Rising Young Worker Despair in the United States

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Abstract

Between the early 1990s and 2015 the relationship between mental despair and age was hump-shaped in the United States: it rose to middle-age, then declined later in life. That relationship has now changed: mental despair declines monotonically with age due to a rise in despair among the young. However, the relationship between age and mental despair differs by labor market status. The hump-shape in age still exists for those who are unable to work and the unemployed. The relation between mental despair and age is broadly flat, and has remained so, for homemakers, students and the retired. The change in the age-despair profile over time is due to increasing despair among young workers. Whilst the relationship between mental despair and age has always been downward sloping among workers, this relationship has become more pronounced due to a rise in mental despair among young workers. We find broad-based evidence for this finding in the Behavioral Risk Factor Surveillance System (BRFSS) of 1993-2023, the National Survey on Drug Use and Health (NSDUH), 2008-2023, and in surveys by Pew, the Conference Board and Johns Hopkins University.

1. Declining youth well-being

There is a growing literature suggesting that the U-shape in age in well-being and the hump shape in age in ill-being have both disappeared in the years since around 2013-2015 in the US and the UK (Blanchflower, Bryson and Xu, 2024) and in Western Europe (Blanchflower and Bryson, 2025a). This disappearance of a mid-life crisis has been driven by the decline in the mental health of the young, and is particularly evident for young people ages 12-25, and especially young women (see Twenge, Martin and Campbell (2018), Udupa et al 2023 and Haidt, 2024).

Worsening youth mental health has subsequently been noted as having occurred in Iceland by Thorisdottir et al (2021) in Norway by Krokstad et al (2022), Garriguet (2021) for Canada, Huang, Helliwell and Norton (2025), for Canada and the US and Leigh and Robson for Australia (2025). Indeed, Blanchflower (2025) found that the young were the unhappiest age group in 167 UN countries.

Various explanations for this phenomenon have been advanced. One of the ones receiving most attention has been the rise in social media and access to the internet (Haidt, 2024; Suárez Álvarez and Vicente, 2024; Lohman, 2015). A series of natural experiments summarized by Pugno (2024) suggest the relationship between worsening youth mental health and the spread of the internet is *causal*. Nevertheless, even if social media and internet usage is a contributory factor, it is unlikely to be the only explanation of the change.

It is usual in the well-being literature to consider the role played by economic factors, including paid employment. Broadly speaking, those in paid employment tend to be happier than those who are unemployed and seeking work, and those who are incapable of work (Winkelmann and Winkelmann, 1998). Economists tend to put this down to the benefits of a higher income that comes with paid employment, even if this relationship is non-linear (Kahneman and Deaton, 2010). However, some economists have demonstrated that the value of paid work, in terms of subjective well-being, exceeds that which is due to its pecuniary value alone (Blanchflower and Oswald, 2011). This point is taken as a given for most psychologists who maintain that individuals' self-worth, their identity and their social standing are often linked, and sometimes determined, by their employment and occupational status (Faunce, 1989). Furthermore, job loss is a shock to workers, resulting in a decline in their well-being which exceeds that which could be accounted for by the income loss (Layard et al., 2012) and which, unlike most other shocks, they are unable to recover from until they are able to find work again (Clark et al, 2008). Notwithstanding these well-known findings in the literature, no research to date has considered the role that paid work might play in the changing age profile of despair in the United States.

It is possible that changes to jobs and the labor market might lead to a reduction in the wellbeing returns to paid employment. Green et al. (2024) argues that job quality is on a par with health as a key determinant of subjective wellbeing, so changes in that job quality can be expected to impact worker wellbeing. A slowdown in the rate of real earnings growth in recent years has, arguably, reduced the overall value of paid work, or perhaps the extent to which it compensates workers for the effort exerted in working. An alternative way of looking at this is to consider time-variance in the value of leisure time: recent studies note that the price of leisure has fallen due to technological changes pushing down the price of items that young people in particular use in their leisure time,

such as gaming devices (Kopytov et al, 2023). In addition, by pushing up the quality of leisure time, these trends raise the relative cost of time in employment.

Earned income, and the time it takes to make that income, do not fully capture the costs and benefits of paid employment. Psychologists from Maslow (1943) onwards, emphasize the importance to human beings of satisfying a hierarchy of needs, beginning with physiological and social needs, through to self-actualization at the top of the hierarchy. Although employment is often considered a means to achieve safety and security, relative to reliance on state welfare or family and friends, changes in the nature of employment contracts may have limited the value of paid work for some in this regard. The advent of 'gig' working, for example, whilst beneficial for some, may create uncertainty and insecurity for those who resort to it because they have no clear path to permanent employment and career progression. These new forms of employment are predominantly undertaken by young people (Lepanjuuri et al., 2018)

More broadly, employers are successfully deploying new technologies to minimize 'break' times, and exert greater control over production processes, often aided by close technological monitoring of work processes, which limit worker control and autonomy over ever-more-demanding processes, all of which – based on Karasek's (1979) theory regarding the importance of worker control and autonomy for wellbeing – should result in a decline in the wellbeing of workers. Evidence from task-based studies of work, and social surveys in which workers report on the nature of job tasks, indicates there has been a growth in job demands and a reduction in worker job control in the United Kingdom (Green et al., 2022) which, presumably, is mirrored in the United States. During COVID, the shift to home and hybrid working, whilst beneficial in some respects, may have exacerbated feelings of social isolation experienced by the young in particular as they missed out on the social component of the workplace. The demise of collective bargaining and trade union presence in the workplace implies a diminution in workers' bargaining power, making it even more difficult for workers to resist such changes and to alter their terms and conditions of employment (Feiveson, 2023).

It is plausible that the trends described above have particularly adverse consequences for young people because they are new arrivals in the labor market and, as such, are more likely to be subject to new forms of contracting and are less likely to work in unionized workplaces where workers might draw on collective bargaining power to resist employer-driven change. Laura Feiveson (2024) from the US Treasury has evaluated the worsening, relative position of young people and argues that there are several recent negative factors lowering the well-being of the young, including young workers:

"*…many changes have contributed to an increasing sense of economic fragility among young adults. Young male labor force participation has dropped significantly over the past thirty years, and young male earnings have stagnated, particularly for workers with less education. The relative prices of housing and childcare have risen. Average student debt per person has risen sharply, weighing down household balance sheets and contributing to a delay in household formation. The health of young adults has deteriorated, as seen in increases in social isolation, obesity, and death rates…*A*n aging population means that young adults today are competing for houses and jobs with more older workers than the young of their parents' generation did. Increased globalization and technological advances brought an abundance of affordable goods to*

American consumers, but with the cost of fewer job opportunities for men without college degrees".

These trends in the world of work may be accentuated by the impact of social media. As Pugno (2025) suggests, social media may exacerbate workers' feelings of distress and despair where workers end up comparing their situation with that of others:

"*As far as social competition is concerned, it is well known that comparing one's economic condition with that of others deflates subjective well-being, at least in advanced countries, especially if the comparison is made with those with better conditions ..The reason is that looking at others' economic conditions gives rise to material aspirations that are unrealistic and hence frustrating*" (2024, p.7).

To our knowledge we are the first to explore the link between labor force status and the shift in the age-pattern of mental despair from a hump-shape to a monotonic decline in age. We do so with data for the United States. We find the hump-shape in age still exists for those who are unable to work and the unemployed. The relation between mental despair and age is broadly flat, and has remained so, for homemakers, students and the retired. The change in the age-despair profile over time is due to increasing despair among young workers. Whilst the relationship between mental despair and age has always been downward sloping among workers, this relationship has become more pronounced due to a rise in mental despair among young workers.

In Section Two we describe our data and methodology. In Section Three we present our Results before concluding in Section Four.

2. Data and methods

Our primary analysis uses annual micro-data for the period 1993-2023 from the Behavioral Risk Factor Surveillance System (BRFSS). Each survey contains some responses from the succeeding year. For example, the 2023 file contains just over 25,000 observations for January-March 2024.[1] We also examine confirmatory evidence on mental health from the National Survey on Drug Use and Health (NSDUH) 2008-2023 again for the USA. Our focus is on young people aged below 25, but we include older people in the analysis as a comparator group. We include people over working age but are cautious about the interpretation of what happens to well-being after the age of 65, in part due to the positive impact subjective well-being has on surviving into older age.[2]

We examine changes in well-being over time by age and gender. We present simple distributions in graphical and tabular form as well as regression adjusted estimates which enter age as a categorical variable, alongside a female dummy variable and year and state fixed effects.

[1] In 2023 survey there are 433,323 observations of which 21,755 were from January 2024, 3520 from February 2024 and 36 from March 2024. Excluding missing observations, we have 425,215 observations in the survey on our main mental despair variable.

[2] Hudomiet, Hurd and Rohwedder (2021) using the HRS note that there is a mortality selection bias around age 70; happiness predicts mortality "*Individuals with higher life satisfaction and in better health tend to live longer, and, among survivors, individuals with higher life satisfaction are more likely to remain in the survey, masking the decline in life satisfaction experienced by individuals as they age. We conclude that the optimistic view about increasing life satisfaction at older ages based on cross-sectional data is not warranted."* See also Becker and Trautman (2022).

Our initial dependent variable is the number of **bad mental health days (MHD)** in the last month which is defined as follows.

Q1. "*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?"*

We then construct our **mental despair** measure (Q2) by setting the Q1 variable to one when an individual gave the answer 30 and zero otherwise. This variable was initially defined and used in Blanchflower and Oswald (2022) who showed its incidence had risen over time, from 3.6% in 1993 to 6.4% in 2019, especially for the prime-age and especially the less-educated. Blanchflower and Feir (2020) noted the rise, and the high level in this variable among native Americans. We update this analysis by examining an additional four surveys from 2020-2023 that include the COVID shutdown plus a few months from 2024. It is clear the observed changes started before COVID, which simply extended a pre-existing trend.[3]

The overall weighted mean for mental distress is .053 over the years 1993-2024, with a standard deviation of .224 and a sample size of over ten million (n=10,082,289).

Throughout we focus on differences over time in the relationship between age and despair for workers and non-workers. In the years 2020-2024 56.2% of the sample, was employed; 5.2% were unemployed; 5.1% were homemakers, 4.9% were students, 20% were retired and 6.3% were 'unable to work' and 1.4% refused (n=1,721,923).

As background, adult unemployment rates and youth unemployment rates have tracked each other over the last decade and been relatively low, but with a markedly higher youth rate of around two and a half times.[4] For example, at the time of writing, the latest data for May 2025 showed an unemployment rate for those age 25-54 of 3.6% versus 9.7% for those age 18-24, 2.85 times higher. The recent rise in youth rates has been greater than adult rates from a low of 3.3% to a high of 3.6% for adults and from 7.3% to 9.7% for the young.

3. Results

3.1: Evidence on Increasing Despair Among Young Workers from the BRFSS

In Figure 1 the hump-shape in despair across the age distribution, gets more pronounced over time through to 2015. The left-hand side for those under age 40 starts to rise from 2016-2019, a movement that becomes more pronounced for 2020-2024. The function then essentially declines in age. By contrast, there is little change over time in despair for those aged over fifty. As a consequence, from 2020, the overall hump-shape has gone.

[3] Blanchflower and Bryson (2025b) examined data on bad mental health days from nine BRFSS surveys, 2009-2012 and 2019-2024 and their association with adverse child experiences (ACEs).

[4] Age 25-54 % unemployment rates with 18-24 rates in parentheses 2024=Jan 3.3 (7.3); Feb 3.3 (8.8); March 3.2 (8.8); April 3.2(8.3): May 3.3 (9.3); June 3.5 (8.9); July 3.6 (9.1); Aug 3.6 (9.7); Sept 3.4 (9.2); Oct 3.5 (9.5); Nov 3.7 (9.4) Dec 3.5 (9.0). 2025=Jan 3.4 (9.0); Feb 3.5 (9.7); March 3.5 (9.4); April 3.5 (9.6); May 3.6 (9.7).

The distributions and means are reported in Table 1 for bad mental health days for five time periods: 1993-1999, 2000-2009, 2010-2015, 2016-2019 and 2020-2024. The final column shows the distribution in 2020-2024 for workers only. The median and the mode are always zero in every time period. The proportion saying zero days has declined over time as the proportion saying every day has risen. Means have also risen steadily over time. By the latest period 6.6% said every day was a bad mental health day up from 4.2% in the 1990s (Blanchflower and Oswald, 2021). In the latest period 5.4% of workers also said every day was a bad mental health day.

