

## **APPENDIX**

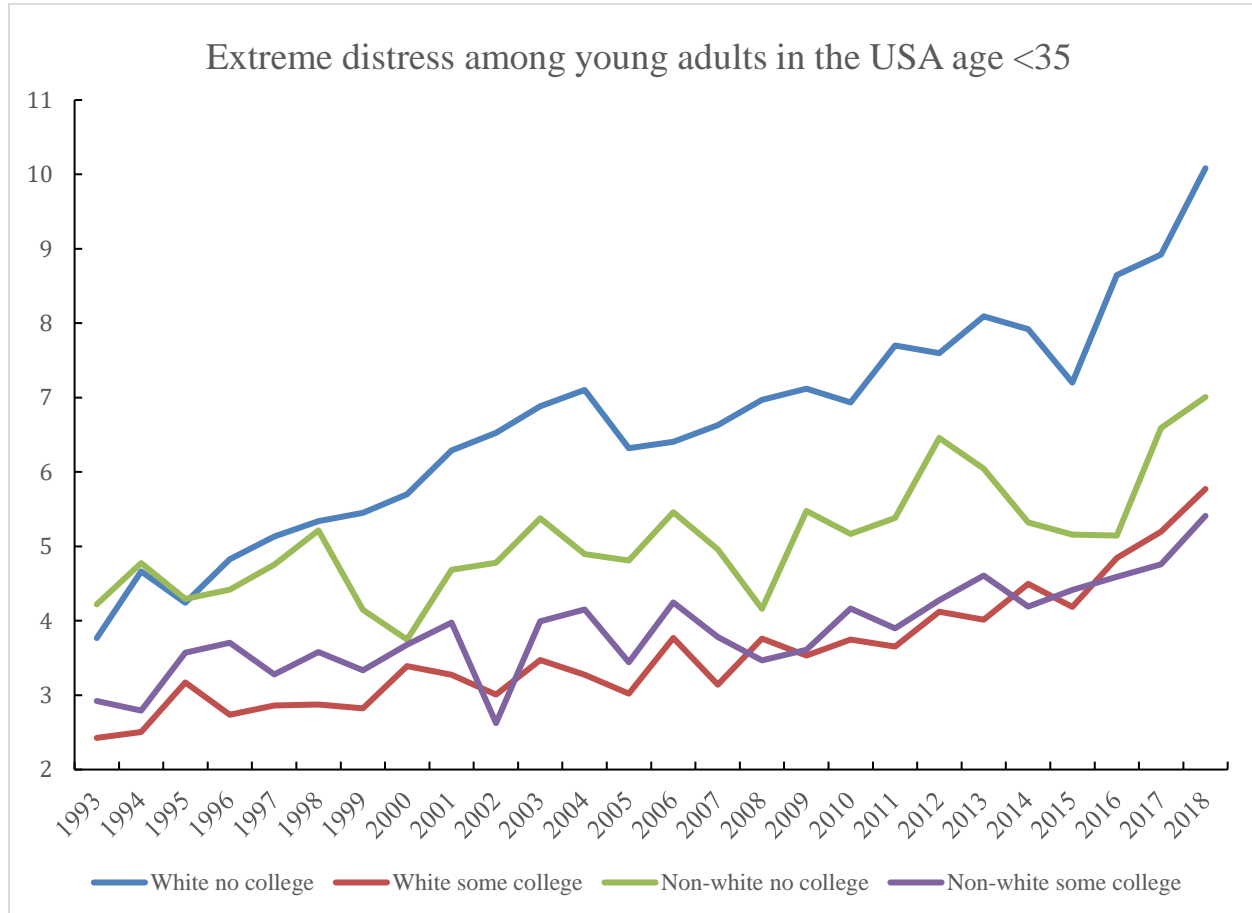
### Trends in Extreme Distress in the USA, 1993-2019

