

Despair, Unhappiness and Age plus new findings on Scotland



Stirling, Dartmouth, NBER and Bloomberg

www.dartmouth.edu/~blnchflr & twitter @D_Blanchflower

1. Blanchflower, D.G. (2020a), 'Unhappiness and age', [Journal of Economic Behavior and Organization](#), forthcoming.
2. Blanchflower, D.G. (2020b), 'Is happiness U-shaped? Age and subjective well-being in 145 countries,' [Journal of Population Economics](#), forthcoming.
3. Blanchflower, D.G. (2020c), 'Experienced life cycle satisfaction in Europe: a comment' [Review of Behavioral Economics](#), forthcoming.
4. Blanchflower, D.G. & Clark, A.E. (2020), 'Children, unhappiness and family finances,' [Journal of Population Economics](#), forthcoming.
5. Blanchflower, D.G. & Graham, C.L. (2020a), 'The mid-life dip in well-being: economists (who find it) versus psychologists (who don't)!' NBER Working Paper #26888, March.
6. Blanchflower, D.G. & Graham, C.L. (2020b), 'Subjective well-being around the world; trends and predictors across the lifespan: a response', **rejected** by [Psychological Science](#)
7. Blanchflower, D.G. & Graham, C.L. (2020c), 'The U-shape of Happiness: A Response', submitted to [Perspectives in Psychological Science](#)
8. Blanchflower, D.G. & Oswald, A.J. (2020), 'American misery: the rise of extreme distress in the USA, 1993-2019,' [American Journal of Public Health](#), forthcoming.
9. Blanchflower, D.G. & Oswald, A.J. (2019a), 'Do modern humans suffer a psychological low in midlife? Two approaches (with and without controls) in seven data sets', in [The Economics of Happiness](#). edited by Mariano Rojas, Springer.
10. Blanchflower, D.G. & Oswald, A.J. (2019b), 'Unhappiness and pain in Modern America: a review essay, and further evidence, on Carol Graham's Happiness for All?', [Journal of Economic Literature](#), 57(2), June, pp. 385-402)

There are patterns in the data

I show that there is a U-shape in happiness and a hump shape in unhappiness in 145 countries.

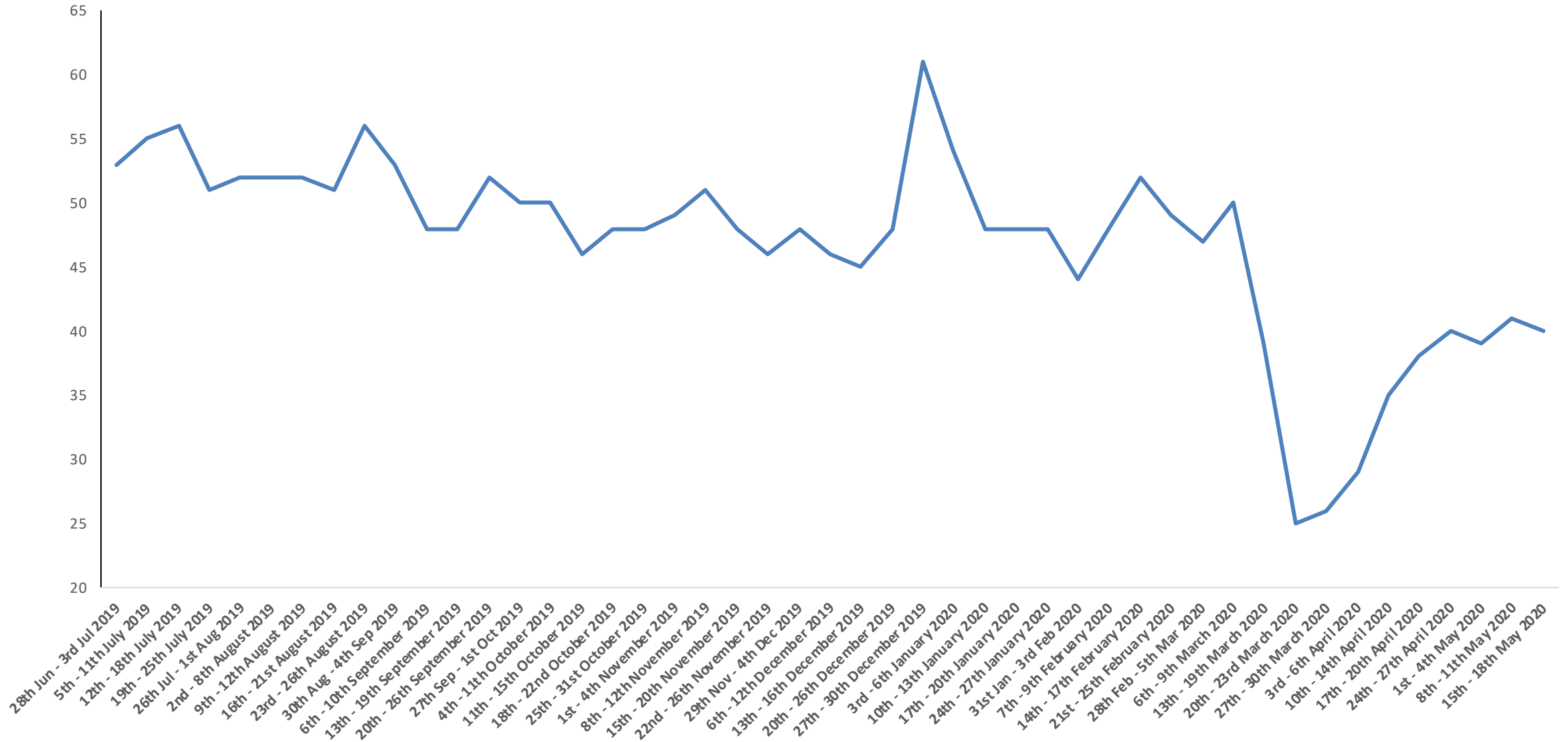
I use all the world's major data files, BRFSS; Gallup World Poll and US Daily Tracker; Eurobarometers; GSS; EQLS; ESS; ISSP; WVS; UK APS. Also Health Survey of England and Health Survey of Scotland

The results from longitudinal data is consistent. Problems of attrition bias and the major panels (BHPS; GSOEP; HILDA) are short and do not follow individuals through the life course.

The findings on happiness are mostly from life satisfaction and happiness but also include trust, satisfaction with the economy, public services and democracy.

The findings on unhappiness include *extreme mental ill-health; depression; worry; sadness; stress; bad nerves; anxiety; loneliness; phobias and panics; being downhearted; being unhappy; poor/short sleep; losing confidence in yourself; not being able to overcome difficulties; being under strain; feeling a failure; feeling left out; feeling tense; thinking of yourself as a worthless person*

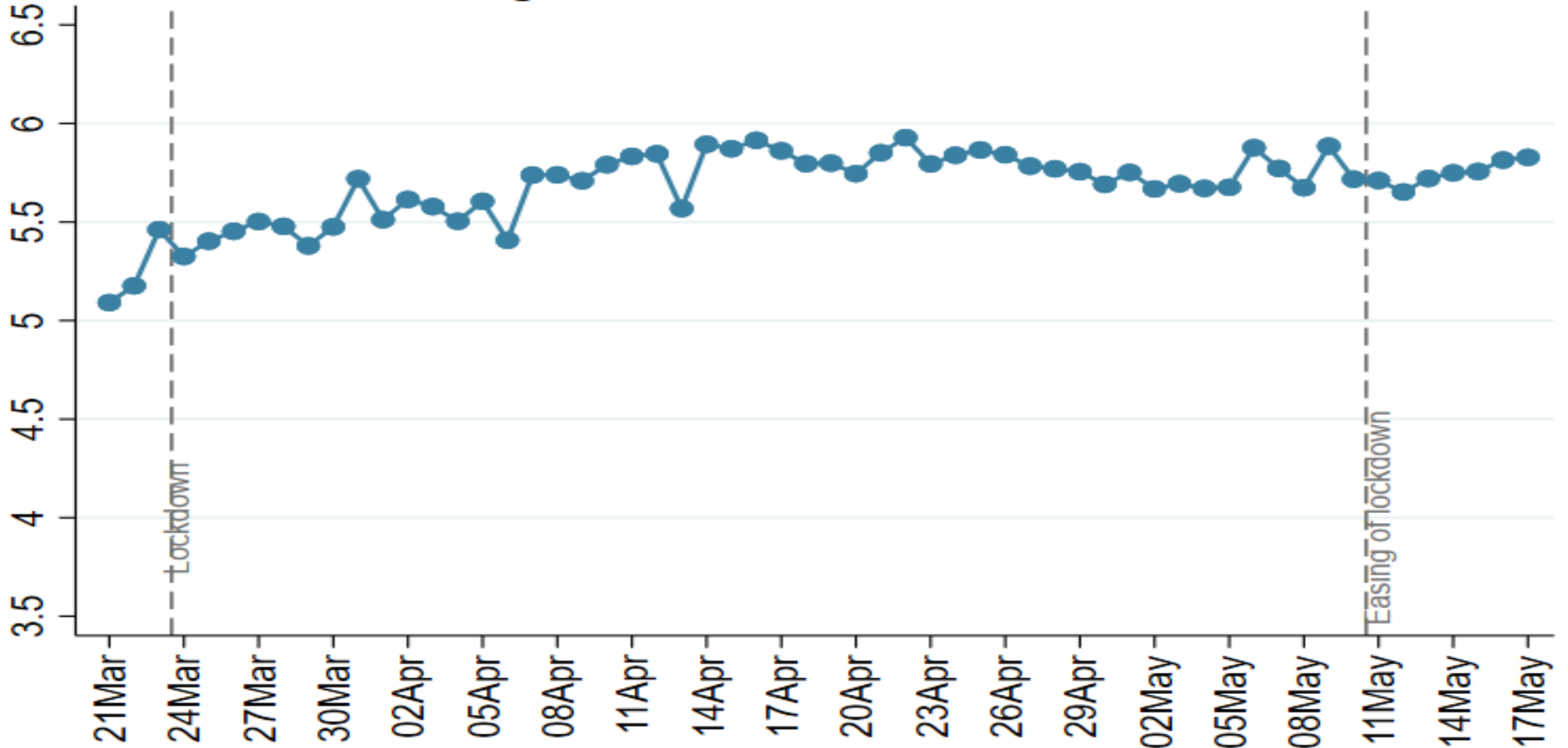
UK Happiness Percent saying yes from Yougov