Table 2 reports (weighted) variation in mental despair percentages by characteristics for the latest period, 2020-2024. The number of bad mental health days and mental despair incidence are higher for women than men. Bad mental health and mental despair decline in age. Mental health days and despair fall with higher levels of education. Natives have especially high rates of mental despair. And Asians have low rates. Both the number of bad mental health days and mental despair are higher among the unemployed and those unable to work, as compared to those in work. Following Kuroki (2021), we define respondents in the BRFSS as gay – based on whether they say they are lesbian, homosexual or bisexual – and find that gays have markedly higher mental despair.[5] [6]

The first two columns of Table 3 report the distribution of young people aged under-25 across the various labor force status categories. It shows that working and being a student account for over four-fifths of youngsters. In the period 1993-2016 they accounted for 54.5% and 28.9% respectively and in the subsequent period 51.7% and 34.0% respectively.

The last two columns show despair rates in the 1990s and 2020s by labor force status. There is a big rise in despair among workers from 4.3% to 10.3%, and among students from 3.0% to 7.0%. Appendix Table 1 presents the changes in despair for workers over time by single-year-of-age.

Figure 2 reports changes in despair rates by gender over time for the three main labor force categories, namely working, being a student and 'other', which includes the unemployed, homemakers, those unable to work and a few 'retired'.[7] All rise over time, but it turns out that the rise in despair among workers and students is especially important given their numerical importance for the young, as shown in Table 3 as they account for 80% of the young.

Figure 3 shows changes over time in the despair of workers according to whether they were high school dropouts, high school graduates/GED holders or had some college. The rise in despair is greater for the less educated.

Figure 4 shows the trend in despair for the same five time periods as above but for workers only. The most striking finding is the sharp rise in despair in the last two periods, especially for those below age 50. But the rise in despair is strongest among the youngest and especially in 2020-2024.

[5] 4.8% of men and 6.9% of women (weighted) are 'gay' using this measure over the period 2020-2024.
[6] Zuazu and van der Meulen Rogers (2024) found from the Flash Eurobarometer Survey #2712 of Women in Times of COVID-19 conducted between 25 January and 3rd February 2022 that LGBTQ+ women were 8-11 percentage points more likely than heterosexual women to report anxiety, worries about mental health and depression.
[7] Appendix Figures 3-6 provide age plots for the five time periods for the unemployed, homemakers, unable to work and students age 18-30.

Figure 5 for 2020-2024 then shows rates of despair by age for males and females for workers and non-workers. Among non-workers, the hump-shaped pattern in despair by age is apparent for non-working men and women. But among workers, despair is downward sloping in age for both men and women. Of note is that female rates are higher among workers, but male rates are higher for non-workers.

The changes in the age profile of despair identified in these charts and tables are also illustrated with a series of regression equations that provide ceteris paribus estimates controlling for gender, year and state.

Table 4 reports the results of regressing despair on age, gender year and state dummies for the five time periods. Sample sizes range between 875,000 and nearly 3 million observations. Part 1) of the table is for all respondents. We find evidence of hump shapes in age maximizing in the first four periods in the age 45-54 age range. In contrast despair declines in age in the most recent period.

Part 2 of Table 4 reruns the analyses but for non-workers only. In all periods, including the most recent, there is a maximum, at age 45-54.

Part 3 then repeats this exercise but for workers. Here the picture is entirely different. From 2000 onwards despair for workers declines in age.

Part 4 of Table 4 focuses on the latest period, 2020-2024, splitting the sample into five labor force categories: the non-employed, the unemployed, homemakers, students, those unable to work and the retired. We find peaks for the unemployed, students and unable to work at ages 35-44.

There is prior evidence that the relation between age and ill-being is different between workers and non-workers. Blanchflower and Bryson (2022) showed that what matters in explaining *pain* through to age 65 is also whether one is working or not. Pain, they showed does rise with age. "*In the United States and elsewhere pain rises with age among workers but is hump shaped among non-workers, maximizing around age 50 and declining thereafter*." This was found using Gallup World Poll and US Daily Tracker data (2008-2017). In Appendix Figure 1 we report results of regressing pain on single year of age, gender, year, state and plucking the coefficients for OECD countries, 2010-2025 by workers (n=243,788) and non-workers (n=182,993).

In Appendix Figure 2 we report on the relation between sadness and age. [8] There are also marked differences between workers and non-workers, with the relation with age much flatter for workers.

Figure 6 reports the mental despair means for 2010-2015. We report the 'all' mean which is hump-shaped, with a peak around age 54, which is a combination of the hump shaped relation for the non-workers and the linear decline for workers.

[8] *Physical pain. Did you experience the following feelings during a lot of the day yesterday? How about physical pain—Yes/No. Sadness. Did you experience the following feelings during a lot of the day yesterday? How about sadness Yes/No.* In the case of sadness there is an obvious hump-shape maximizing at age for non-workers, whereas for workers the sadness/age function is essentially flat.

Figure 7 repeats the exercise for 2020-2024. As with 2010-15 the worker function slopes down, and the non-worker function is U-shaped. But now the 'all' function slopes down. Why? The reason is the markedly higher despair rates among workers under the age of 40, which have big weights in the overall calculation.

Appendix Table 2 for illustration provides data for ages 18-30, for example, to calculate the mean despair rates which is simply the weighted sum of (work mean*n_1)+(non-work mean*n_2)/(n_1+n_2). It is clear that in the first period the function slopes up and in the second it slopes down due to the greater importance of the work weight.

Finally, in our analysis of the BRFSS, we examine differences in despair by education among workers by age. We split by four education groups – high school dropouts, high school graduates, 1-3 years college and 4 years and over of college.

Despair in Figure 8 is plotted for those of working age from 18-65 for the years 2020-2024. The function slopes steeply from left to right for the three lowest education groups. However, the line for those with at least a four-year college degree is much shallower. One possible explanation for these differences by education is that college education proxies for better quality paid work, effectively protecting the young from the distress that may come from engaging in lower quality paid work.

Figure 9 shows an equivalent plot for the period 2010-2019 which shows a much flatter function for the lowest three education groups with little change for those with a 4-year degree. The difference between Figure 9 and Figure 8 may indicate that a decline in job quality, or working conditions, for those with lower levels of education, has become apparent only in the most recent period.

3.2: Mental Distress and Age by Work Status, Other Surveys

Data is also available on serious psychological distress from the National Survey on Drug Use and Health (NSDUH); which is an annual survey of the U.S. population, including individuals 12 years of age and older; it oversamples adolescents and young adults. Twenge et al (2019) examined serious psychological distress between 2008 and 2019. Adult respondents (18 years of age and older) completed the Kessler-6 Distress Scale, a valid and reliable scale that asks adult respondents how frequently they experienced symptoms of psychological distress during the past 30 days. The six symptoms were: feeling nervous, feeling hopeless, feeling restless or fidgety, feeling so sad or depressed that nothing could cheer you up, feeling that everything was an effort, and feeling down on yourself, no good, or worthless.

Response choices were coded as 4 (all of the time), 3 (most of the time), 2 (some of the time), 1 (little of the time), and 0 (none of the time). The possible range of scores was 0 to 24. Scores of 13 and over were coded by the survey administrators as indicative of serious psychological distress; as the other outcomes were dichotomous, following Twenge et al (2019) we relied on this dichotomous variable in our analyses. Psychological distress declines in age, in these data since

2008. The authors showed a rise in psychological distress especially for ages 18-19 and 20-21.[9] We extend these estimates and confirm they rose especially for workers.

Table 5 shows the rise in the Kaiser13 psychological distress score and extends the Twenge et al (2019) results through and past COVID especially for those age less than 26 (n= 639,450). Distress rises particularly from 2014. By 2023 between one in five reported being in distress. This was particularly apparent among workers. Figure 10 confirms the rise in psychological distress is especially important for young workers.

3.3: Possible Explanations for the Poor Well-being of Young Workers.

The big question is why has the mental health of young workers declined in the BRFSS so much since 2015? It does not seem that it is explained entirely by COVID because the trend started prior to 2020, as was clear from Figure 4. The trend has continued in the years since 2020. What are the plausible explanations?

One possibility, noted at the outset, is that the relative wage of youth jobs has fallen. But this doesn't seem to be the case. If we look at median, usual weekly, earnings in current dollars are reported by the Bureau of Labor Statistics for ages 16-24, taken from the Current Population Survey, the ratio compared to workers age 25 and older is little changed. If anything, it has *increased* over time. We found it rose from 56.6% in 2015 to 60.9% in 2024. The youth wage was $487 in 2015 compared with $860 for the 25+ group. In 2024 weekly wages were $772 and $1258 respectively. Plus, the real weekly wage is up, over the last decade for employees. For example, real weekly wages of private sector employees have risen (in 1982-1984 dollars. They average $385.52 in the first five months of 2025, up 2.4% since 2019, but down 2% since 2021 after the wage burst in 2020.[10]

A second possibility is the rise in under-employment among the young. It is apparent that the underemployed have low levels of job satisfaction and overall happiness (Bell and Blanchflower, 2019). Over the years since the Great Recession there was a marked increase in underemployment among the young. That is conditional upon having a job it would have fewer hours than the worker would like; workers were off their labor supply curves in part time jobs when they would prefer full-time. Underemployment is generally measured in the US using data from the Current Population Survey, where individuals are asked if they are part-time for economic reasons (PTFER). Bell and Blanchflower (2021) used this to derive a U7 measure which is simply PTFER/employment.

The Merged Outgoing Rotation Group files of the Current Population Survey for 2009-2024, allow us to identify workers who are PTFER. We simply regress the, 1,0 dummy, for workers in Table 6 on a set of age controls as well as gender, year, state and union. We find evidence that the probability of being underemployed declines in age. This U7 variable enters wage equations

[9] Twenge et al (2019) found the proportion with a Kessler score of 13 or over for those 18-19 was as follows 2008=8.97; 2009=8.47; 2010=8.92; 2011=9.23; 2012=9.4; 2013=9.55; 2014=10.99; 2015=12.33; 2016=13.05 and 2017=14.97.

[10] Data are provided monthly by the BLS, and these are annual averages in 1982-84 as follows -$2015=$364.35; 2016=$367.85; 2017=$369.21; 2018=$372.19; 2019=$376.62; 2020=$391.95; 2021=$393.48; 2022=$381.19; 2023=$380.46; 2024=$382.97 and 2025 (Jan-May) =$385.52.

negatively, along with the employment rate while the unemployment rate no longer does (Blanchflower, Bryson and Spurling, 2024).[11]

A third possibility is a reduction in job satisfaction among the young, potentially reflecting a decline in job quality or else an increase in expectations about what a job might offer. In the US General Social Surveys 1972-2024 workers have reported how satisfied they are with their jobs.[12] Averaged across the 2021, 2022 and 2024 surveys, for example, this variable rises linearly in age, with the young being the least happy.[13] Job satisfaction also rose linearly in the earlier period 2000-2018 the young also had the lowest levels of satisfaction and their level declined from 3.12 to 3.04.

	2021-2024	2000-2018
Age <25	3.04	3.12
25-34	3.17	3.27
35-44	3.27	3.34
45-54	3.32	3.36
55-64	3.42	3.44
65+	3.60	3.63
N	5,702	13,789

Twenge (2023c) has suggested that there has been a reconsideration of work among the young. Especially post-COVID, she suggests, the work ethic has plummeted. She examined data from the nationally representative Monitoring the Future Survey which has asked U.S. 12th graders, most of whom are 18 years old, about their work attitudes since 1976. She notes that the number of 18-year-olds who said they wanted to do their best in their job "even if this sometimes means working overtime" suddenly plummeted in 2021 and 2022. In early 2020, 54% of 18-year-olds said they were willing to work overtime. By 2022, it was 36%. That's a (relative) drop of 33% in just two years. It's also an all-time low in the 46-year history of the survey. Twenge suggests five reasons for this

1. Pandemic burnout
2. Pandemic reminded us that life is more than work.
3. The job market was stronger in 2021-22 and employees could favor work life balance.
4. TikTok made quiet quitting viral.
5. Gen-Z is pessimistic about a rigged system.

Another possibility of course is young people don't want BS Jobs (Graeber, 2019).

Other evidence is consistent with the declining well-being of young workers. An annual survey of more than 1.5 million individuals at over 2,500 organizations in the U.S. found that workplace

[11] The reason for this is that U7 and the employment rate did not mean revert, but the unemployment rate did. Over this period wage growth remained low and did not revert to pre-Great recession levels.