Blanchflower and Oswald

AJPH 2020

**Figure A. The Rise in Extreme Distress Among Younger Americans**

*College vs. Non-College Subsamples*

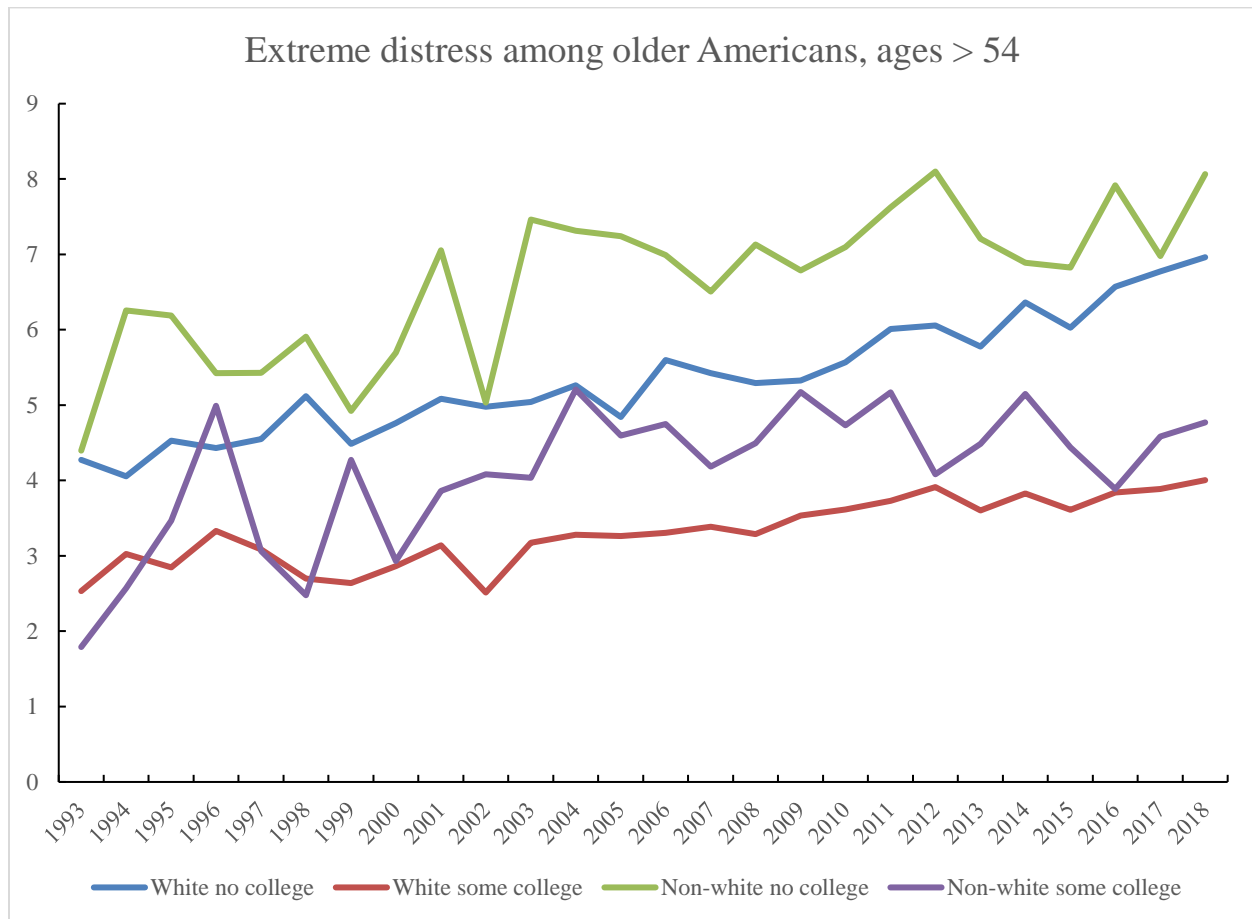


**Notes**

The paper's proxy measure of 'extreme distress' is depicted on the vertical axis. It is the % of people who give the extreme answer of 30 days in response to the BRFSS question: Question. "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"

This Figure deliberately follows the format of Figure 2 in the paper.

**Figure B. The Rise in Extreme Distress Among Older Adults in the USA**  
*College vs. Non-College Subsamples*



#### Notes

The paper's proxy measure of 'extreme distress' is depicted on the vertical axis. It is the % of people who give the extreme answer of 30 days in response to the BRFSS question: Question. *"Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"*

This Figure deliberately follows the format of Figure 2 in the paper.