From UCL UK study

https://b6bdcb03-332c-4ff9-8b9d-28f9c957493a.filesusr.com/ugd/3d9db5_cf6736fab93e4fb898d42d8668a350a6.pdf

Figure 19 Life satisfaction



Psychologists disagree

Whitbourne (2018) has gone so far as to argue that the U-shape curve is a 'myth'.

“The curve is not universal – data from economically struggling countries, for example, don’t show the happiness rebound. Perhaps the people who participate in such surveys are those whose lives tend to follow the curve, while people who feel miserable at seventy or eighty, whose ennui is offset only by brooding over unrealized expectations, don’t even bother to open such questionnaires” Arthur Krystal

“We present evidence that the U shape is not as robust or generalizable as often argued.. We believe the conclusion that happiness declines from late adolescence to midlife (the first half of the U-shape) is premature, and possibly wrong” Galambos et al (2020)

*“It is possible that the U-shaped (or other) curve exists but that it is so small that it is not practically meaningful. In other words, just because differences across age are statistically significant, that does not mean that these differences have practical significance.... At some point, an effect size becomes so small that it is truly **trivial** and lacks practical significance. For our Cantril ladder scale, respondents reported (and probably thought) in terms of the nearest whole scale point from 1 to 10. Therefore, it seemed that differences below 1.00 should be considered quite small” Jebb et al(2019).*

Psychologists disagree - Blanchflower and Graham (#5-7)

Haven't spotted the rise of deaths of despair in US prime age less-educated (Case & Deaton, 2020).

Mostly based on sample size of <500 (#5)

Wrongly show that studies such as Inglehardt (1990) show no U-shape when they do. When the Eurobarometer data they use are re-estimated there are clear U-shapes (#5)

One study claimed there was an M-shape but this was due to omitting young, happy students (#3)

Wrongly report (Jebb et al) that their study shows no U-shape when the data clearly does (#7)

Wrongly claim the size of the effects are trivial even though they are comparable to losing a spouse or a job (#6). They are about half of the scale of the drop in happiness in the lockdown.

Suggest that it is appropriate to study the life course from 18-80 by studying people in the age range of 18-35 or ages 60+ (#7)

Wrongly compare studies with no controls to those with controls (#5-#7)

Blanchflower and Oswald American Misery and Despair USA 1003-2019 (#8)

We examine responses to a question in the BRFSS on 8.1 million respondents. We say that someone is in ‘despair if they say 30 of last thirty days were bad mental health days.

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?”*

The first finding is shown in Table 1. It is that the aggregate level of the paper’s extreme-distress proxy -- effectively *‘every day of my life is a bad day’* -- has trended upwards since the early 1990s. In 1993, the proportion of Americans with a reported level of distress this severe was 3.6%. In 2019, that proportion had increased to 6.4% of U.S. adults.

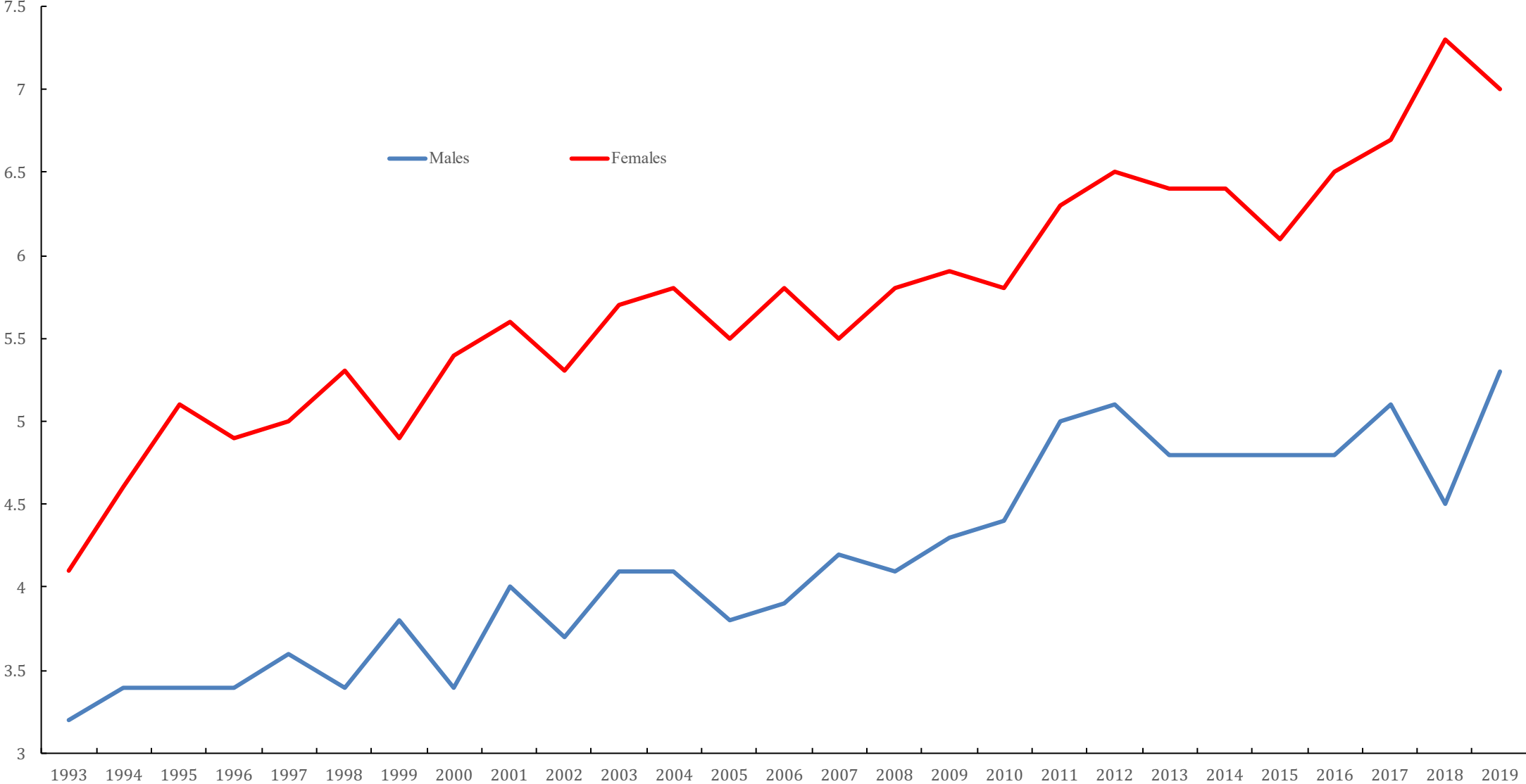
The USA appears to have a problem of middle-aged extreme distress that stems disproportionately from within the white low-education section of the U.S. population.

It finds: (i) at the personal level, the strongest statistical predictor of extreme distress is ‘I am unable to work’; (ii) at the state level, a decline in the share of manufacturing jobs is a predictor of increased extreme distress. These findings seem to mesh with other evidence on the psychological damage created by economic insecurity.