[12] The exact question is "*On the whole, how satisfied are you with the work you do--would you say you are satisfied (=4); moderately satisfied (-3), a little dissatisfied (=2) and very dissatisfied (=1)?*

[13] Blanchflower, Bryson and Green (2021) also found with these GSS data for 1972-1996, 1998-2008 and 2008-2018 that job satisfaction also rose linearly in age but there were U-shapes in age in Gallup's US Daily Tracker.

well-being from 2019 through 2023 spiked at the start of the pandemic in 2020 and has since declined as workers have returned to offices and lost some of the flexibility that had provided work-life balance.[14] Well-being scores, where higher is better, were 4.10 in 2019, 4.21 in 2020, 4.15 in 2021, 4.14 in 2022 and 4.11 in 2023. Well-being was markedly higher for men than for women with scores over time for men with female scores in parentheses 2019 4.15 (4.08); 2020 4.23 (4.20); 2021 4.17 (4.14); 2022 4.17 (4.12) and 2023 4.16 (4.11).

Smith, Barton, Myers and Erb (2024) found "*we would generally find a declining score in well-being scores with advancing age groups. However, between 2020 and 2023, this trend reversed, indicating an increase in well-being scores with age*". By 2023 there was "*a near linear relationship between age and well-being*". There was no difference between men and women in 2023 in the scores for ages 18-24 at 4.03; 26-34=4.09 (4.06), 35-44=4.17 (4.12); 45-54=4.23 (4.18) and 55+=4.28 (4.23) again with female scores in parentheses. They also found wellbeing was highest among Asians and lowest among African Americans and higher for males than females.

In addition, the Pew Research Center found that younger workers in 2024 are among the least satisfied with their jobs. Lin, Horowitz and Fry (2024) found that younger workers in 2024 had especially low levels of job satisfaction. The percentage of workers who were satisfied with their jobs was as follows.

	Extremely/very	Somewhat	Not too/not at all
Ages 18-29	43	40	17
Age 30-49	48	41	11
Age 50-64	56	34	10
Age 65+	67	27	6

A report by the Conference Board (2025) confirms this finding and suggested that the job satisfaction gap between younger and older workers continued to widen. It found a 15-point gap in job satisfaction between the oldest and youngest generations. Only 57.4% of US workers under age 25 reported being satisfied with their jobs. That's in comparison to 72.4% of those aged 55 and older. In addition, Cangrade (2024) investigated happiness at work and found the youngest were once again, the most unhappy. The proportions who said they were unhappy were as follows by generation - Baby Boomers (born 1955-1964) = 9%; Gen X (born 1965-1980) =13%; Millennials (born 1981-1996) =13% and Gen Z (born 1997-2012) =26%.

6. Conclusions

In this paper we have confirmed that the mental health of the young in the United States has worsened rapidly over the last decade, as reported in multiple datasets. The deterioration in mental health is particularly acute among young women. We have previously shown that there has been a shift in the age profile of poor mental health such that the hump-shape in age has been replaced by a monotonic decline in age, and that this is due to a worsening in the mental health of young people, both in absolute and relative terms. But this is the first paper to show that this change is primarily due to a change in the mental health of young workers. They have experienced a rise in despair that happened pre-COVID but has continued during the COVID period. This is especially the case for the least educated. Most had their schooling during COVID lockdown where their

[14] https://carey.jhu.edu/sites/default/files/2024-08/HCDLab-GPTW-WellBeing-Report-2024.pdf

social interactions were limited. Lack of social capital may be a contributory factor (Putnam, 2000 and Helliwell and Putnam, 2004).

We can therefore conclude that the reason that mental despair now declines in age is because of the recent decline in the mental health of *workers* under the age of forty and especially those under twenty-five.

It does not appear that the declining mental health of young workers is driven by a decline in the youth wage compared to the wage of older workers; this ratio has increased. Real wages have also been on the rise. As Feiveson (2024) has noted the relative prices of housing and childcare have risen. Student debt is high and expensive. The health of young adults has also deteriorated, as seen in increases in social isolation and obesity. Suicide rates of the young are rising. Moreover, Jean Twenge provides evidence that the work ethic itself among the young has *plummeted*. Some have even suggested the young are unhappy having BS jobs.

There is a good deal of supporting evidence from a variety of surveys including from Pew, the Conference Board and Johns Hopkins on the parlous state of young worker well-being in the USA that we documented here. The concern is that we are observing the consequences of past well-being shocks. We should note that 10.1% of workers aged 20 in 2023 said they were in despair. They were aged 17 when COVID lockdowns were implemented in 2020. They were 10 years old in 2013 as the smartphone and the internet exploded. In addition, of course, they were in high school ages 14-18 in 2017-2021. We know from the Youth Risk Behavior Survey that the well-being of high school students deteriorated sharply around that time.[15]

Jean Twenge suggested to us that an explanation for this, maybe that childhood and teenage years with low levels of in-person interaction and more time online, such as have occurred since 2014 or so, results in depression and pessimism and dissatisfaction across many domains (including work). Social media glamorizes others' lives plus online news and social media encourage pessimism about jobs and the economy in general. This likely results in dissatisfaction across many domains, perhaps especially work. With an additional side element perhaps of "*the whole system is rigged anyway, so why try*?"

This rise in despair/psychological distress of young workers may well be the consequence of the mental health declines observed when they were high school children going back a decade or more. Increasing access to the internet and smartphones seem to be the culprits.

[15] Blanchflower and Sacerdote (2025) note using the YRBS that the rise in the proportion of high school students who felt *sad or hopeless every day* rose as follows, for females with male rates in parentheses 2015=40% (20); 2017=41 (21); 2019=46 (27); 2021=56 (29); 2023=53 (28).

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Table 1. Distribution # Bad Mental Health Days (weighted by _llcpwt))

	1993-1999	2000-2009	2010-2015	2016-2019	2020-2024	2020-2024 (workers)
0	68.5	66.0	65.5	64.1	58.7	57.9
1	3.5	3.7	3.4	3.3	3.1	3.5
2	6.0	5.9	5.3	5.1	5.3	5.6
3	3.3	3.4	3.2	3.3	3.7	4.0
4-29	18.7	21.0	22.6	24.2	29.2	29.1
30	4.2	5.8	5.6	6.0	6.6	5.4
Mean	2.95	3.38	3.73	4.01	4.72	4.36
N	873,937	2,978,477	2,758,189	1,767,288	1,689,564	855,316

Table 2. Distribution of Bad Mental Days and Mental Despair 2020-2024 (N=1,689,564)

	#Bad MHD	Mental Despair		#Bad MHD	Mental Despair
All	4.72	.066	Asian	3.41	.034
Male	3.95	.057	Hispanic	4.49	.064
Female	5.46	.075	Gay	9.64	.134
Age <25	7.01	.079	Straight	4.37	.064
Age 25-34	5.95	.076	Employees	4.44	.053
Age 35-44	5.07	.071	Self-employed	3.94	.055
Age 45-54	4.56	.069	Unemployed >1yr	7.48	.128
Age 55-64	4.13	.066	Unemployed <1yr	7.16	.112
Age 65-74	3.04	.049	Homemaker	4.40	.061
Age 75-80	2.52	.041	Student	6.86	.062
White	4.76	.065	Retired	2.80	.044
Black	4.92	.071	Unable to work	10.38	.207
Native	6.37	.110	Native age<25	7.30	.109

Table 3. Labor Force status distributions and despair, 1993-2024 Age <25

	Distribution		Despair scores	
	1993-2015	2016-2024	1990s	2020s
Employee	50.7	46.7	3.3	8.0
Self-employed	3.8	5.0	5.2	9.9
Unemp>1year	3.1	2.7	5.9	11.7
Unemp<1year	7.0	5.8	5.9	12.3
Homemaker	4.1	2.1	4.9	8.4
Unable to work	1.6	2.0	15.2	17.9
Refused	0.6	1.5	3.4	7.8
Student	28.9	34.0	2.4	5.6
Work (employee+self-emp)	54.5	51.7	3.4	8.2
All			3.5	7.9
Total	384,331	209,042	80,577	102,548

Table 4. Despair regressions over time for all, non-workers and workers

1) All

	1993-1999	2000-2009	2010-2015	2016-2019	2020-2024
Age 25-34	.0031 (3.47)	-.0001 (0.20)	.0068 (8.99)	.0009 (1.01)	-.0023 (2.49)
Age 35-44	.0106 (12.22)	.0057 (8.76)	.0091 (12.62)	.0010 (1.18)	-.0049 (5.61)
Age 45-54	.0164 (18.02)	.0165 (25.87)	.0209 (30.17)	.0056 (6.67)	-.0091 (10.49)
Age 55-64	.0110 (11.24)	.0098 (15.29)	.0156 (22.97)	.0013 (1.57)	-.0127 (15.12)
Age 65-74	-.0002 (0.28)	-.0107 (16.03)	-.0084 (12.21)	-.0212 (26.08)	-.0336 (40.43)
Age 75-80	.0027 (2.53)	-.0150 (21.74)	-.0167 (23.51)	-.0322 (37.84)	-.0437 (50.47)
Female	.0153 (33.95)	.0162 (61.02)	.0141 (51.00)	.0154 (44.11)	.0185 (51.09)
Adjusted R^2	.0061	.0062	.0069	.0070	.0071
N	873,937	2,978,477	2,758,188	1,765,927	1,704,398

2) Non-workers

	1993-1999	2000-2009	2010-2015	2016-2019.	2020-2024
Age 25-34	.0270 (14.10)	.0315 (23.64)	.0454 (32.35)	.0048 (26.78)	.0411 (22.80)
Age 35-44	.0616 (32.05)	.0682 (53.02)	.0769 (56.33)	.0813 (46.49)	.0708 (40.50)
Age 45-54	.0822 (41.51)	.1071 (86.84)	.1141 (91.18)	.1047 (66.18)	.0797 (48.79)
Age 55-64	.0290 (16.39)	.0383 (33.49)	.0538 (47.30)	.0486 (34.92)	.0354 (24.76)
Age 65-74	-.0005 (0.28)	-.0110 (9.90)	-.0062 (5.66)	-.0145 (10.94	-.0242 (18.17)
Age 75-80	.0021 (1.23)	-.0173 (15.50)	-.0176 (15.92)	-.2933 (21.87)	-.0382 (28.40)
Female	-.0015 (1.65)	-.0004 (0.78)	.0019 (4.12)	.0035 (6.14)	.0075 (12.89)
Adjusted R^2	.0189	.0287	.0303	.0303	.0261
N	324,038	1,296,296	1,382,171	867,671	808,948

3) Workers

	1993-1999	2000-2009	2010-2015	2016-2019.	2020-2024
Age 25-34	-.0013 (1.37)	-.0076 (10.62)	-.0054 (6.86)	-.0126 (13.18)	-.0151 (14.53)
Age 35-44	.0017 (1.81)	-.0081 (11.72)	-.0097 (12.64)	-.0204 (21.76)	-.0247 (24.56)
Age 45-54	.0015 (1.51)	-.0078 (11.31)	-.0106 (14.22)	-.0272 (29.84)	-.0363 (36.34)
Age 55-64	-.0049 (4.32)	-.0119 (16.63)	-.0131 (17.44)	-.0323 (35.56)	-.0445 (44.43)
Age 65-74	-.0116 (6.59)	-.0218 (23.85)	-.0216 (24.73)	-.0394 (37.62)	-.0524 (45.61)
Age 75-80	-.0091 (2.56)	-.0217 (14.75)	-.0228 (17.41)	-.0427 (26.56)	-.0531 (30.34)
Female	.0153 (30.49)	.0160 (14.75)	.0128 (52.329)	.0131 (32.06)	.0185 (30.34)
Adjusted R^2	.0042	.0036	.0029	.0054	.0077
N	545,637	1,673,779	1,358,164	880,295	862,662

4) 2020-2024

	Unemployed	Homemaker	Student	Unable to work	Retired
Age 25-34	.0213 (4.78)	-.0112 (1.76)	.0143 (4.70)	.0345 (3.15)	.0217 (1.10)
Age 35-44	.0394 (8.80)	.0220 (3.53)	.0446 (8.92)	.0758 (7.43)	.0270 (1.54)
Age 45-54	.0320 (7.22)	.0238 (3.78)	.0356 (5.06)	.0625 (6.39)	-.0494 (2.93)
Age 55-64	.0129 (3.00)	-.0237 (3.74)	.0197 (1.74)	.0087 (0.91)	-.0704 (4.21)
Age 65-74	.0266 (4.92)	.0375 (5.78)	-.0143 (1.05)	.0285 (2.88)	-.0769 (4.60)
Age 75-80	.0548 (6.65)	.0486 (7.67)	-.0204 (1.22)	.0681 (6.39)	-.0852 (5.10)
Female	.0192 (8.06)	-.0198 (4.31)	.0325 (13.93)	.0338 (12.85)	.0065 (11.98)
Adjusted R^2	.0097	.0054	.0097	.0136	.0036
N	76,663	68,602	42,442	100,112	514,114

Includes year and state dummies, 18-24 excluded. Samples include Guam, Puerto Rico and USVI

Table 5. Serious Psychological Distress (Kaiser score >12) (weighted), NSDUH n=639450.