**Table A. Employment Variables by State, 1993-2019**

Column 1: manufacturing employment as % nonfarm employment 1993

Column 2: manufacturing employment as % nonfarm employment 2019

Column 3: change in manufacturing employment 1993-2019

Column 4: change in nonfarm employment 1993-2019

Column 5: % change nonfarm employment 1993-2019

Column 6: % population in extreme-distress average 2015-2019

	(1)	(2)	(3)	(4)	(5)	(6)
USA	15.3	8.5	-3971	39392	36	6.2
Alabama	20.8	13.1	-90	346	20	8.2
Alaska	6.0	3.8	-2	79	31	5.9
Arizona	10.7	6.0	6	1329	84	6.3
Arkansas	23.2	12.7	-67	281	28	8.6
California	14.1	7.7	-367	5304	44	5.2
Colorado	9.9	5.4	-17	1095	66	3.9
Connecticut	17.0	9.5	-99	158	10	5.7
Delaware	12.6	5.9	-16	116	33	6.4
DC	0.8	0.2	-4	126	19	5.6
Florida	8.6	4.2	-97	3402	61	6.8
Georgia	16.5	9.0	-109	1460	46	6.7
Hawaii	3.3	2.2	-4	120	22	4.6
Idaho	14.1	9.2	9	319	74	4.7
Illinois	16.2	9.6	-268	844	16	5.2
Indiana	23.2	17.2	-66	545	21	6.9
Iowa	17.3	14.1	8	312	24	4.5
Kansas	15.2	11.7	-5	290	26	6.3
Kentucky	18.1	13.0	-23	414	27	8.0
Louisiana	10.7	6.8	-40	324	20	7.4
Maine	15.9	8.4	-29	113	22	7.4
Maryland	8.4	3.9	-69	648	31	4.5
Massachusetts	14.8	6.7	-177	829	29	6.0
Michigan	20.0	14.2	-162	448	11	6.6
Minnesota	15.6	10.9	-31	709	31	4.3
Mississippi	23.8	12.5	-93	162	16	9.3
Missouri	15.3	9.4	-88	514	21	7.4
Montana	6.3	4.3	0	156	48	5.3
Nebraska	13.0	9.7	-1	258	34	4.8
Nevada	4.4	4.0	30	753	112	5.9
New Hampshire	18.2	10.3	-21	186	37	6.7
New Jersey	13.2	5.9	-209	707	20	6.3
New Mexico	6.3	3.2	-12	227	36	6.7
New York	10.8	4.6	-392	2015	26	5.2
North Carolina	25.3	10.6	-347	1309	40	6.4

North Dakota	6.3	6.0	8	151	53	4.7
Ohio	19.9	12.6	-276	676	14	7.7
Oklahoma	12.8	8.2	-25	435	35	7.8
Oregon	14.8	10.2	5	622	47	7.3
Pennsylvania	17.2	9.5	-315	918	18	6.9
Rhode Island	19.4	8.1	-44	69	16	6.1
South Carolina	22.0	11.6	-87	623	40	7.4
South Dakota	12.0	10.1	8	129	41	4.6
Tennessee	21.8	11.5	-152	771	33	8.9
Texas	12.5	7.0	-38	5224	70	6.0
Utah	13.2	8.8	31	741	91	4.7
Vermont	15.5	9.5	-9	60	23	5.4
Virginia	12.7	6.0	-124	1111	38	6.1
Washington	14.0	8.4	-21	1210	53	4.7
West Virginia	12.4	6.5	-31	103	16	10.1
Wisconsin	21.8	16.0	-50	572	24	5.1
Wyoming	4.6	3.4	1	79	38	5.8

Notes: Official U.S. government establishment-level data from the Bureau of Labor Statistics.