Table 1. U.S. Rates of Extreme Distress -- by Gender, Race, Age, and Education (%)

	<i>All</i>	<i>Male</i>	<i>Female</i>	<i>High School. Grad & Below</i>	<i>Age 35-54. White</i>	<i>Age 35-54 Non-white</i>
1993	3.6%	3.2	4.1	4.5	3.9	4.9
1995	4.3	3.4	5.1	5.0	4.6	6.1
1997	4.3	3.6	5.0	5.5	4.7	5.5
1999	4.4	3.8	4.9	5.5	4.8	5.9
2001	4.9	4.0	5.6	6.3	5.3	6.0
2003	4.9	4.1	5.7	6.4	5.2	5.8
2005	4.7	3.8	5.5	6.1	5.3	5.6
2007	4.9	4.2	5.5	6.5	5.2	5.6
2008	5.0	4.1	5.8	6.6	5.6	6.1
2009	5.1	4.3	5.9	6.9	5.5	6.6
2010	5.1	4.4	5.8	6.9	5.4	6.0
2011	5.7	5.0	6.3	7.4	6.5	6.7
2012	5.8	5.1	6.5	7.7	6.4	6.9
2013	5.6	4.8	6.4	7.4	6.1	6.4
2014	5.6	4.8	6.4	7.3	6.3	6.3
2015	5.5	4.8	6.1	7.1	6.5	6.1
2016	5.7	4.8	6.5	7.5	6.5	6.0
2017	5.9	5.1	6.7	7.7	6.9	5.5
2018	6.2	4.5	7.3	8.1	6.8	5.7
2019	6.4	5.3	7.0	8.6	6.8	5.5

Extreme distress by gender, 1993-2019



Extreme distress, ages 35-54 by college or non-college, 1993-2019

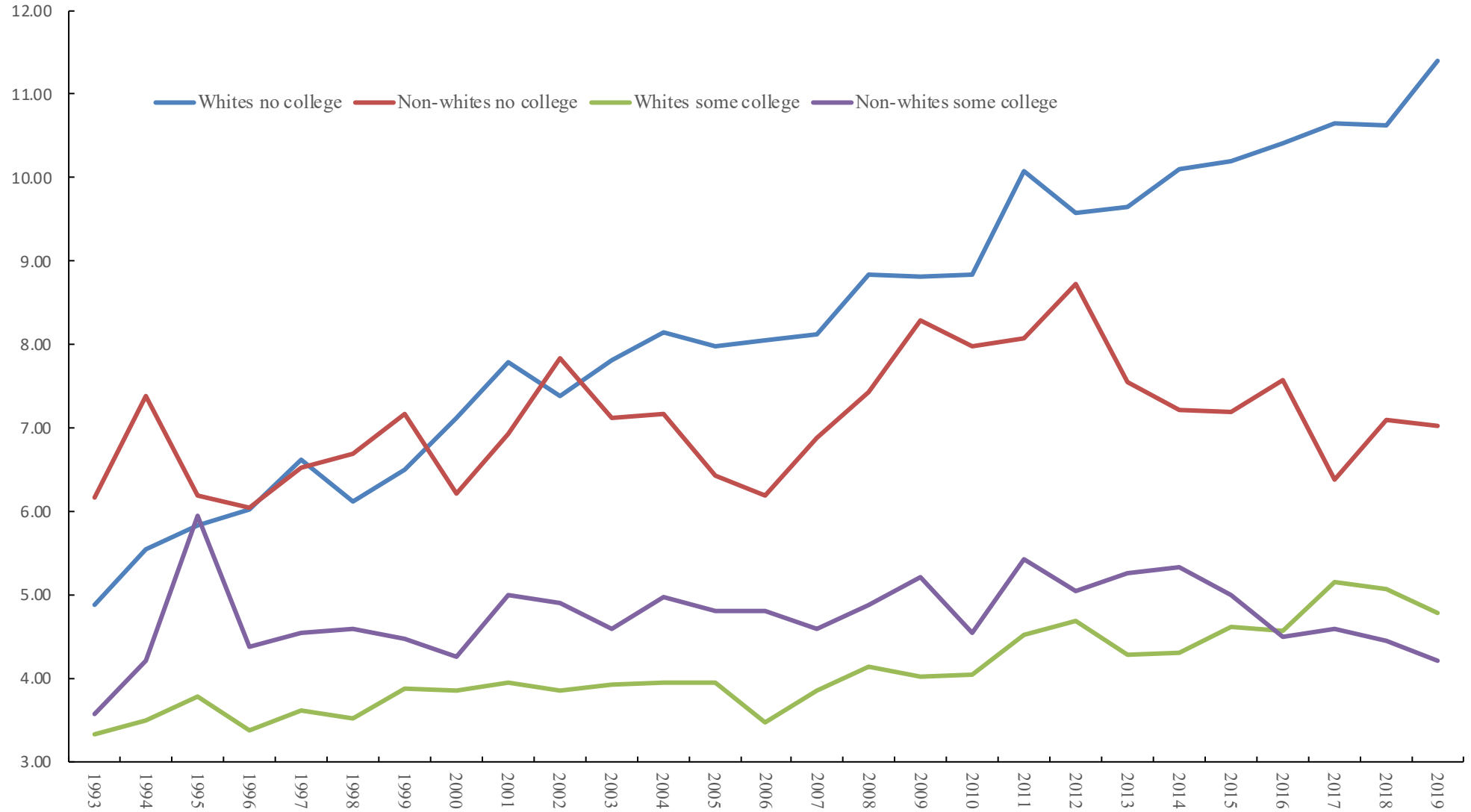


Table 2. Extreme-Distress Regression Equations, USA 1993-2019 (Full Sample, Pooled Data)

	All	Whites	Non-whites
<i>State-level variable</i>			
State Manufacturing %*100	-.044 (-.079, -.008)	-.066 (-.103, -.029)	.031 (-.026, .088)
<i>Personal-level variables</i>			
Unable to work	.176 (.174, .178)	.189 (.186, .190)	.147 (.144, .150)
Out of work >1 year	.085 (.083, .087)	.093 (.090, .096)	.065 (.062, .068)
Out of work <1 year	.057 (.056, .059)	.064 (.061, .066)	.043 (.041, .046)
Education grades 1-8	.006 (.001, .012)	.018 (.011, .025)	-.007 (-.015, .000)
Education grades 9-11	.001 (-.005, .006)	.007 (.000, .015)	-.009 (-.017, -.001)
High school graduate/GED	-.015 (-.021, -.010)	-.012 (-.020, -.005)	-.020 (-.028, -.012)
1-3 years college	-.017 (-.022, -.011)	-.015 (-.023, -.008)	-.016 (-.024, -.008)
>=4yrs college	-.029 (-.034, -.023)	-.027 (-.034, -.020)	-.028 (-.036, -.020)
Constant	.0078	.0082	-.0097
N	7,432,061	5,901,896	1,455,077

95% confidence intervals in parentheses

The U-shape of Happiness: A Response (to Galambos et al, 2020)