Time/age	18-20	21-23	24-25	26-29	30-34	35-49	50-64	65+
2008	9	7	6	6	5	5	3	3
2009	8	8	7	5	6	5	4	2
2010	9	8	6	6	5	5	4	2
2011	9	7	7	7	5	5	4	2
2012	9	8	8	6	6	5	4	3
2013	10	8	6	7	6	5	4	3
2014	10	9	8	5	5	5	4	3
2015	12	10	10	7	5	5	4	2
2016	14	10	9	7	6	6	5	2
2017	15	13	11	9	7	6	4	2
2018	16	14	11	10	7	5	4	2
2019	17	16	14	12	8	6	4	3
2020	19	17	15	11	9	7	5	2
2021	22	19	16	13	10	7	4	2
2022	21	19	17	14	11	7	5	2
2023	19	20	15	16	11	7	4	2
N	89,593	89,978	61,136	52,970	64,704	156,283	70,990	53,796
Male workers								
2021	15	13	4	11	8	7	3	2
2022	17	14	6	16	12	8	5	3
2023	15	13	5	12	12	8	4	1
Female workers								
2021	31	23	7	19	15	10	6	3
2022	25	24	6	17	14	11	5	3
2023	23	25	7	17	19	10	7	3

Table 6. Underemployment – modeling the proportion part-time for economic reasons among workers.

	2009-2024	2009-2019	2020-2024	2020-2024
Age *100				-.0019 (2.12)
Age 25-34	-.0023 (9.84)	-.0024 (8.77)	-.0021 (4.52)	
Age 35-44	-.0031 (13.25)	-.0034 (12.38)	-.0025 (5.15)	
Age 45-54	-.0032 (13.61)	-.0037 (13.66)	-.0018 (3.63)	
Age 55-64	-.0039 (15.70)	-.0044 (15.28)	-.0026 (5.13)	
Age 65-74	-.0033 (9.02)	-.0041 (9.36)	-.0014 (2.12)	
Age 75-80	.0022 (3.12)	-.0033 (3.82)	.0002 (0.17)	
Female	-.0023 (17.60)	-.0026 (17.28)	-.0015 (5.44)	-.0014 (5.42)
Union	-.0006 (2.79)	-.0006 (2.40)	-.0006 (1.39)	-.0008 (1.67)
Constant	.0216	.0221	.0246	.0235
Adjusted R^2	.0020	.0016	.0033	.0033
N	2,375,802	1,750,509	625,293	625,293

Equations are for workers only and include year and state dummies. Excluded 18-24.