**Table B. Probit Extreme-Distress Equations, 1993-2019** (Full Sample, Pooled Data)

	All	Whites	Non-whites
<i>State-level variable</i>			
State Manufacturing %*10	-.041 (-.079, -.003)	-.066 (-.107, -.026)	.031 (-.027, .088)
<i>Personal-level variables</i>			
Unable to work	.920 (.913, .927)	.965 (.957, .972)	.802 (.790, .815)
Out of work ≥1 year	.588 (.578, .598)	.640 (.628, .651)	.470 (.455, .486)
Out of work < 1 year	.452 (.443, .461)	.495 (.484, .506)	.352 (.337, .368)
Self-employed	.065 (.059, .071)	.072 (.065, .079)	.055 (.040, .070)
Homemaker	.166 (.158, .174)	.176 (.167, .185)	.132 (.116, .147)
Student	.114 (.101, .127)	.106 (.090, .122)	.107 (.085, .128)
Retired	.219 (.212, .226)	.217 (.209, .225)	.243 (.229, .258)
Lmkt refused	.281 (.231, .332)	.301 (.237, .365)	.229 (.174, .283)
Education Grades 1- 8	.018 (-.023, .058)	.101 (.043, .160)	-.071 (-.125, -.017)
Grades 9- 11	-.039 (-.079, .001)	.016 (-.043, .075)	-.099 (-.153, -.046)
Grade 12/GED	-.147 (-.187, -.107)	-.112 (-.171, -.054)	-.177 (-.230, -.124)
College 1-3 years	-.164 (-.204, -.124)	-.144 (-.202, -.085)	-.150 (-.203, -.097)
College ≥4 years	-.330 (-.371, -.290)	-.313 (-.371, -.254)	-.290 (-.344, -.237)
Education refused/dk	-.115 (-.170, -.060)	-.077 (-.152, -.003)	-.124 (-.212, -.037)
Divorced	.254 (.249, .259)	.261 (.255, .266)	.203 (.192, .213)
Widowed	.213 (.207, .219)	.221 (.214, .228)	.158 (.144, .173)
Separated	.411 (.401, .421)	.503 (.491, .516)	.258 (.243, .273)
Single	.136 (.130, .142)	.150 (.142, .157)	.093 (.083, .104)
Living together	.146 (.136, .156)	.168 (.156, .180)	.089 (.071, .107)
Marital refused	.207 (.178, .235)	.240 (.203, .277)	.171 (.121, .220)
Black non-Hispanic	-.117 (-.126, -.108)		
Asian/Pacific Islanders	-.094 (-.109, -.080)		-.046 (-.065, -.027)
Native American	.066 (.050, .082)		.178 (.159, .196)
Other	.164 (.152, .176)		.239 (.224, .253)
Hispanic	-.035 (-.044, -.026)		.064 (.053, .076)
Race refused	.131 (.115, .147)		
BMI	.009 (.008, .009)	.009 (.009, .010)	.007 (.006, .007)
Male	-.146 (-.150, -.142)	-.155 (-.159, -.150)	-.130 (-.138, -.122)
Smoker	.228 (.224, .231)	.216 (.211, .220)	.252 (.244, .259)
Constant	-2.0947	-2.1067	-2.2037
N	7, 432, 061	5,901,896	1,455,077
Pseudo R <sup>2</sup>	.1062	.1123	.0873

Notes: with clustered standard errors at state-year cell level. 95% confidence intervals in parentheses. This is the probit equivalent of Table 2 in the paper. The regressions include a full set of age dummies and state dummies. Year dummies are also included. In column 3 the excluded category is black non-Hispanics. Non-whites excludes those who did not report race (refused) and includes blacks, Asians/Pacific Islanders, Hispanics, Multi, and other races. Other base categories: age 18; never attended school/kindergarten; employee; and married. Source: BRFSS, 1993-2019. Extreme distress here is measured as those who give the answer 30 to the BRFSS question “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good”

**Table C. Extreme-Distress Equations, 1993-2019, for Low-Education Midlife Individuals**  
(Aged 35-54; High School Graduates or Dropouts)