David G. Blanchflower

and

Carol L. Graham

Figure 1. Life satisfaction in UK, 2016-2018

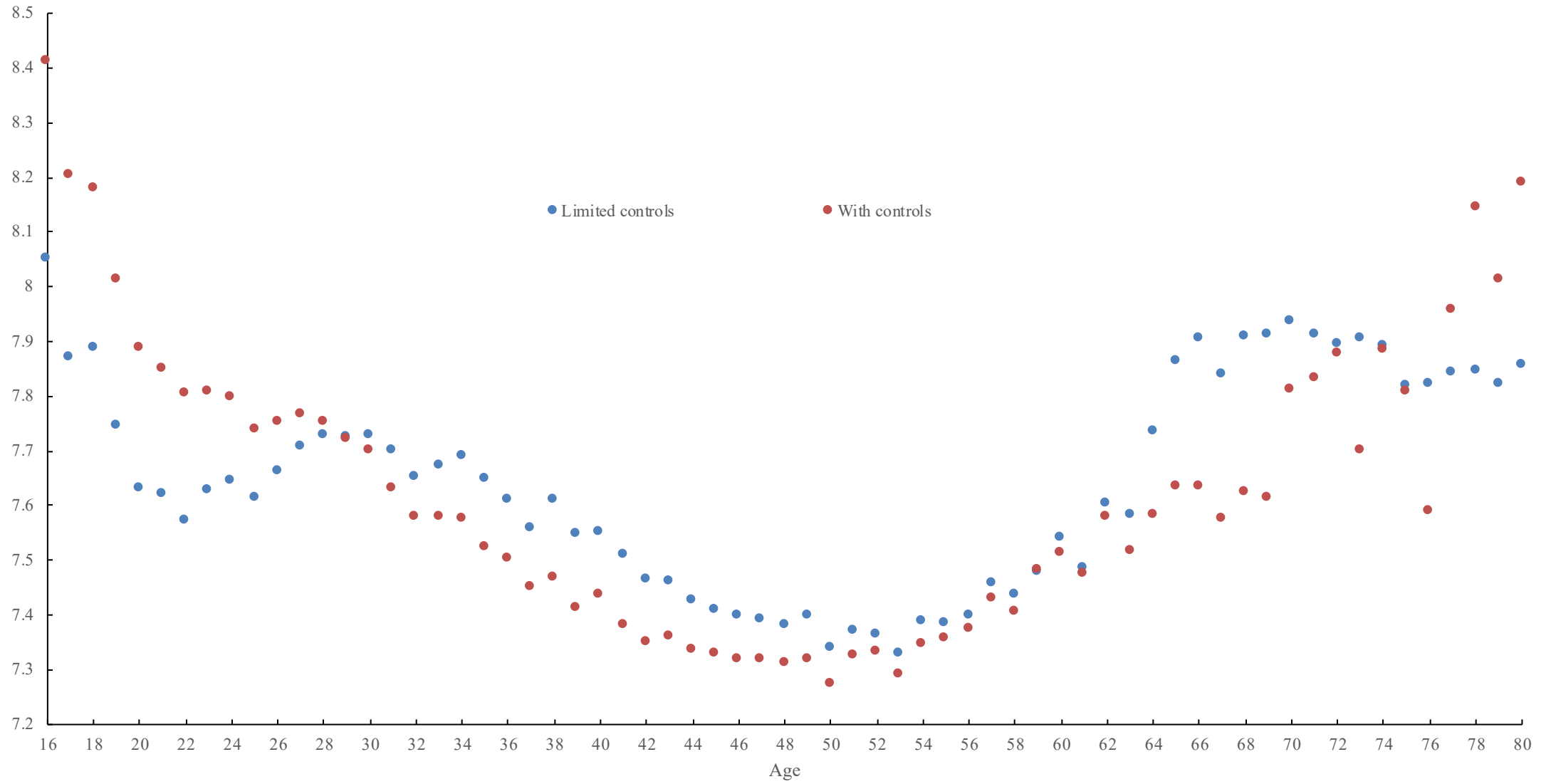


Figure 2. Life satisfaction in Europe, 2009-2019

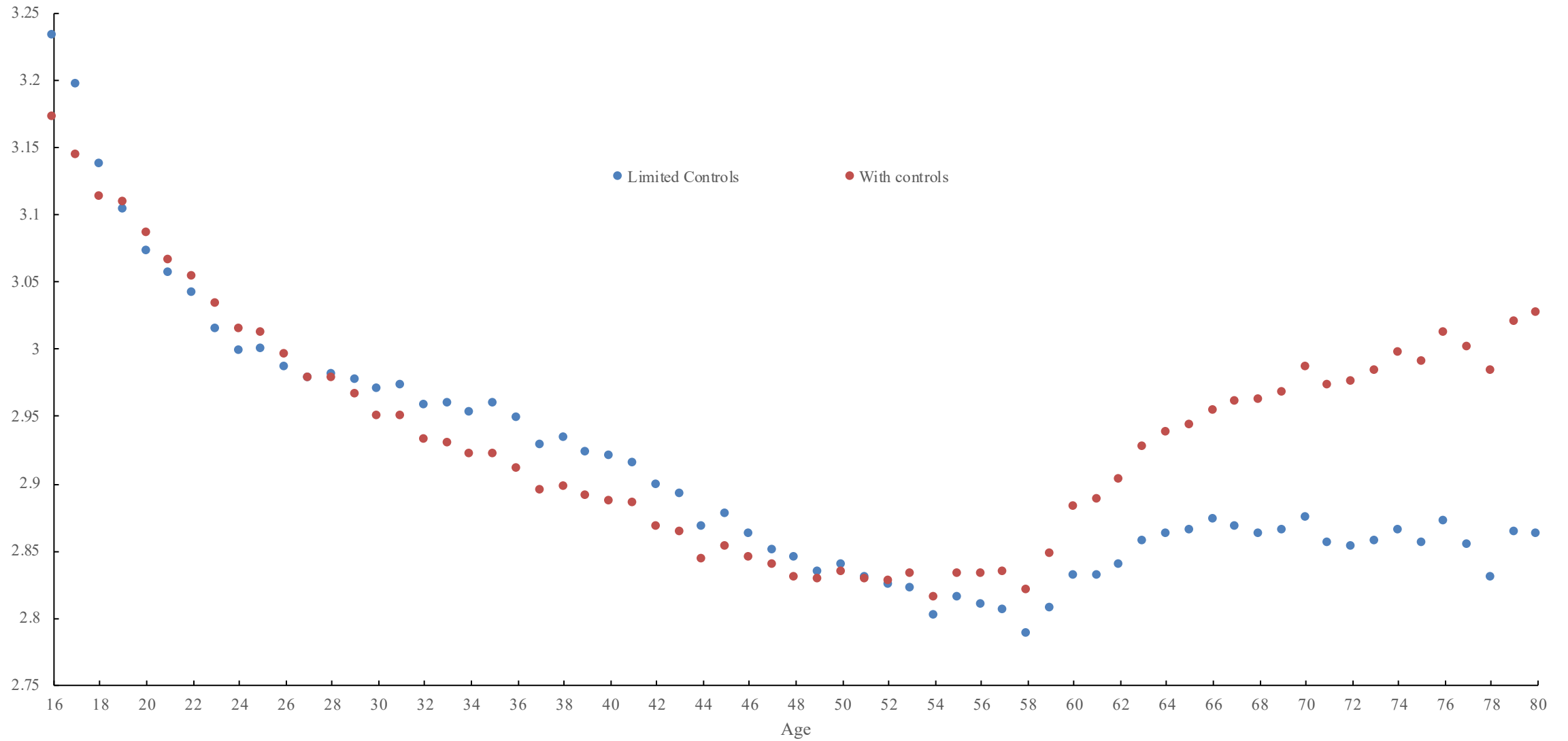
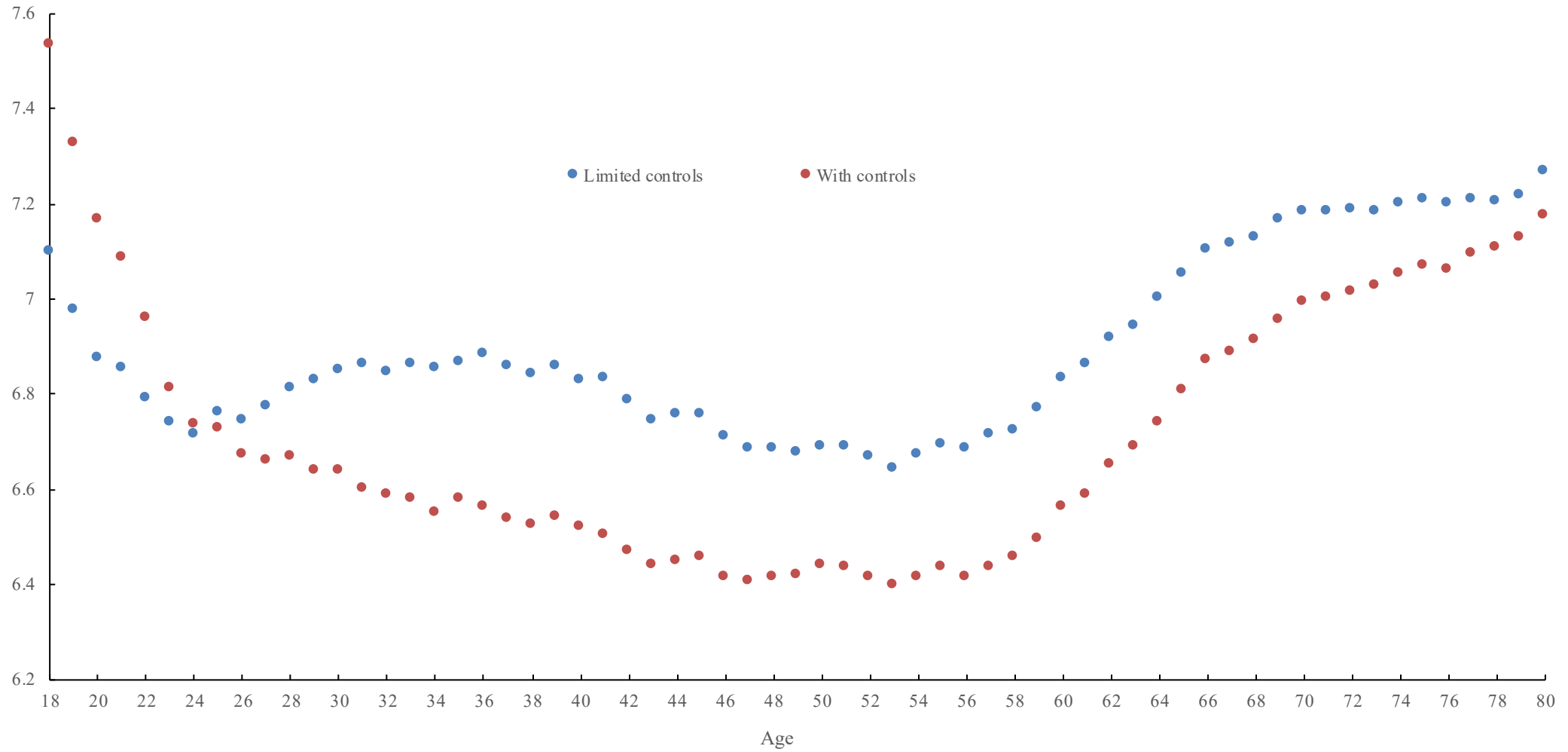