Figure 1. Despair, 1993-2024

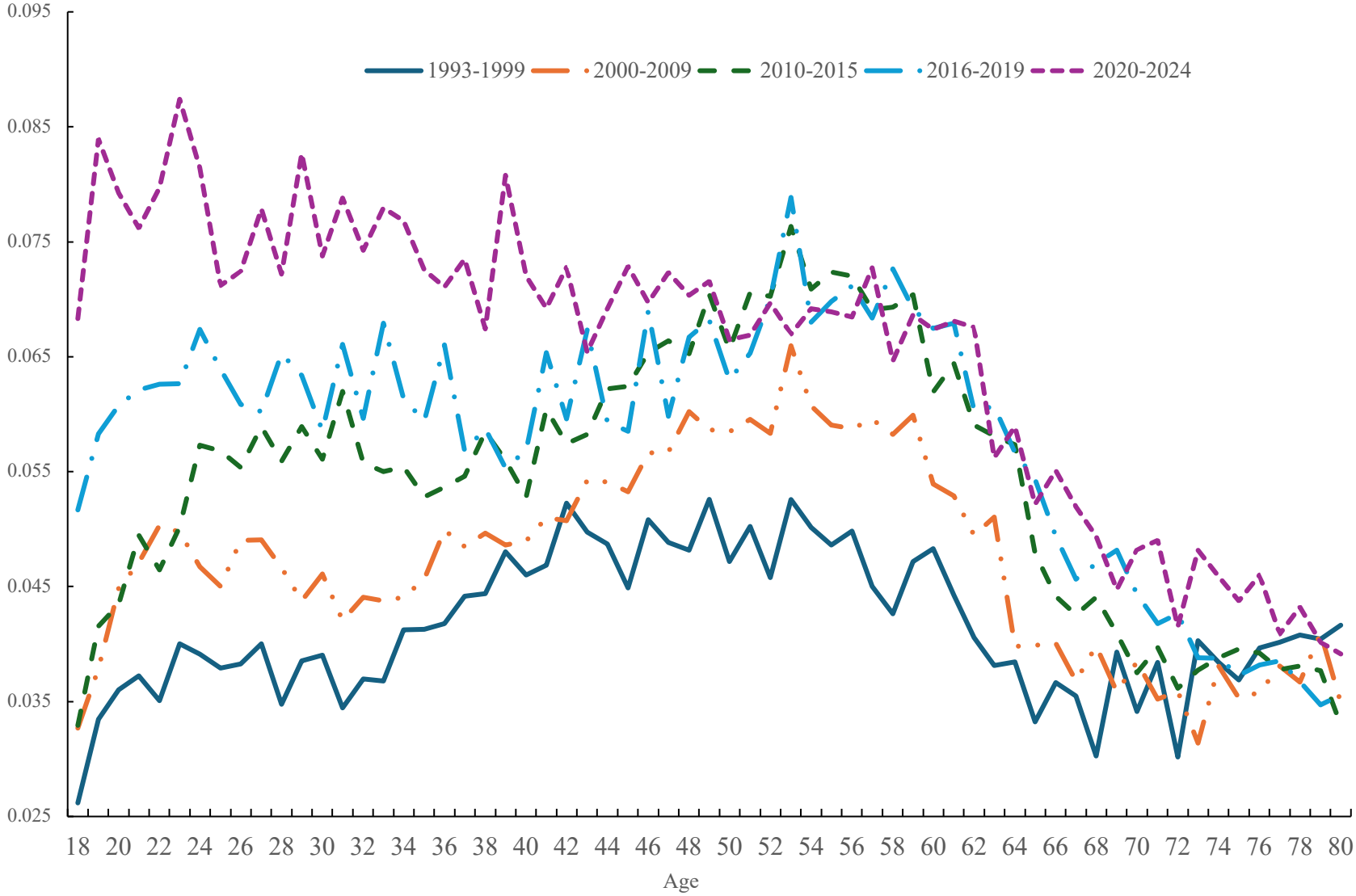


Figure 2. Despair by labor force status and gender ages 18-24

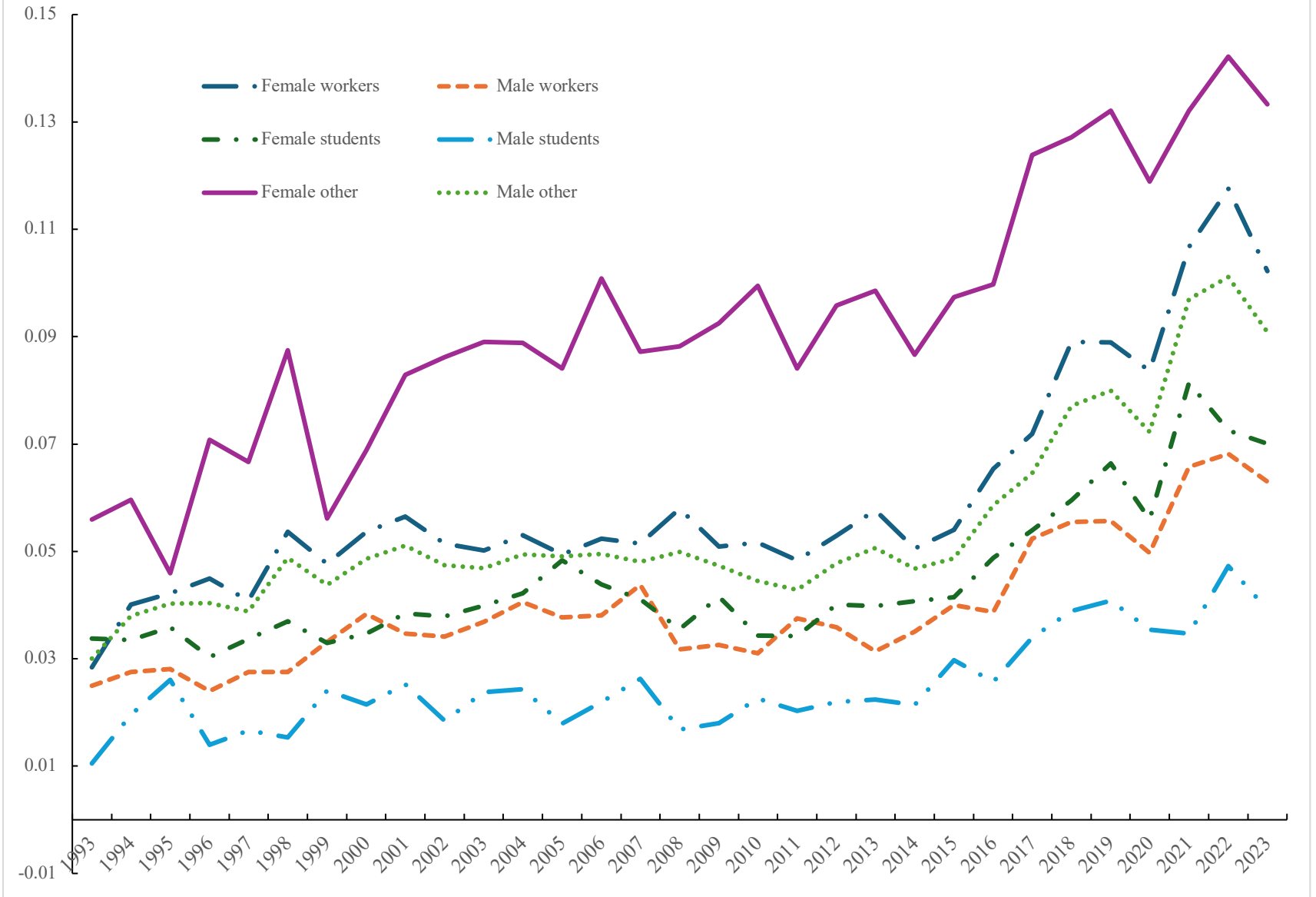


Figure 3. Despair for Workers by Education Status

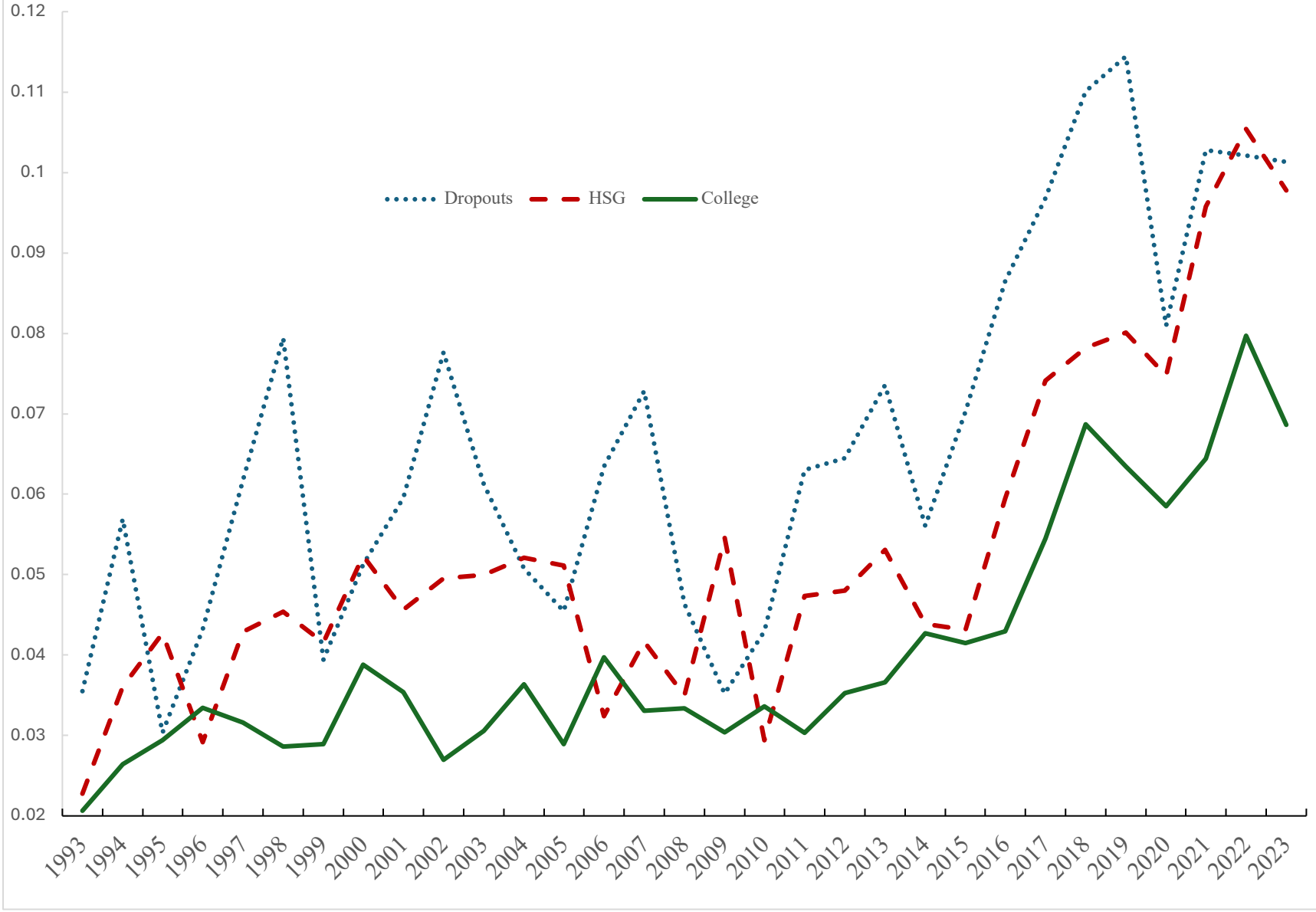


Figure 4. Despair for Workers by Age

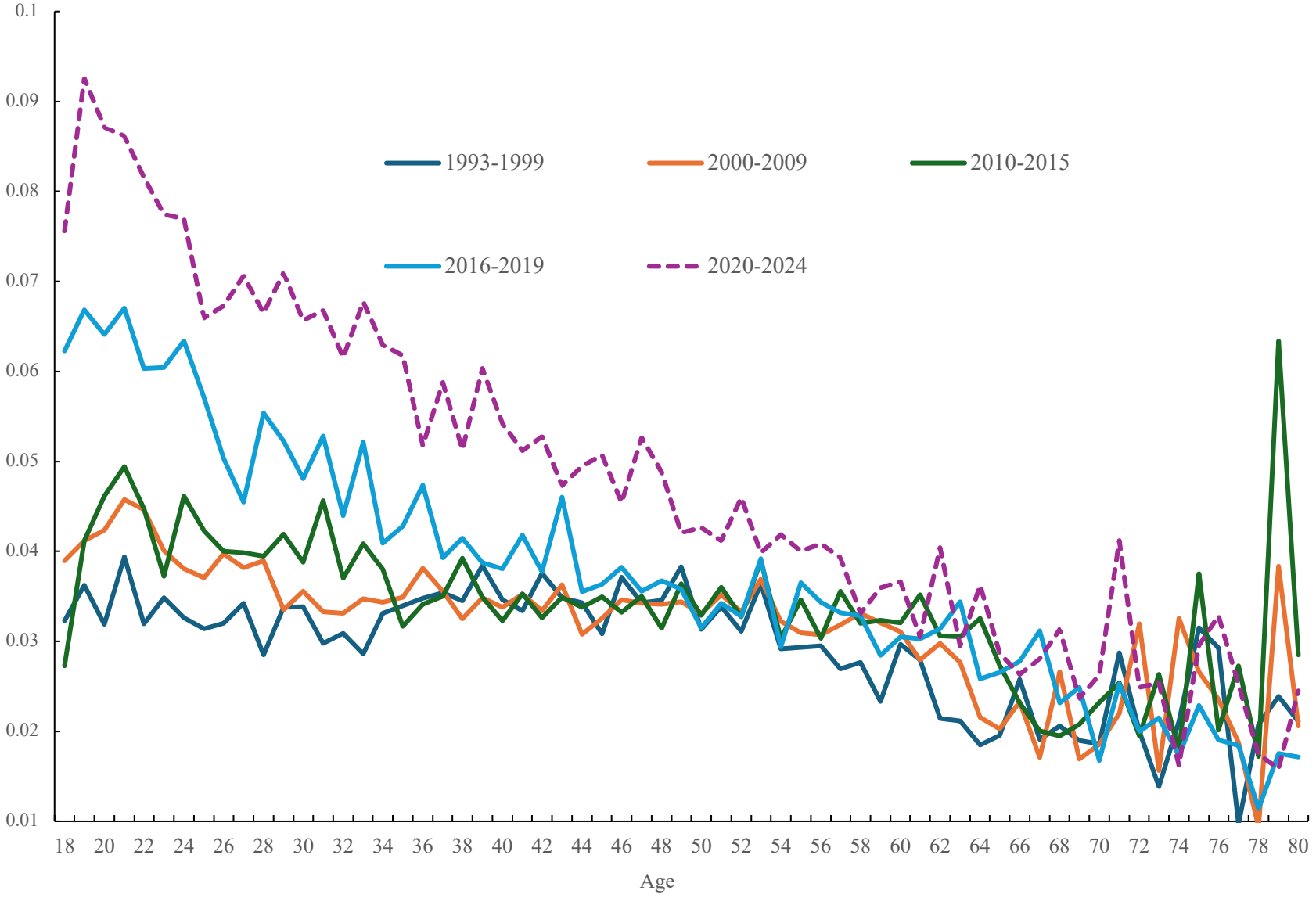


Figure 5. Despair by Age, 2020-2024 by Work and Gender

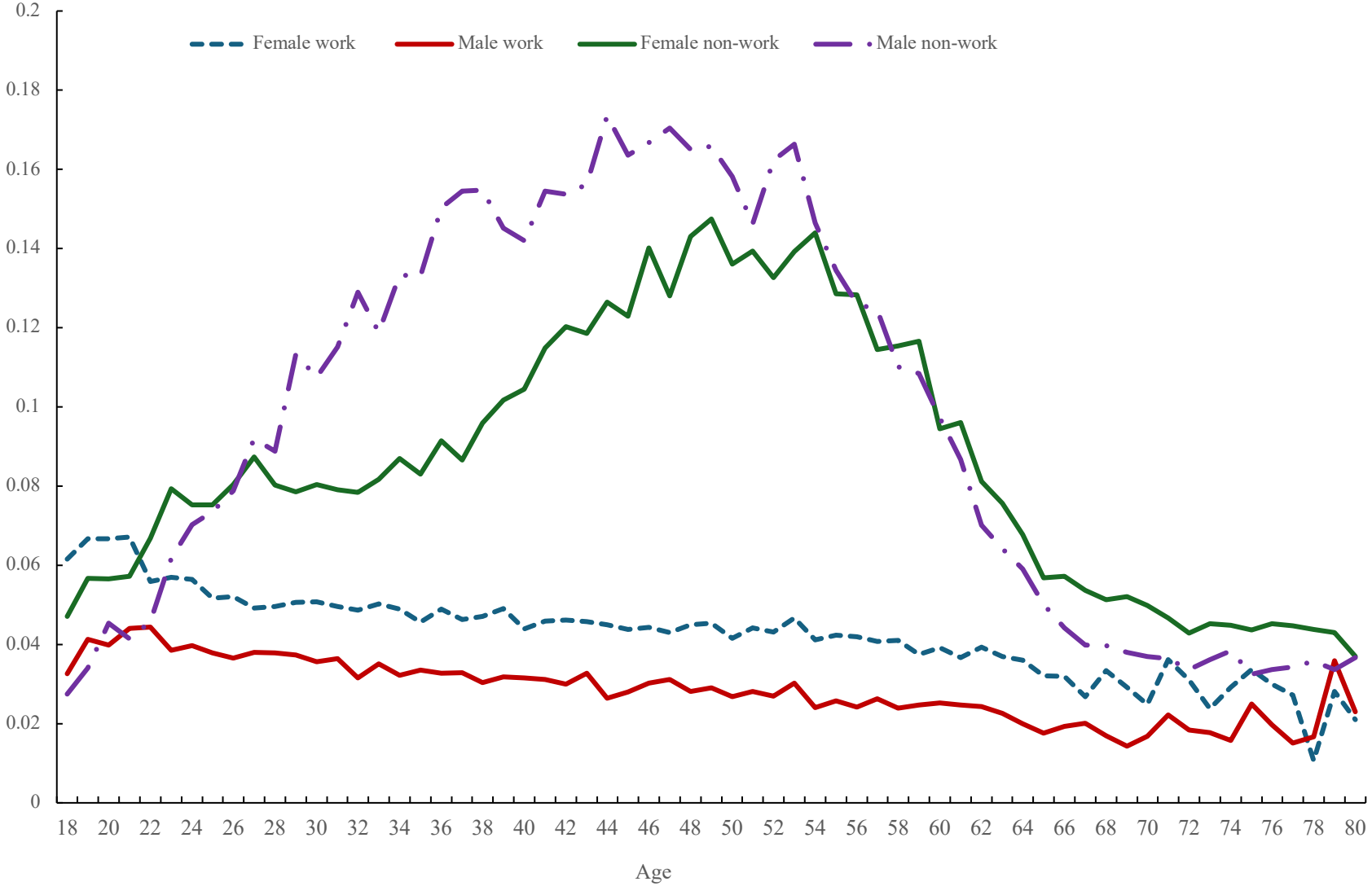