	Whites	Non-whites
<i>State-level variable</i>		
State Manufacturing % *100	-.211 (-.302, -.119)	-.134 (-.260, -.007)
<i>Personal-level variables</i>		
Unable to work	.226 (.221, .230)	.169 (.164, .174)
Out of work >1 year	.123 (.117, .129)	.080 (.075, .086)
Out of work <1 year	.080 (.075, .084)	.053 (.047, .058)
Male	-.031 (-.033, -.030)	-.024 (-.026, -.0218)
Self-employed	.009 (.007, .010)	.007 (.004, .010)
Homemaker	.018 (.016, .021)	.013 (.009, .017)
Student	.052 (.036, .068)	.028 (.012, .044)
Retired	.044 (.038, .050)	.061 (.050, .072)
Divorced	.035 (.033, .037)	.034 (.031, .037)
Widowed	.057 (.051, .062)	.038 (.031, .046)
Separated	.083 (.078, .089)	.034 (.029, .039)
Never been married	.013 (.010, .015)	.006 (.003, .009)
Member unmarried couple	.018 (.013, .023)	.008 (.003, .013)
BMI *100	.110 (.096, .123)	.094 (.001, .001)
Asia/Pacific islander		.014 (.008, .019)
Native American		.033 (.026, .039)
Other races		.050 (.044, .056)
Hispanic		.010 (.006, .014)
Smoker	.030 (.029, .032)	.037 (.034, .039)
Grades 1-8	.057 (.043, .070)	.001 (-.011, .013)
Grades 9-11	.028 (.016, .040)	.003 (-.009, .015)
High school graduate/GED	-.001 (-.013, .011)	-.012 (-.023, .000)
Constant	.0370	.0196
N	600,516	242,737
R <sup>2</sup>	.1021	.0695

**Notes:** with clustered standard errors at state-year cell level. 95% confidence intervals in parentheses. The equations include a full set of state dummies, year dummies, and individual year of age dummies. OLS estimates. Non-whites excludes those who did not report race (refused). Other base categories: never attended school/kindergarten; employee; and married.

Source: BRFSS, 1993-2019. Extreme distress here is measured as those who give the answer 30 to the BRFSS question “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?”

**Table D. Weighted Means: Percent Employed in Manufacturing Industry**

	% manufacturing
1993	15.1
1994	14.8
1995	14.7
1996	14.4
1997	14.2
1998	14.0
1999	13.5
2000	13.2
2001	12.5
2002	11.7
2003	11.1
2004	10.9
2005	10.6
2006	10.4
2007	10.1
2008	9.8
2009	9.0
2010	8.8
2011	8.9
2012	8.9
2013	8.7
2014	8.7
2015	8.7
2016	8.5
2017	8.4
2018	8.5



**Table E. OLS Regressions of Extreme Distress 1993- 2019 full results including 9 cohort dummies used to plot chart S7**