Figure 3. Cantril's Life satisfaction ladder, USA 2009-2019 from Gallup US daily tracker



The U-shape of Happiness in Scotland

David N.F. Bell

Division of Economics, Management School, University of Stirling,
IZA and CPC

and

David G. Blanchflower

Table 1. Life satisfaction Scotland, 2008-2018 (mean=7.686) – Scottish Health Survey

Age 25-34	-.0573 (1.73)	-.3236 (8.96)	-.3357 (8.81)	-.3351 (8.34)
Age 35-44	-.2334 (7.34)	-.5052 (13.74)	-.5463 (14.10)	-.5187 (12.68)
Age 45-54	-.3830 (12.31)	-.5495 (14.73)	-.6065 (15.36)	-.5720 (13.70)
Age 55-64	-.2295 (7.35)	-.3171 (8.08)	-.3981 (9.55)	-.3432 (7.78)
Age 65-74	.1653 (5.18)	-.1360 (2.91)	-.1970 (3.93)	-.1222 (2.32)
Age 75+	-.0219 (0.65)	-.1541 (2.97)	-.1832 (3.26)	-.0409 (0.69)
<1 portion fruit & veg		.1333 (3.26)	.1386 (3.15)	.1129 (2.43)
1 but < 2 fruit & veg		.1996 (6.89)	.1807 (5.84)	.1619 (4.96)
2 but <3 fruit & veg		.2750 (9.48)	.2537 (8.19)	.2301 (7.04)
3 but <4 fruit & veg		.3548 (11.97)	.3098 (9.78)	.2749 (8.23)
4 but <5 fruit & veg		.3996 (12.78)	.3489 (10.45)	.3025 (8.62)
5 but <6 fruit & veg		.4514 (13.31)	.3853 (10.63)	.3404 (8.92)
6 but <7 fruit & veg		.4726 (12.37)	.4209 (10.34)	.3678 (8.59)
7 but <8 fruit & veg		.4745 (10.47)	.4102 (8.53)	.3581 (7.13)
8+ fruit & veg		.4547 (11.04)	.3960 (9.11)	.3489 (7.62)
Male		-.0013 (0.10)	-.0194 (1.26)	-.0240 (1.49)
Log equivalized income			.2557 (22.69)	.2531 (21.06)
BMI				-.0086 (5.78)
Year dummies	Yes	Yes	Yes	Yes
Education dummies	No	Yes	Yes	Yes
Marital status	No	Yes	Yes	Yes
Labor force status	No	Yes	Yes	Yes
N	60,772	60,565	51,314	44,373

Table 2. Well-being in Scotland, 2016-2019

	Life satisfaction	Happiness	Worthwhile	Anxious
Age 25-34	-.4273 (10.24)	-.2907 (5.63)	-.2074 (5.12)	.1149 (1.62)
Age 35-44	-.7552 (18.06)	-.5272 (10.20)	-.3928 (9.67)	.2935 (4.13)
Age 45-54	-.9033 (21.71)	-.5872 (11.41)	-.5190 (12.84)	.3204 (4.53)
Age 55-64	-.5611 (13.33)	-.2728 (5.24)	-.2409 (5.89)	.0158 (0.22)
Age 65-74	.0742 (1.61)	.3309 (5.80)	.2858 (6.38)	-.6673 (8.51)
Age 75+	.1204 (0.92)	.3376 (2.09)	.3050 (2.41)	-.4119 (1.86)
Male	-.1265 (7.59)	-.0873 (4.23)	-.2997 (18.50)	-.3627 (12.80)
Year dummies	Yes	Yes	Yes	Yes
Education dummies	Yes	Yes	Yes	Yes
Marital status	Yes	Yes	Yes	Yes
Labor force status	Yes	Yes	Yes	Yes
Constant	8.2346	7.7694	8.2608	2.9631
Adjusted R ²	.1051	.0530	.0795	.0345
N	42,971	42,966	42,934	42,956
Mean dep variable	7.751	7.576	7.929	2.807

Source: UK Annual Population Survey, January 2016-December 2019. Notes: excluded category ages 16-24.

Table 3. GHQ36 Scotland, 2008-2018 (mean=7.686) Scottish Health Survey

Age 25-34	.0938 (0.99)	.4215 (4.01)	.5434 (4.87)	.5078 (4.32)
Age 35-44	.4426 (4.88)	.6778 (6.33)	.8373 (7.38)	.7473 (6.24)
Age 45-54	.8020 (9.03)	.7958 (7.33)	.9765 (8.45)	.8631 (7.07)
Age 55-64	.2981 (3.34)	.0633 (0.55)	.2841 (2.33)	.1654 (1.28)
Age 65-74	-.6849 (7.49)	-.2961 (2.17)	-.1882 (1.28)	-.2981 (1.93)
Age 75+	-.4580 (4.61)	-.3074 (2.01)	-.2045 (1.24)	-.3715 (2.13)
<1 portion fruit & veg		-.4566 (3.79)	-.4676 (3.62)	-.4208 (3.09)
1 but < 2 fruit & veg		-.3333 (3.91)	-.2877 (3.16)	-.1985 (2.07)
2 but <3 fruit & veg		-.5985 (7.00)	-.5775 (6.33)	-.5240 (5.46)
3 but <4 fruit & veg		-.7638 (8.77)	-.7135 (7.65)	-.6393 (6.53)
4 but <5 fruit & veg		-.8327 (9.07)	-.7528 (7.68)	-.7023 (6.82)
5 but <6 fruit & veg		-.9605 (9.64)	-.8757 (8.23)	-.7886 (7.05)
6 but <7 fruit & veg		-1.0062 (9.01)	-.9323 (7.82)	-.8587 (6.85)
7 but <8 fruit & veg		-1.0343 (7.84)	-.9066 (6.46)	-.9035 (6.15)
8+ fruit & veg		-.9830 (8.18)	-.8987 (7.05)	-.7537 (5.61)
Male		-.9509 (22.47)	-.9262 (20.51)	-.9256 (19.57)
Log equivalized income			-.3888 (11.71)	-.3332 (9.45)
BMI				.0202 (4.68)
Year dummies	Yes	Yes	Yes	Yes
Education dummies	No	Yes	Yes	Yes
Marital status	No	Yes	Yes	Yes
Labor force status	No	Yes	Yes	Yes
N	55,250	55,174	47,766	42,190

