survey details are here

   https://www.gov.scot/collections/scottish-health-survey/

5. Global Minds details are here

   https://sapienlabs.org/

Variable validation.

The WMWEBS variable has been validated in Tennant et al. (2007) and Sarasjärvi et al. (2023).

The GHQ score is validated by Makowska et al. (2002), Werneke et al. (2000), Hardy et al. (1999), and Goldberg et al. (1997).

Appendix 2

Suicide Rates in the EU for Ages 15–19

	2015	2022	Change
EU	4.35	4.44	0.09
Belgium	5.07	5.43	0.36
Bulgaria	3.19	3.72	0.53
Czechia	4.56	7.36	2.80
Denmark	1.42	4.05	2.63
Germany	4.77	4.5	−0.27
Estonia	16.64	7.21	−9.43
Ireland	6.73	6.79	0.06
Greece	1.31	1.69	0.38
Spain	2.63	2.94	0.31
France	3.26	3.81	0.55
Croatia	5.03	7.39	2.36
Italy	2.47	2.74	0.27
Cyprus	1.91	2.13	0.22
Latvia	6.89	3.15	−3.74
Lithuania	18.64	4.56	−14.08
Luxembourg	3.04	5.91	2.87
Hungary	5.26	4.51	−0.75
Netherlands	4.06	6.35	2.29
Austria	6.71	7.9	1.19
Poland	8.33	8.32	−0.01
Portugal	1.62	3.41	1.79
Romania	5.64	2.65	−2.99
Slovenia	5.27	6.17	0.90
Slovakia	2.42	3.43	1.01
Finland	5.59	7.86	2.27
Sweden	6.48	5.36	−1.12
Iceland	18.09	8.57	−9.52
Norway	4.59	6.52	1.93
Switzerland	7.98	6.81	−1.17
United Kingdom	3.90	5.26 (2018)	
Türkiye	2.26	6.65	4.39

Note: https://ec.europa.eu/eurostat/databrowser/view/tps00202/default/table?lang=en.

Appendix 3

Country Rankings of Life Satisfaction for the Young From Marquez et al. (2024)

	GWP		PISA		HBSC		HBSC		HBSC	
	2020–2024		2022		2021/2022		2021/2022		2021/2022	
	Age 15–24		Age 15		Age 15		Age 13		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

	GWP		PISA		HBSC		HBSC		HBSC	
	2020–2024		2022		2021/2022		2021/2022		2021/2022	
	Age 15–24		Age 15		Age 15		Age 13		Age 11	
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						
72	Armenia	6.16								
73	Kyrgyz c	6.15								
74	Philippines	6.12								
75	Georgia	6.08								
76	Vietnam	6.06								
77	China	6.05								

	GWP		PISA	HBSC	HBSC	HBSC
	2020–2024		2022	2021/2022	2021/2022	2021/2022
	Age 15–24		Age 15	Age 15	Age 13	Age 11
78	Mauritius	6.03				
79	Uzbekistan	5.98				
80	Colombia	5.95				
81	Mongolia	5.94				
82	Libya	5.93				
83	Jamaica	5.81				
84	Indonesia	5.81				
85	Congo	5.78				
86	South Africa	5.75				
87	Nepal	5.67				
88	Tajikistan	5.61				
89	Iraq	5.61				
90	Venezuela	5.59				
91	Algeria	5.54				
92	Gabon	5.52				
93	Iran	5.46				
94	Cameroon	5.36				
95	Azerbaijan	5.34				
96	Morocco	5.34				
97	Hong Kong	5.33				
98	Turkish Cyprus	5.32				
99	Côte d'Ivoire	5.32				
100	Mozambique	5.32				
101	Nigeria	5.28				
102	Palestine	5.25				
103	Pakistan	5.17				
104	Türkiye	5.07				
105	Senegal	5.06				
106	Guinea	5.05				
107	Namibia	5.05				
108	Burkina Faso	4.98				
109	Lao P.D.R.	4.90				
110	Tunisia	4.87				
111	Jordan	4.86				
112	Ghana	4.84				
113	Sri Lanka	4.80				
114	Kenya	4.78				
115	Liberia	4.73				
116	Bangladesh	4.72				
117	Uganda	4.69				

	GWP		PISA	HBSC	HBSC	HBSC
	2020–2024		2022	2021/2022	2021/2022	2021/2022
	Age 15–24		Age 15	Age 15	Age 13	Age 11
118	Niger	4.63				
119	Cambodia	4.62				
120	Mauritania	4.61				
121	Chad	4.56				
122	Benin	4.52				
123	Gambia	4.52				
124	Ethiopia	4.48				
125	Mali	4.47				
126	Myanmar	4.40				
127	Egypt	4.38				
128	Togo	4.34				
129	India	4.33				
130	Madagascar	4.17				
131	Tanzania	4.15				
132	Botswana	4.09				
134	Comoros	4.01				
135	Eswatini	3.84				
136	Malawi	3.83				
137	Lesotho	3.8				
138	Zimbabwe	3.77				
139	Congo	3.37				
140	Sierra Leone	3.19				
141	Lebanon	2.93				
142	Afghanistan	1.96				

Note: Ranks and life satisfaction scores. Belgium (Fl) means Belgium (Flemish). Items colored red = UK nations.

Appendix 4

Mental Health in Europe From Flash Eurobarometer 530

	Sad	Worries	Difficulty concentrating	Moods	Eat and sleep	Social withdrawal
Age 25–34	−0.0013 (0.11)	−0.0150 (1.40)	−0.0625 (6.06)	−0.0457 (4.95)	−0.0472 (5.69)	−0.0239 (2.33)
Age 35–44	−0.0511 (4.50)	−0.0497 (4.76)	−0.1070 (10.63)	−0.0797 (8.86)	−0.0573 (7.09)	−0.0725 (7.25)
Age 45–54	−0.0807 (7.11)	−0.0981 (9.42)	−0.1317 (13.09)	−0.1163 (12.95)	−0.0932 (11.55)	−0.1016 (10.17)
Age 55–64	−0.1405 (12.17)	−0.1386 (13.08)	−0.1829 (17.86)	−0.1733 (18.95)	−0.1294 (15.76)	−0.1423 (14.00)
Female	0.1463 (21.29)	0.1200 (19.03)	0.0809 (13.28)	0.0818 (15.04)	0.0523 (10.69)	0.0851 (14.08)
Adjusted R^2	0.0609	0.0483	0.0389	0.0434	0.0273	0.0393
N	19,098	19,098	19,098	19,098	19,098	19,098

	Low self-esteem	Detachment from reality	Unable to cope	Problems alcohol or drugs
Age 25–34	−0.0623 (6.08)	−0.0351 (8.63)	−0.0149 (1.52)	−0.0004 (0.09)
Age 35–44	−0.1159 (11.58)	−0.0453 (11.42)	−0.0677 (7.07)	−0.0041 (0.84)
Age 45–54	−0.1685 (16.85)	−0.0586 (14.79)	−0.1043 (10.91)	−0.0227 (4.66)

	Low self-esteem	Detachment from reality	Unable to cope	Problems alcohol or drugs
Age 55–64	−0.2357 (23,16)	−0.0631 (15.66)	−0.1591 (16.35)	−0.0336 (6.77)
Female	0.1111 (18.35)	−0.0000 (0.01)	0.0921 (15.90)	−0.0215 (7.25)
Adjusted R^2	0.0653	0.0173	0.0400	0.0124
N	19,098	19,098	19,098	19,098

Note: 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