Figure 6. Mental Despair, 2010-2015

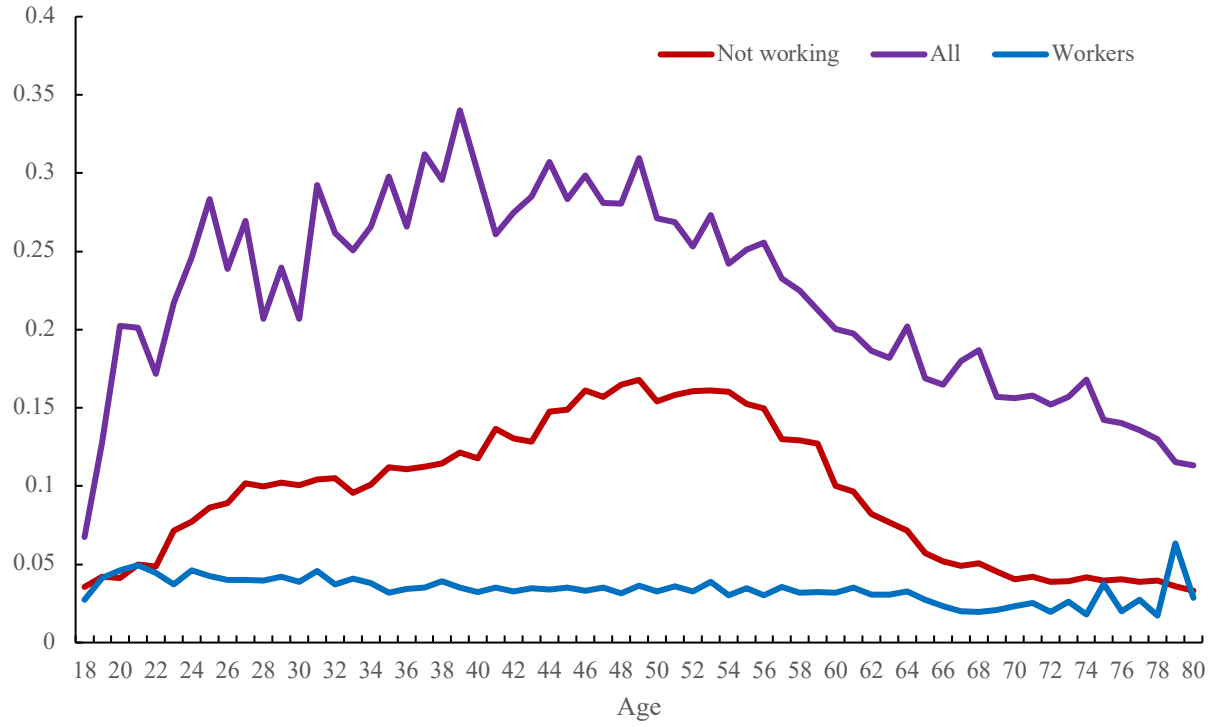


Figure 7. Mental Despair, 2020-2024

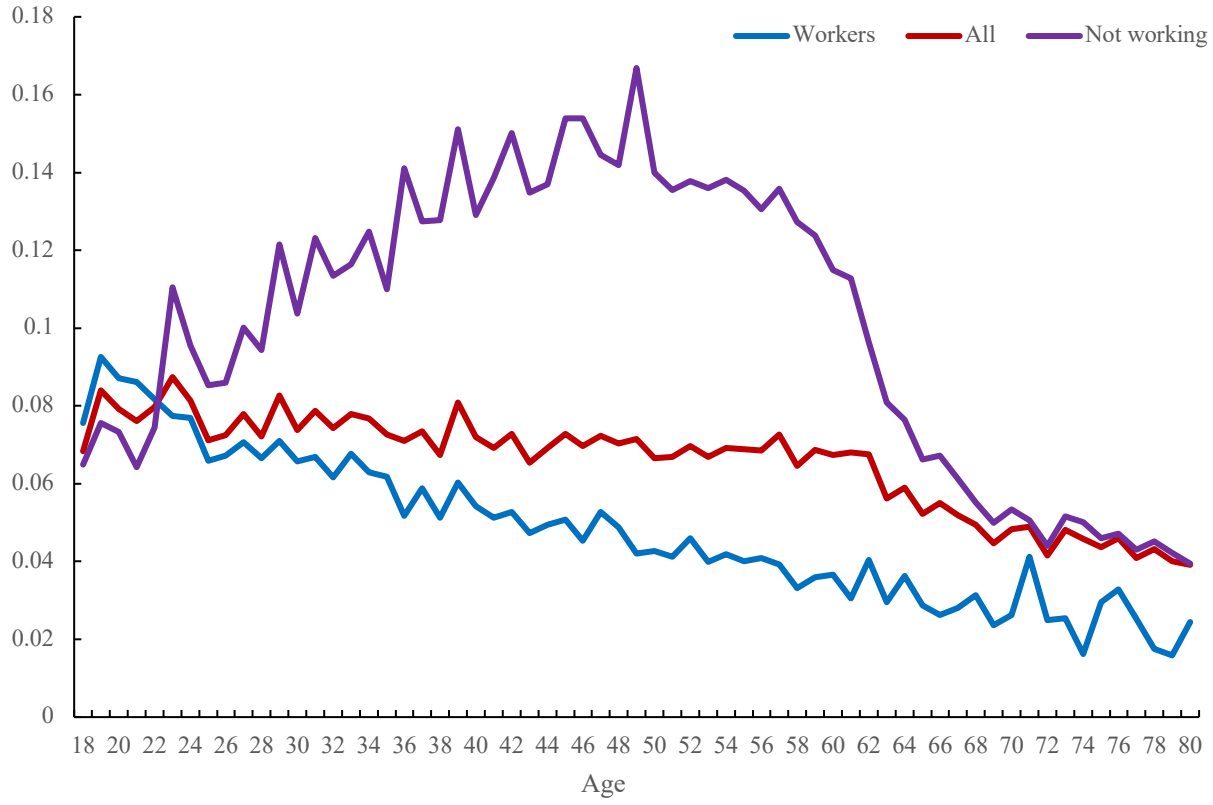


Figure 8. Despair for workers by educational attainment (weighted), 2020-2024

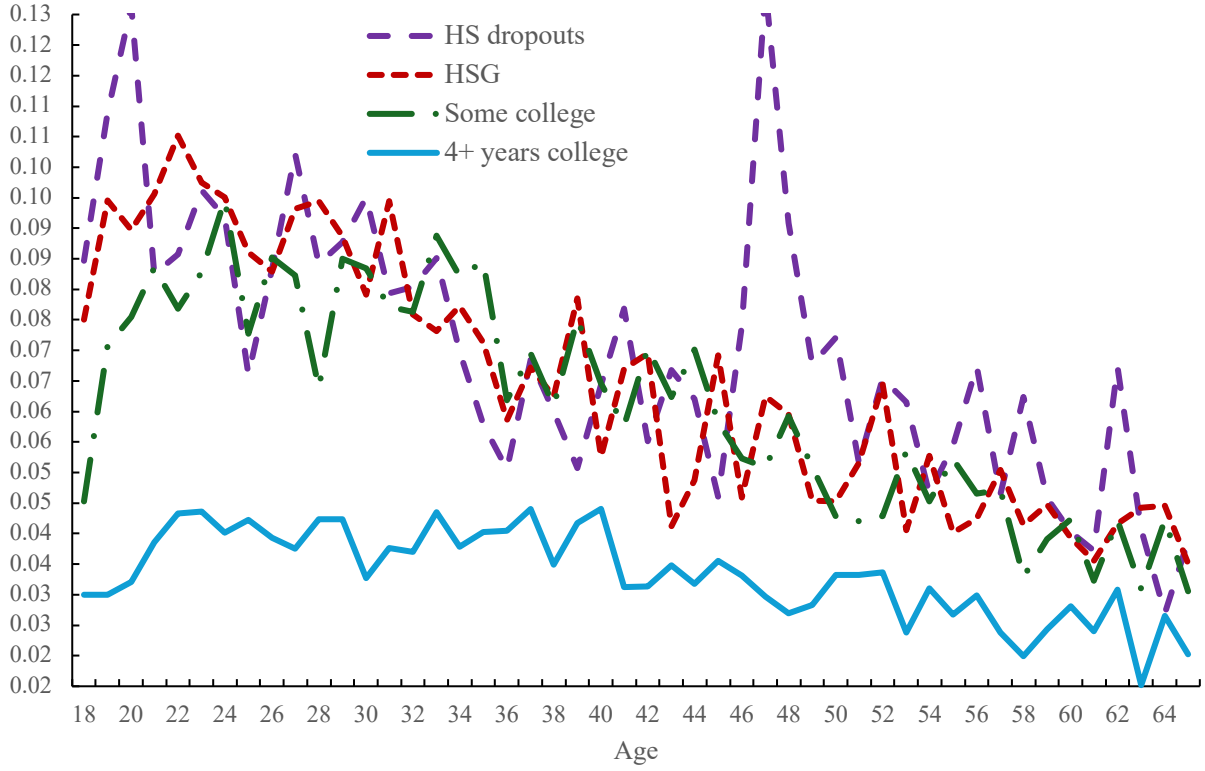


Figure 9. Despair for workers by educational attainment (weighted), 2010-2019 .

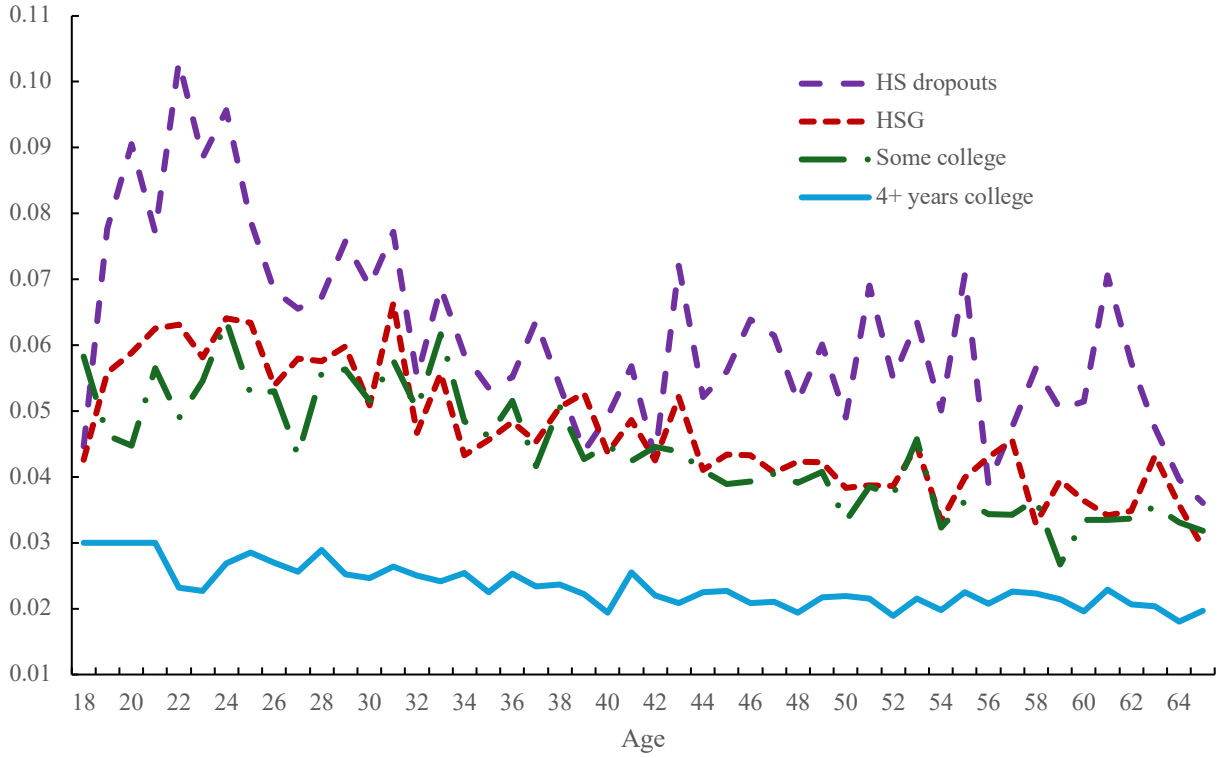
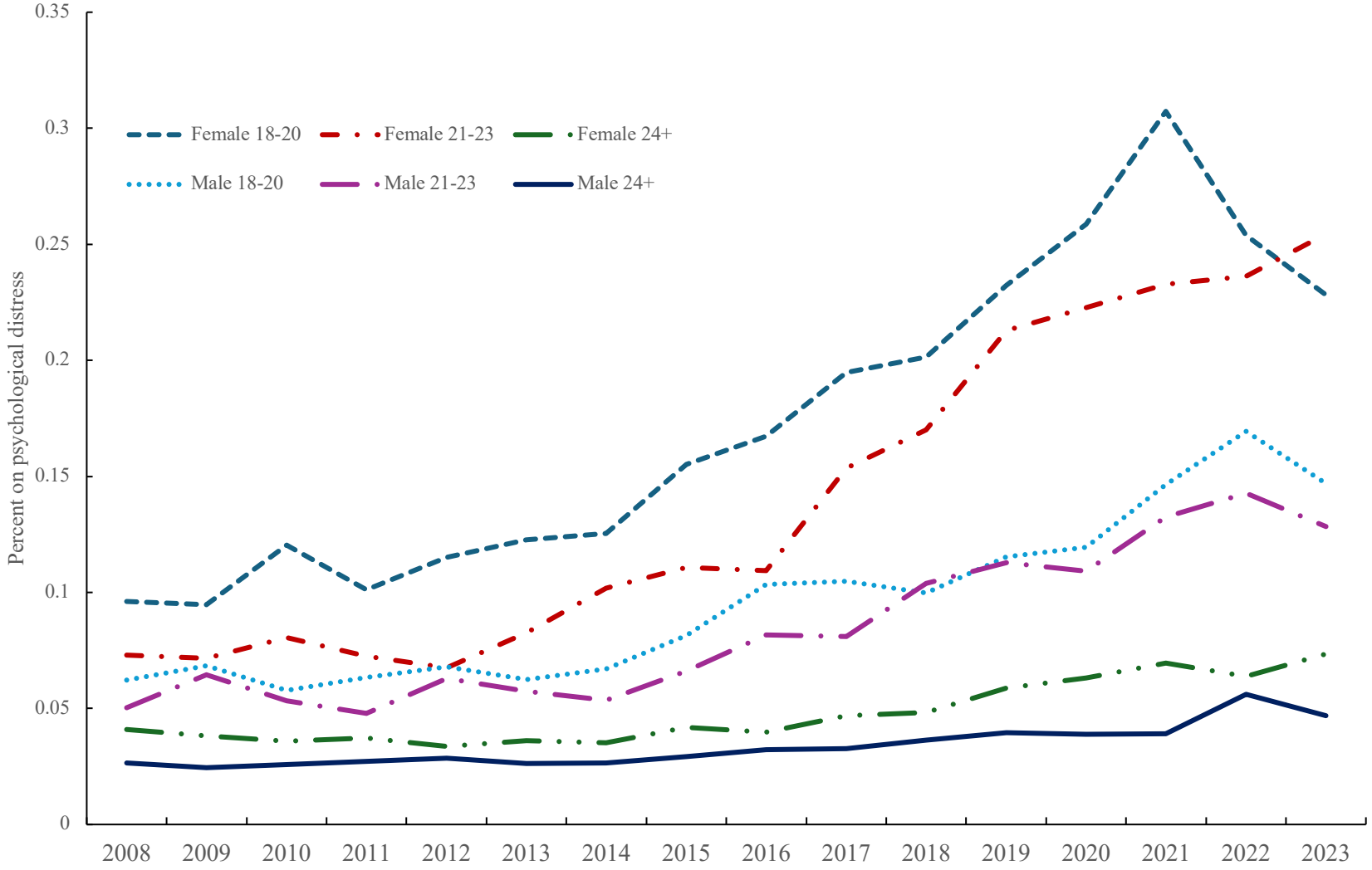