Chart 1. Life satisfaction in Scotland, 2008-2018, Scottish Health Survey

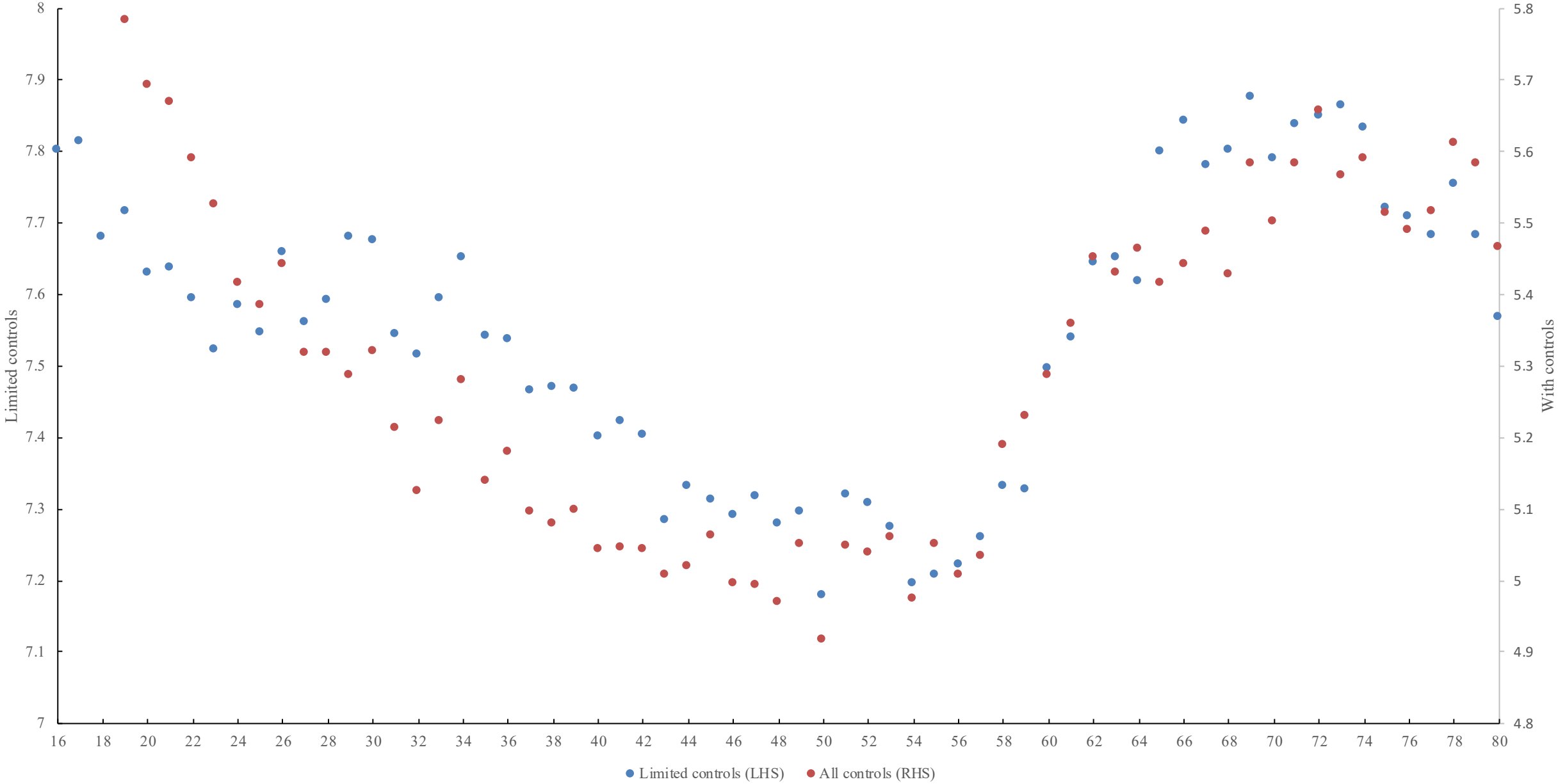


Chart 2. Life satisfaction, Scotland, 2016-2019, APS

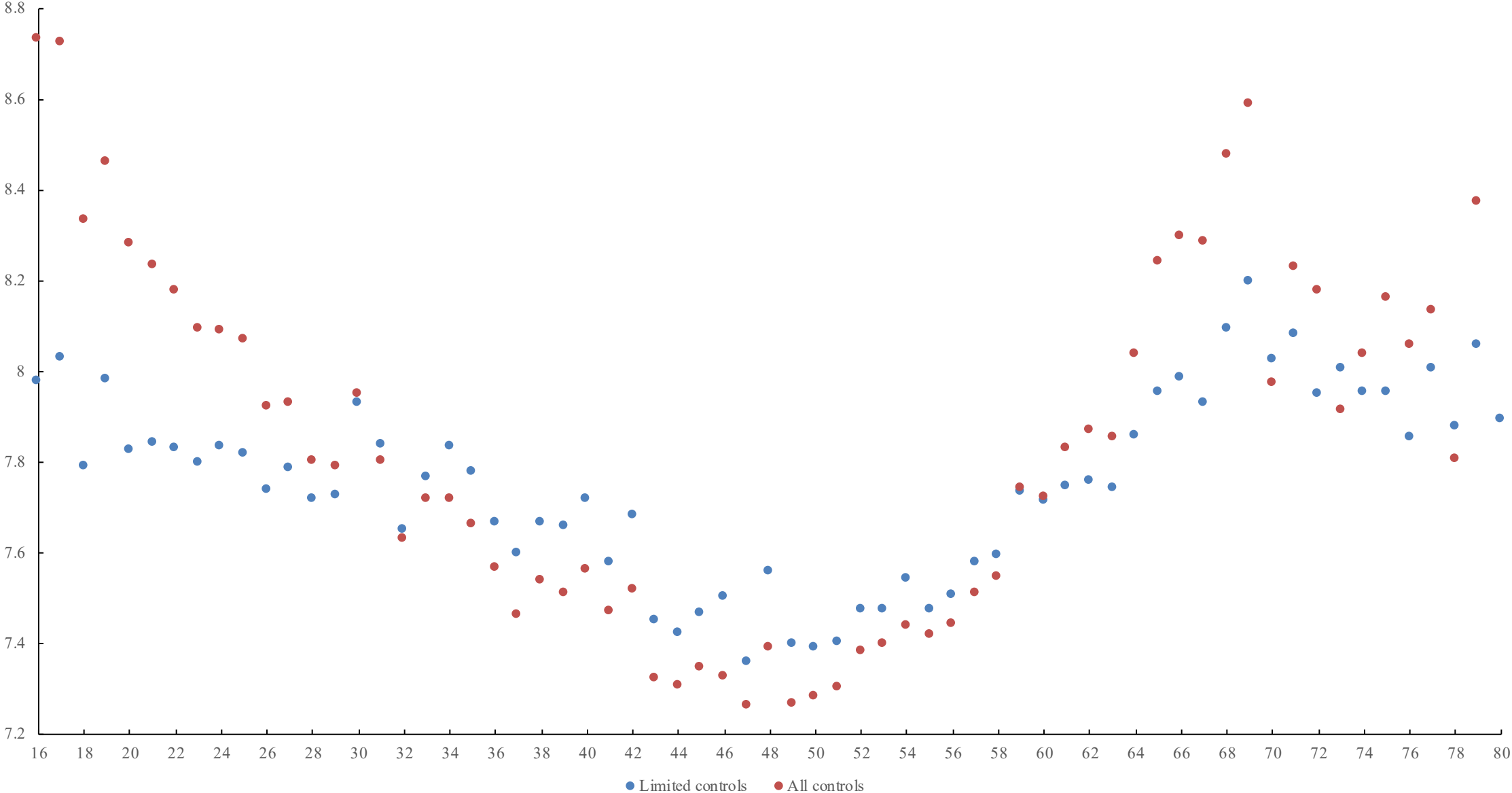


Chart 3. GHQ36 Unhappiness - Scotland, 2008-2018, Scottish Health Survey

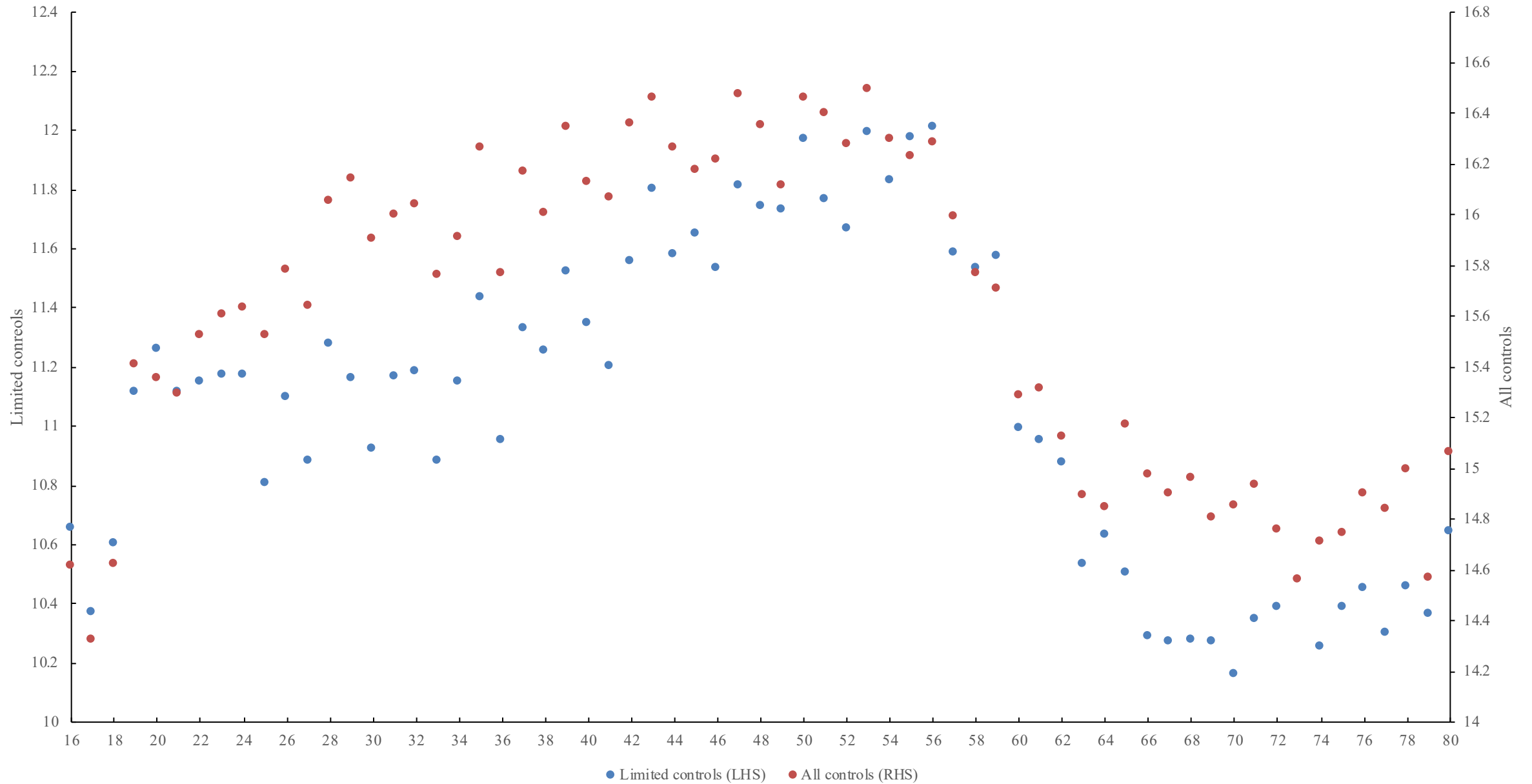
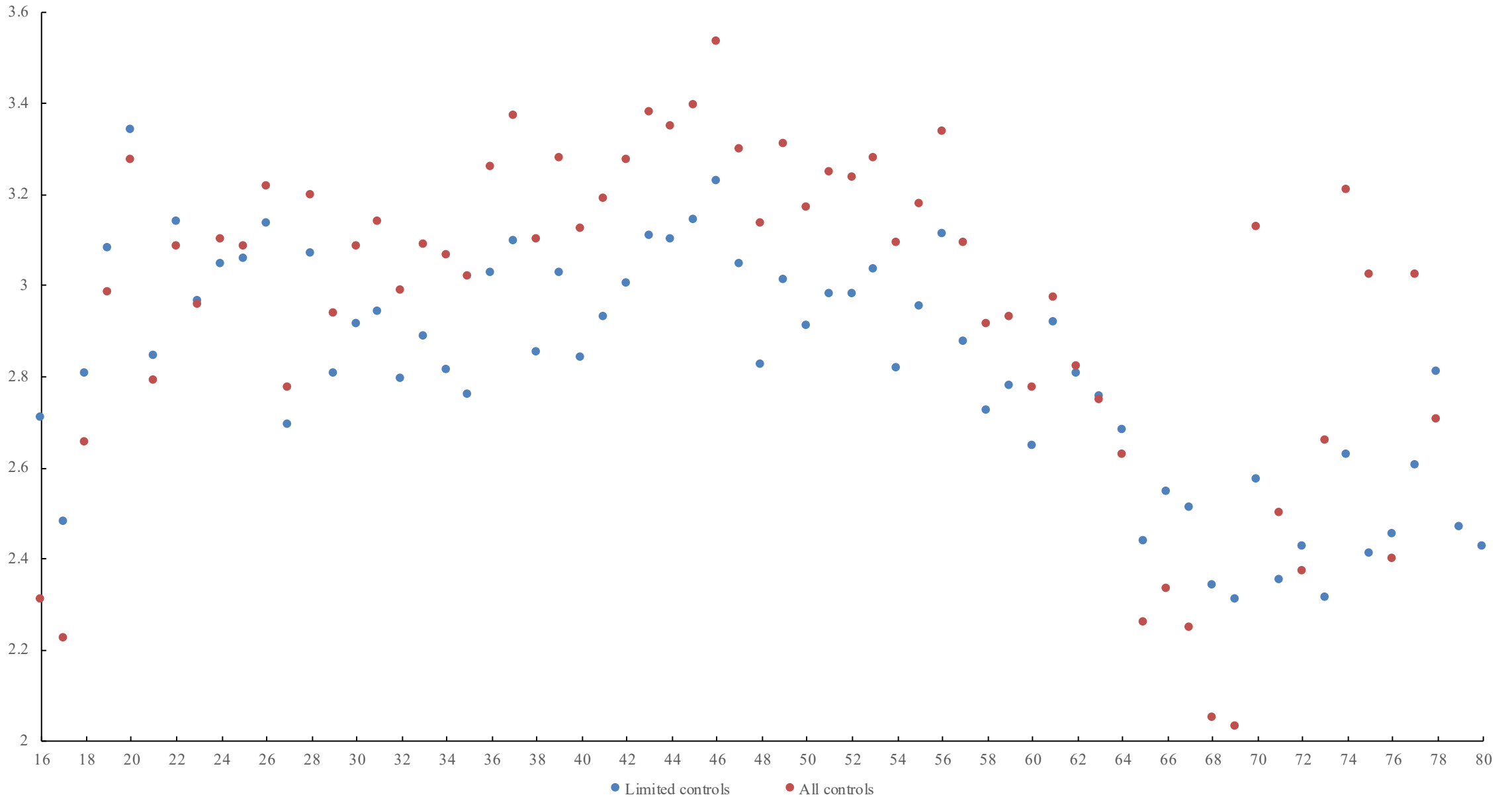


Chart 4. Anxiety in Scotland, 2016-2019, APS.