Figure 10. Serious Psychological Distress Among Workers , NSDUH



Appendix Table 1. Despair among workers

Work	1993-1999	2000-2009	2010-2015	2016-2019	2020-2024
18	3.23	3.90	2.72	6.23	7.56
19	3.63	4.12	4.12	6.68	9.26
20	3.19	4.24	4.61	6.41	8.71
21	3.94	4.58	4.94	6.70	8.62
22	3.20	4.46	4.47	6.03	8.16
23	3.48	4.01	3.72	6.05	7.74
24	3.26	3.81	4.61	6.34	7.70
25	3.14	3.71	4.23	5.71	6.59
26	3.20	3.97	4.00	5.04	6.73
27	3.42	3.82	3.98	4.55	7.06
28	2.85	3.89	3.95	5.54	6.65
29	3.38	3.35	4.19	5.23	7.10
30	3.39	3.56	3.88	4.81	6.57
31	2.98	3.33	4.56	5.28	6.68
32	3.09	3.31	3.70	4.40	6.16
33	2.86	3.47	4.08	5.21	6.77
34	3.31	3.44	3.80	4.09	6.30
35	3.39	3.49	3.17	4.28	6.17
36	3.48	3.81	3.41	4.74	5.18
37	3.54	3.56	3.50	3.93	5.87
38	3.45	3.25	3.93	4.15	5.13
39	3.84	3.49	3.49	3.87	6.03
40	3.46	3.38	3.23	3.81	5.42
41	3.34	3.52	3.53	4.18	5.12
42	3.76	3.34	3.26	3.77	5.27
43	3.49	3.63	3.49	4.60	4.73
44	3.43	3.08	3.38	3.55	4.95
45	3.08	3.26	3.50	3.64	5.07
46	3.71	3.46	3.32	3.83	4.54
47	3.43	3.42	3.50	3.56	5.27
48	3.45	3.41	3.14	3.67	4.88
49	3.83	3.44	3.64	3.58	4.21
50	3.14	3.30	3.29	3.15	4.26
51	3.39	3.52	3.60	3.42	4.12
52	3.11	3.33	3.27	3.28	4.60
53	3.64	3.69	3.90	3.92	3.99
54	2.92	3.22	3.03	2.94	4.19
55	2.93	3.10	3.46	3.65	4.00
56	2.95	3.07	3.03	3.43	4.09
57	2.70	3.18	3.56	3.32	3.93
58	2.76	3.31	3.20	3.29	3.31
59	2.33	3.21	3.23	2.84	3.59
60	2.97	3.11	3.20	3.05	3.66
61	2.79	2.80	3.52	3.03	3.05
62	2.14	2.98	3.06	3.14	4.04
63	2.12	2.76	3.05	3.44	2.95
64	1.85	2.15	3.26	2.58	3.63
65	1.96	2.02	2.73	2.65	2.86
66	2.58	2.33	2.32	2.78	2.63
67	1.91	1.71	2.00	3.11	2.81
68	2.06	2.66	1.95	2.32	3.13
69	1.90	1.69	2.08	2.49	2.37
70	1.86	1.86	2.32	1.68	2.63
71	2.87	2.20	2.54	2.53	4.12

72	2.00	3.20	1.95	2.00	2.49
73	1.39	1.56	2.63	2.15	2.54
74	2.11	3.25	1.78	1.73	1.62
75	3.15	2.66	3.75	2.29	2.96
76	2.93	2.36	2.01	1.90	3.28
77	0.97	1.88	2.73	1.84	2.52
78	2.08	0.94	1.72	1.14	1.74
79	2.39	3.83	6.34	1.75	1.59
80	2.11	2.06	2.85	1.72	2.45

Appendix Table 2. Calculation of Mean despair, 2010-2015 and 2020-2024

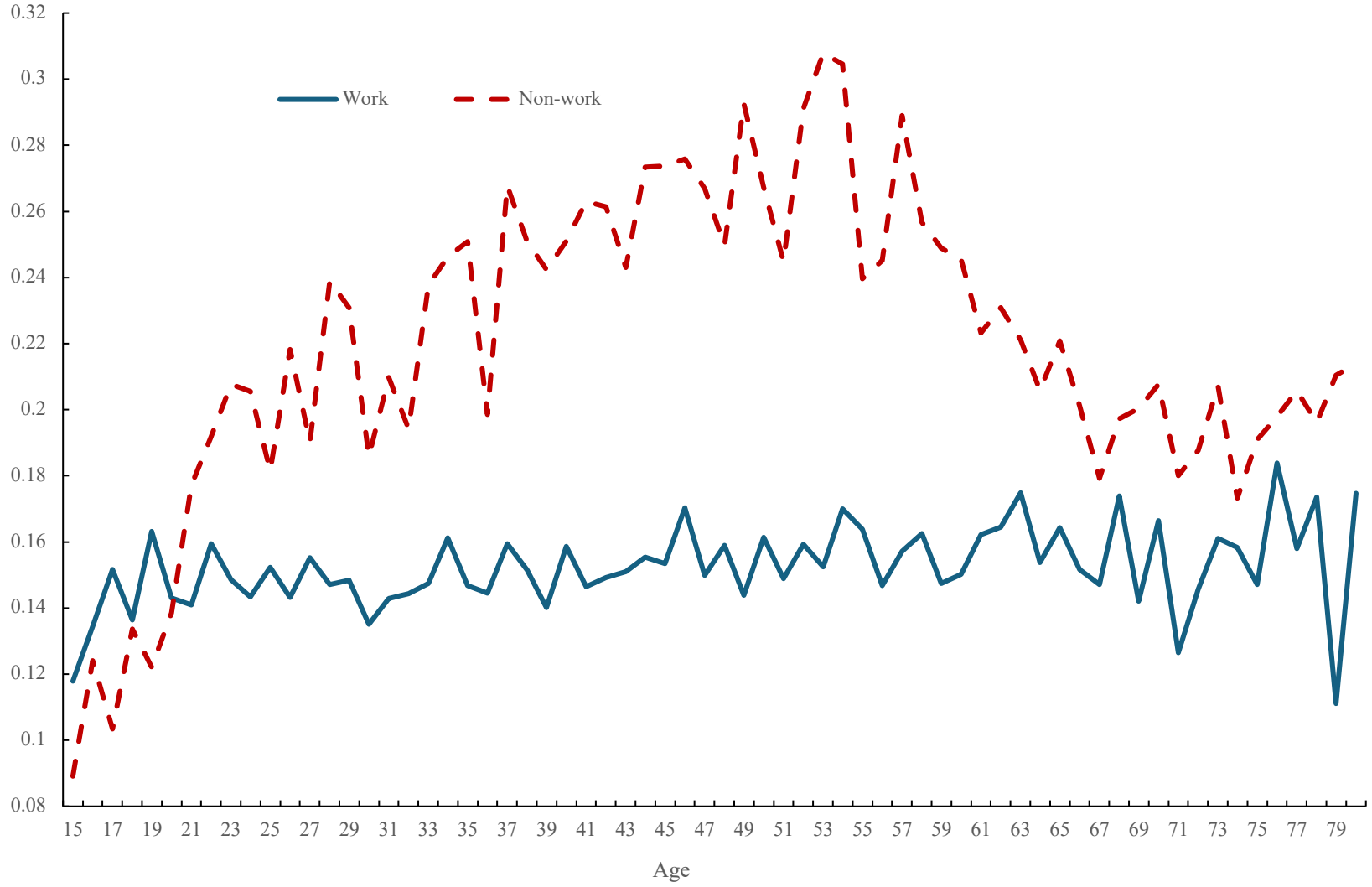
2010-15	Work		Nonwork		All
	Mean	N	Mean	N	Mean
18	.027	5,071	.036	10,260	.033
19	.041	5,753	.042	8,474	.042
20	.046	6,772	.041	7,610	.044
21	.049	7,958	.050	7,763	.050
22	.045	9,002	.049	6,700	.046
23	.037	10,674	.072	6,020	.050
24	.046	11,559	.077	5,618	.056
25	.042	12,754	.086	5,677	.056
26	.040	12,748	.089	5,379	.055
27	.040	13,715	.102	5,600	.058
28	.039	15,075	.100	5,785	.056
29	.042	15,305	.102	5,761	.058
30	.039	18,131	.101	6,820	.056

2020-2024	work		nonwork		All
	Mean	N	Mean	N	Mean
18	.076	5,071	.065	7,657	.069
19	.093	6,253	.076	7,211	.083
20	.087	7,066	.073	6,828	.080
21	.086	8,060	.064	6,663	.076
22	.082	9,501	.075	5,479	.079
23	.077	11,067	.111	4,591	.087
24	.077	11,555	.096	4,128	.082
25	.066	12,654	.085	3,957	.071
26	.067	12,087	.086	3,508	.071
27	.071	12,608	.100	3,633	.077
28	.066	13,889	.094	3,597	.072
29	.071	13,621	.122	3,446	.081
30	.066	16,264	.104	4,118	.073

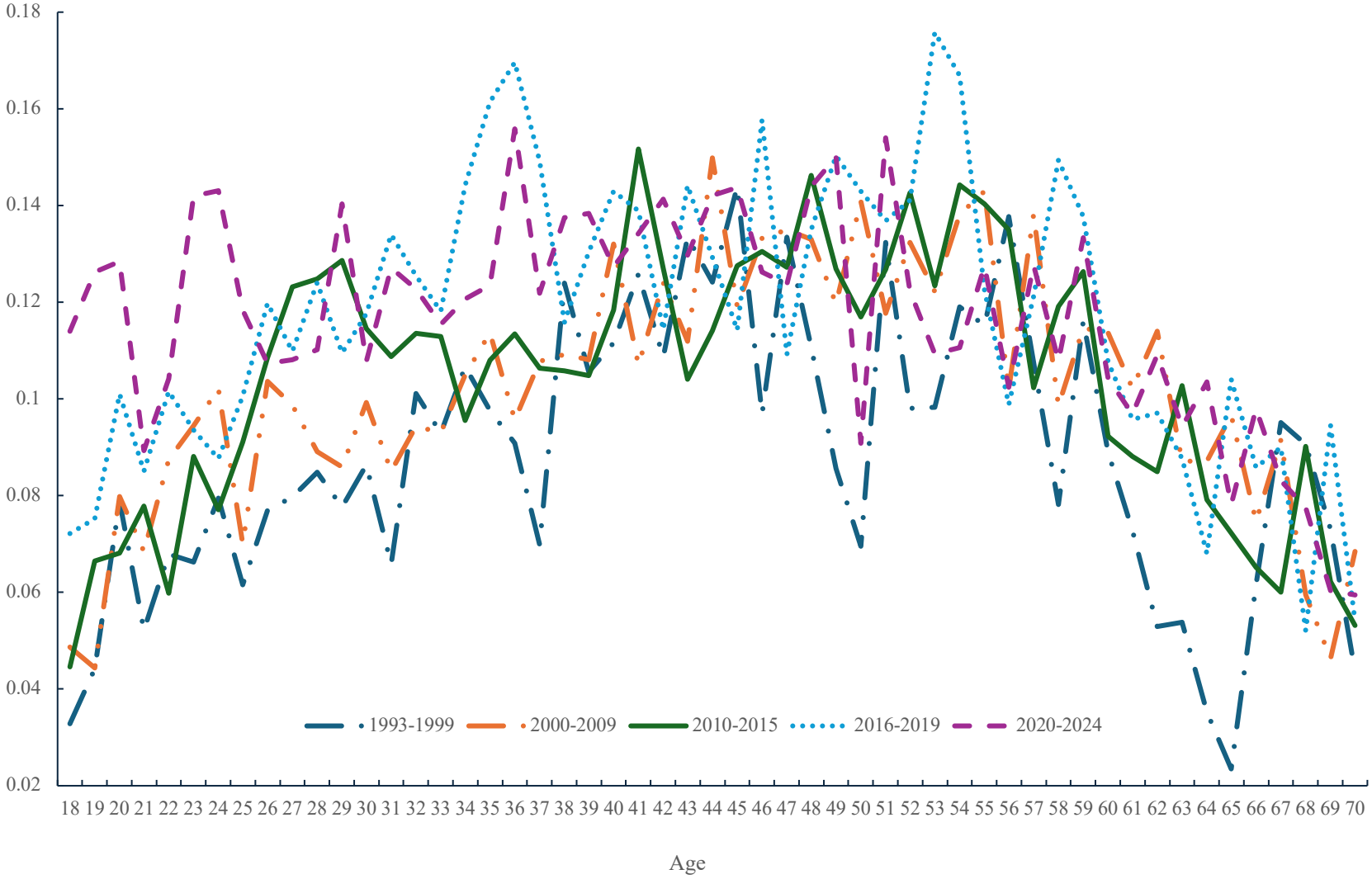
The ‘all’ mean is the weighted sum of work and non-work /sum of observations on both