Sleep Duration is U-shaped in Age in the United States

(Reject and) resubmitted to Journal of Sleep Research

David G. Blanchflower

April 30th, 2020

Chart 1. Average hours of sleep, USA, 2013-2019

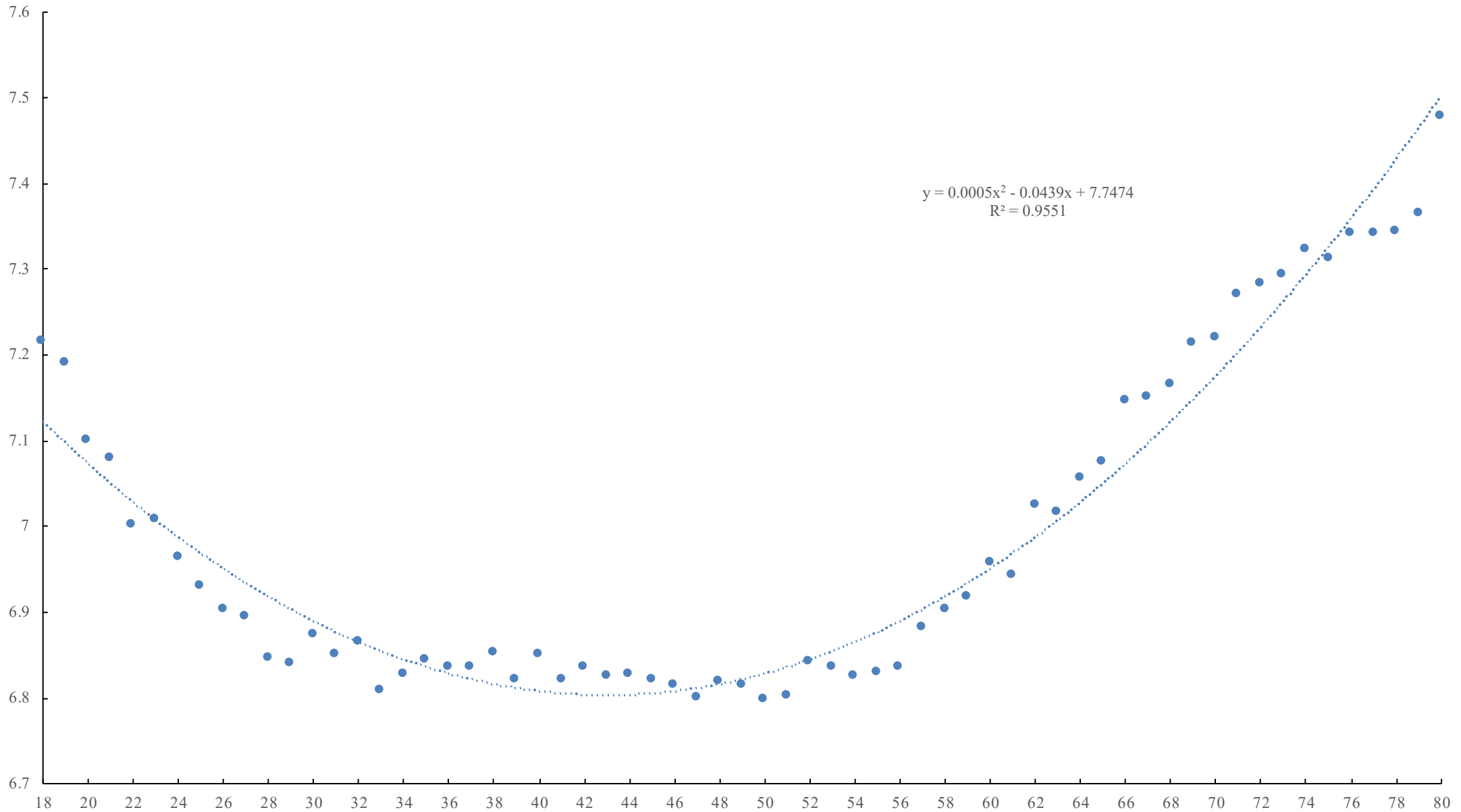


Chart 2. Percent of Age Group With Short Sleep

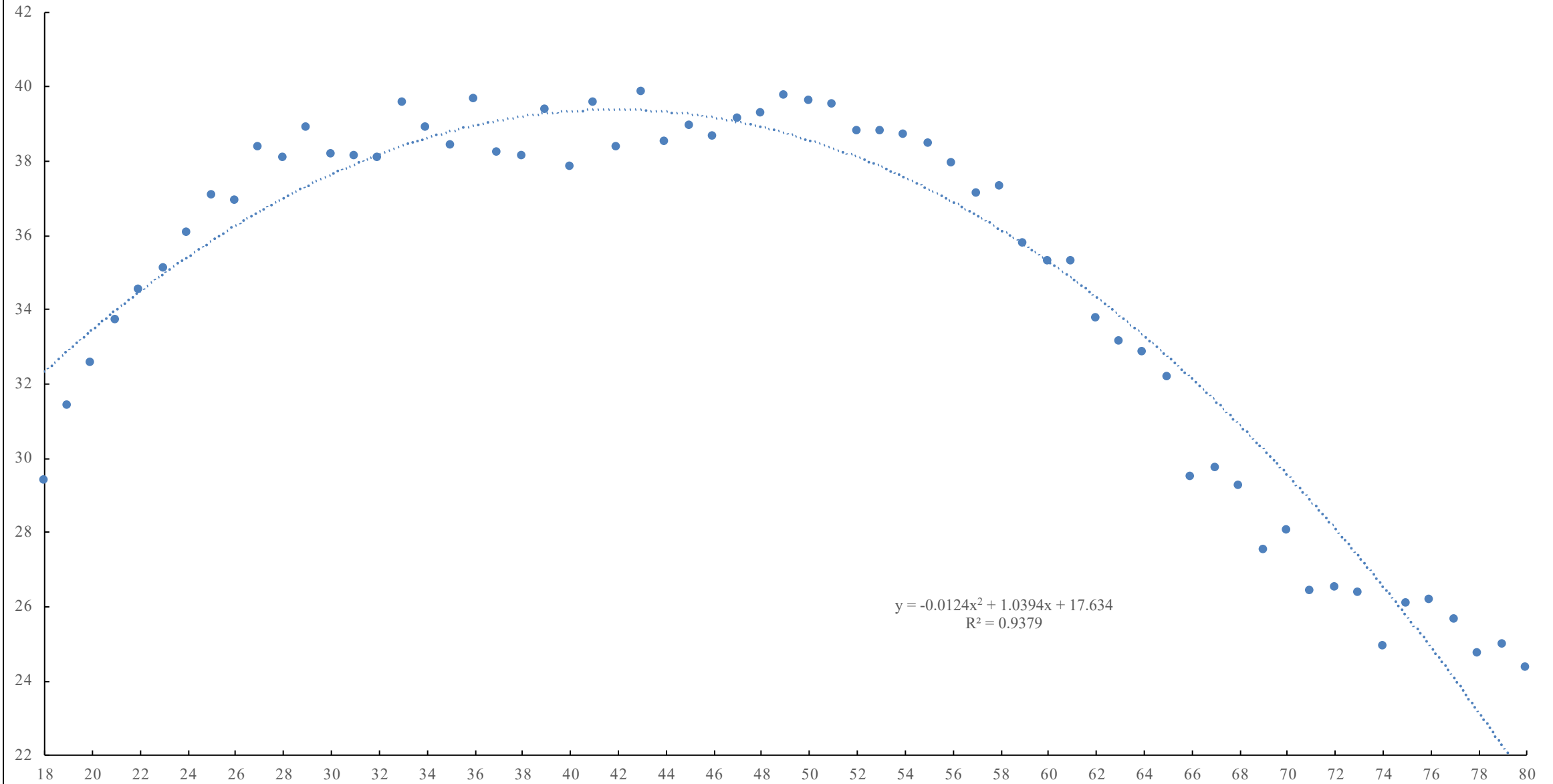
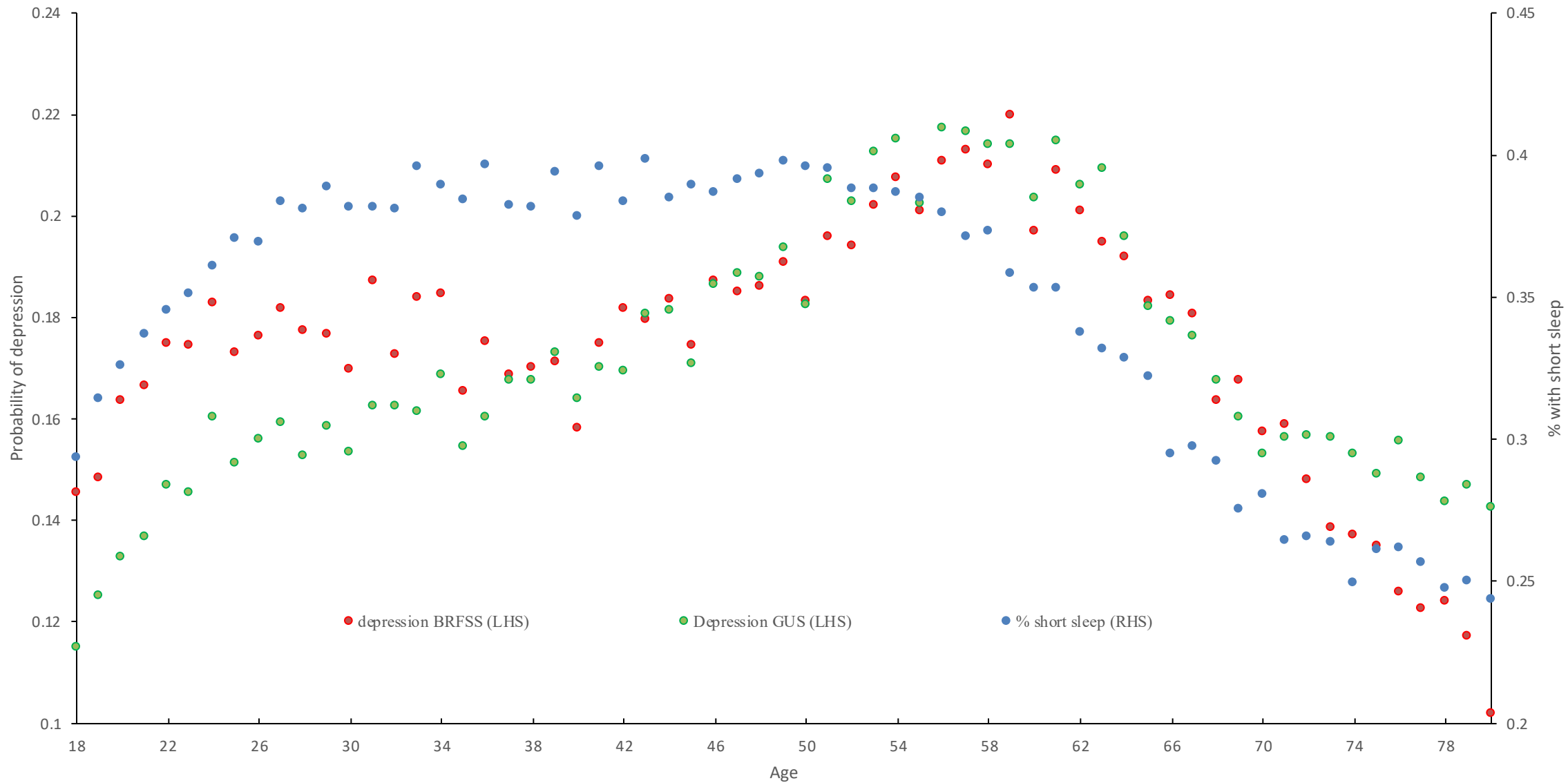


Chart 9. Incidence of short sleep and the probability of being depressed.



Galambos, Krahn, Johnson and Lachman claim: "*the conclusion that happiness declines from late adolescence to midlife (the first half of the U shape) is premature, and possibly wrong.*"

Carol Graham and I argue that couldn't possibly be further from the truth. The empirical literature they summarize they claim is inconsistent with a U shape, but we show it is consistent with one, once their errors and omissions are corrected.

We present evidence of midlife zeniths in well-being for the UK, the US and Europe based on four million individual observations.

We also find evidence that the U-shape applies not just to life satisfaction but more broadly to questions on the household's financial situation the situation of the economy, the provision of public services, expectations of the economy, satisfaction with democracy and trust in the media; political parties; the police; the army and even the United Nations.

These all have minima that average around age 48.

The finding of a U-shape is one of the most robust patterns in social science.

**I'VE BEEN "SOCIAL DISTANCING"
ALL MY LIFE...**