Appendix Figure 1. Pain across OECD from GWP 2018-2025

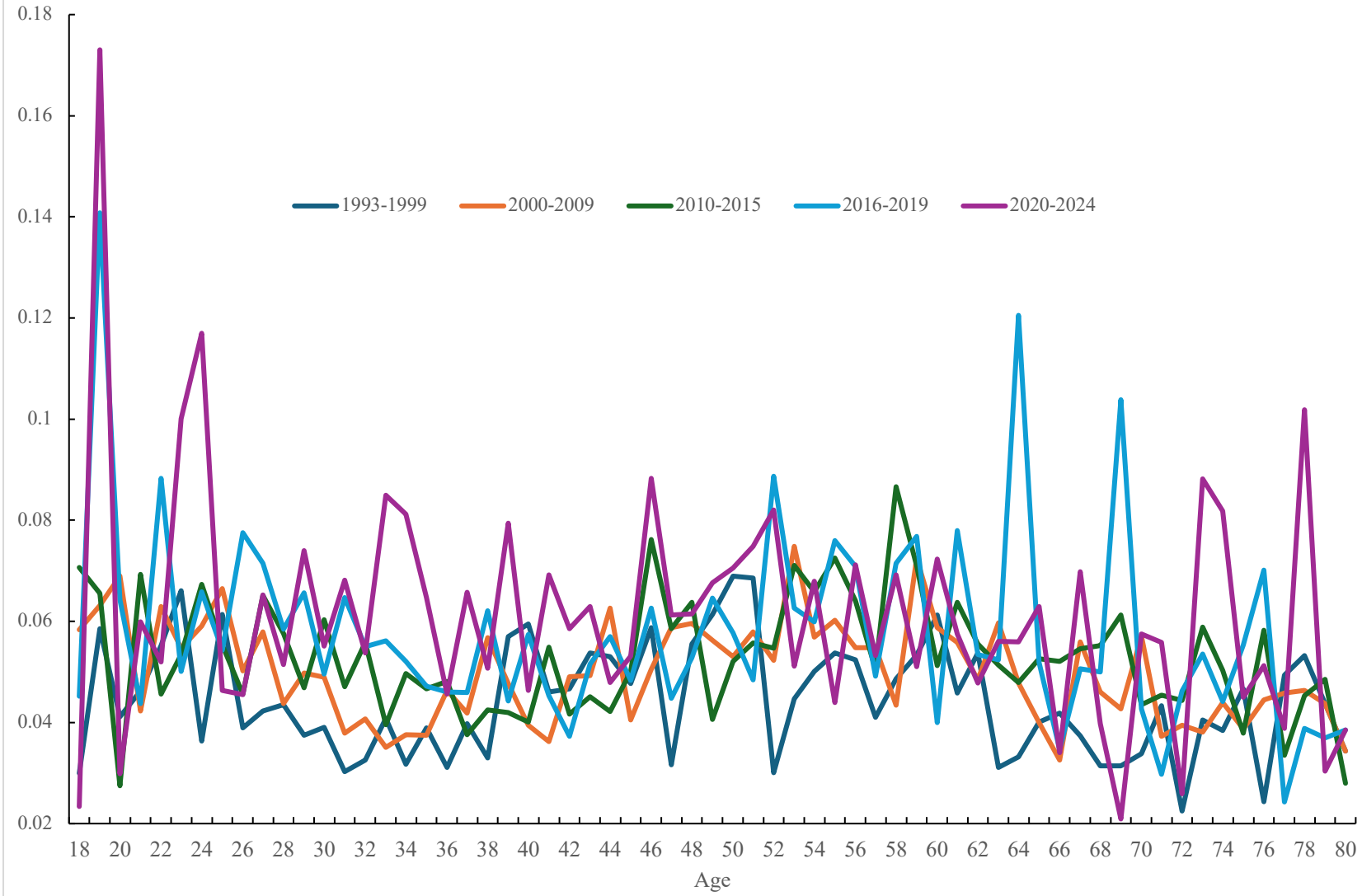
Appendix Figure 2. Sadness GWP, 2018-2025, OECD



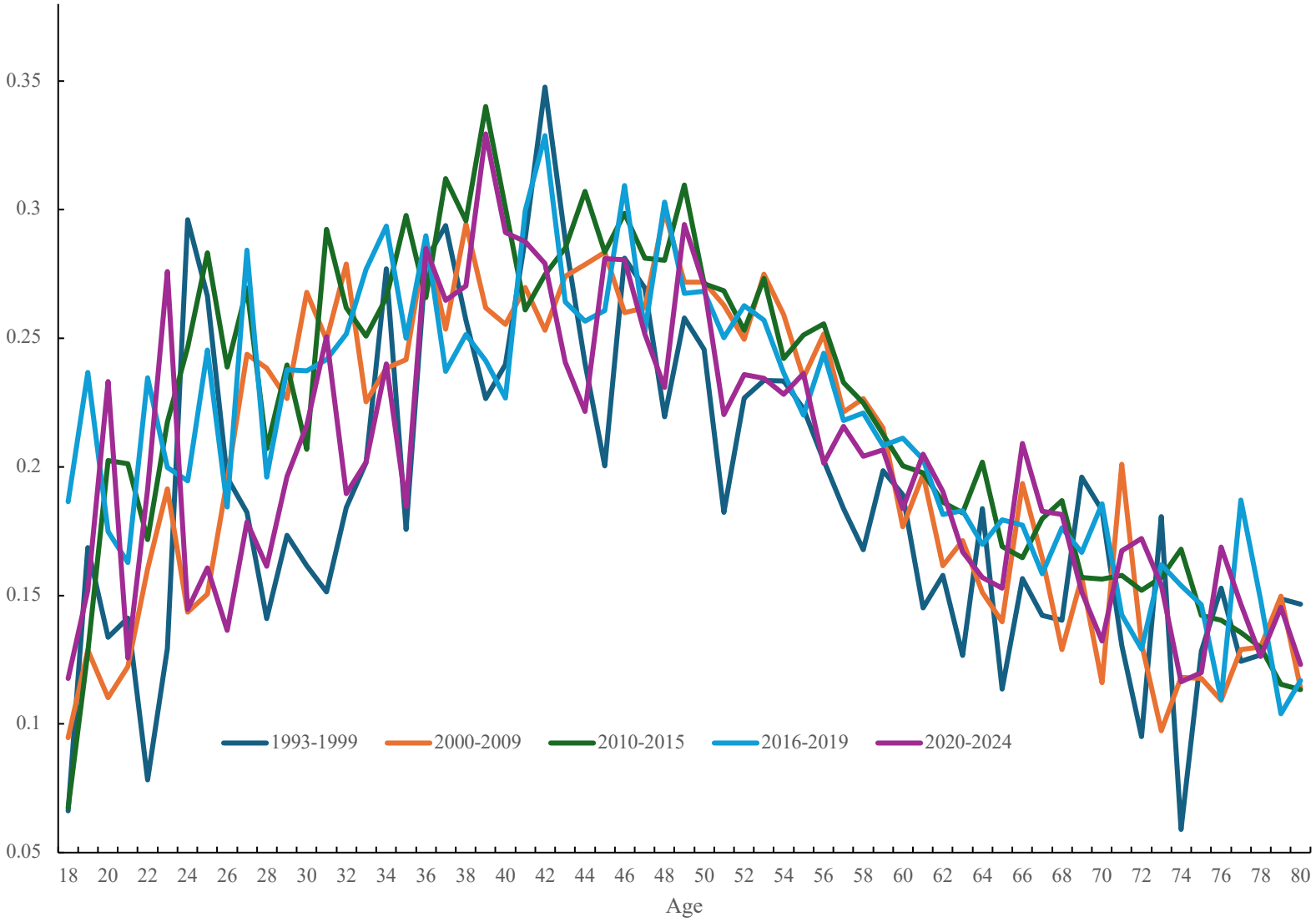
Appendix Figure 3. Despair for the Unemployed

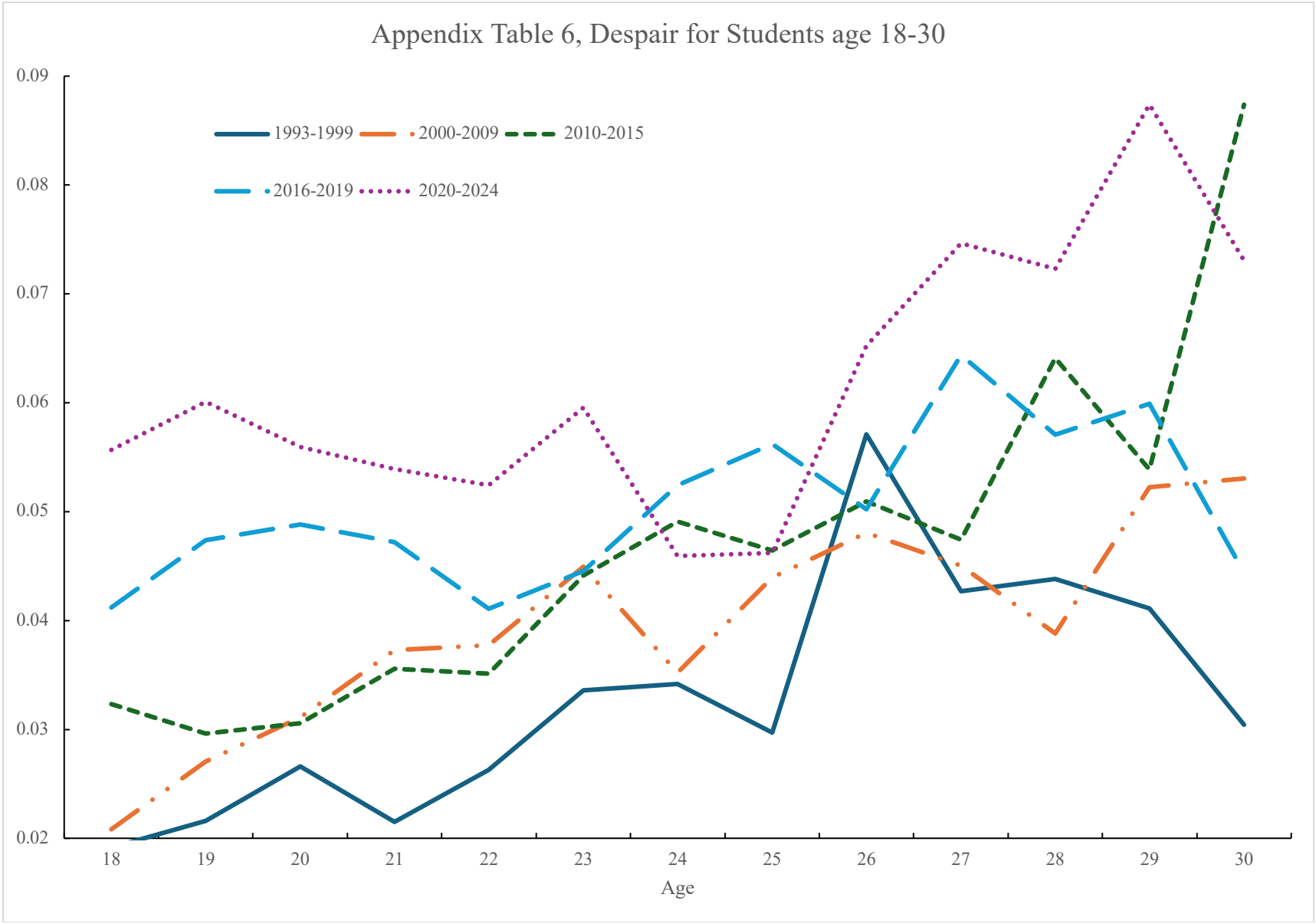


Appendix Figure 4. Despair for Homemakers



Appendix Figure 5. Despair for those Unable to Work.




Appendix Table 6, Despair for Students age 18-30
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
1993-1999
2000-2009
2010-2015
2016-2019
2020-2024
18
19
20
21
22
23
24
25
26
27
28
29
30
Age