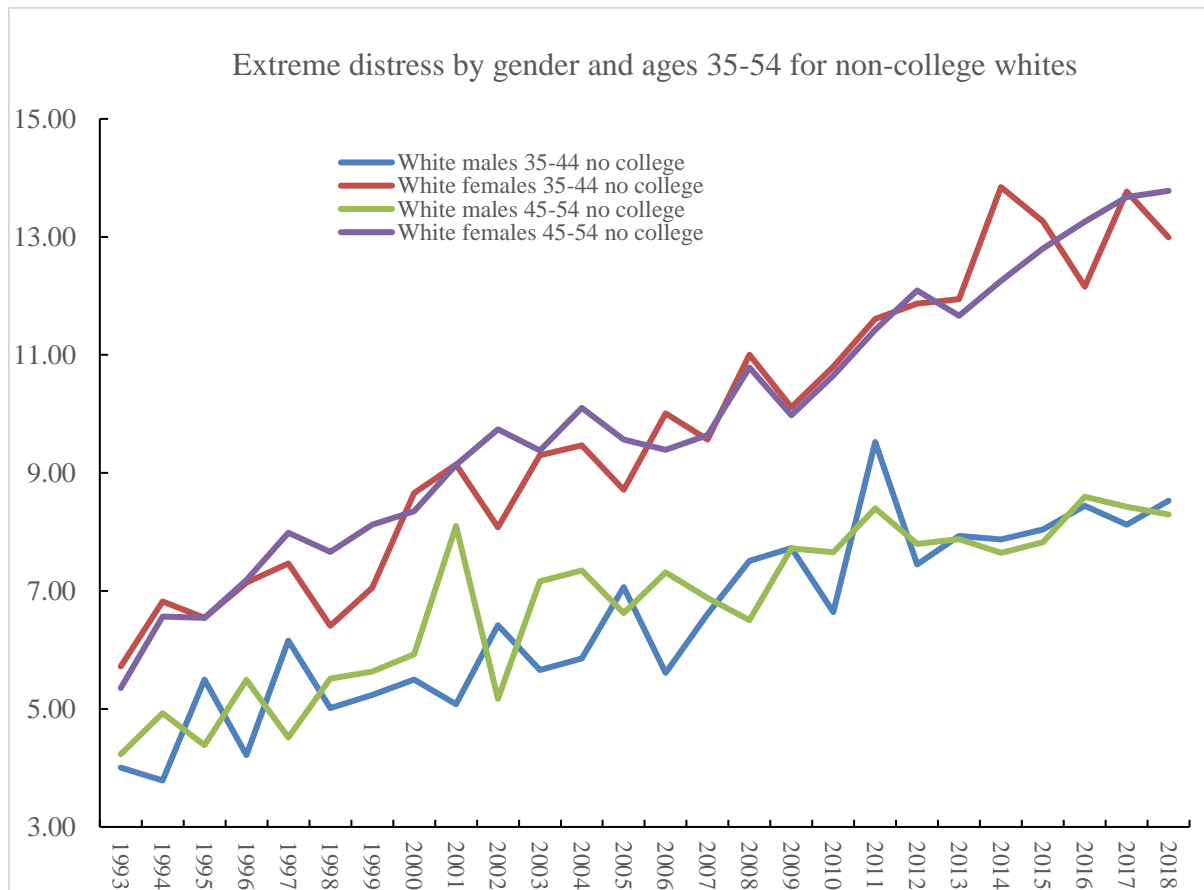
	All
State Manufacturing%*100	-.044 (-.080, -.009)
Born 1920-1929	-.011 (-.013, -.009)
Born 1930-1939	-.016 (-.019, -.014)
Born 1940-1949	-.016 (-.019, -.013)
Born 1950-1959	-.014 (-.018, -.011)
Born 1960-1969	-.017 (-.021, -.013)
Born 1970-1979	-.017 (-.021, -.013)
Born 1980-1989	-.013 (-.018, -.009)
Born 1990-2001	-.009 (-.014, -.003)
1994	.003 (-.000, .007)
1995	.008 (.004, .011)
1996	.007 (.003, .012)
1997	.008 (.004, .012)
1998	.010 (.006, .014)
1999	.009 (.005, .014)
2000	.010 (.006, .013)
2001	.012 (.008, .016)
2002	.008 (.002, .014)
2003	.010 (.007, .013)
2004	.012 (.008, .015)
2005	.009 (.006, .0123)
2006	.011 (.007, .014)
2007	.010 (.006, .0128)
2008	.010 (.007, .0136)
2009	.009 (.006, .0128)
2010	.011 (.008, .0146)
2011	.011 (.007, .0140)
2012	.012 (.008, .0152)
2013	.009 (.006, .0125)
2014	.010 (.007, .0139)
2015	.011 (.007, .0147)
2016	.013 (.009, .0163)
2017	.016 (.012, .0195)
2018	.017 (.013, .0206)
2019	.019 (.011, .0259)
Age 19	.009 (.006, .0110)
Age 20	.014 (.011, .0163)
Age 21	.015 (.013, .0177)
Age 22	.018 (.016, .0204)
Age 23	.022 (.019, .0241)
Age 24	.022 (.020, .0244)
Age 25	.021 (.019, .0237)
Age 26	.023 (.021, .0257)

Age 27	.023 (.021, .026)
Age 28	.024(.021, .026)
Age 29	.023 (.021, .026)
Age 30	.024 (.021, .026)
Age 31	.024 (.021, .026)
Age 32	.024 (.021, .026)
Age 33	.024 (.021, .027)
Age 34	.024 (.022, .027)
Age 35	.024 (.021, .027)
Age 36	.025 (.022, .028)
Age 37	.025 (.022, .027)
Age 38	.024 (.021, .026)
Age 39	.024 (.021, .027)
Age 40	.023 (.020, .026)
Age 41	.024 (.021, .027)
Age 42	.024 (.021, .027)
Age 43	.025 (.022, .027)
Age 44	.024 (.021, .027)
Age 45	.024 (.020, .027)
Age 46	.026 (.023, .029)
Age 47	.024 (.021, .027)
Age 48	.024 (.021, .027)
Age 49	.024 (.020, .027)
Age 50	.022 (.019, .025)
Age 51	.022 (.019, .026)
Age 52	.019 (.016, .023)
Age 53	.021 (.018, .025)
Age 54	.018 (.015, .021)
Age 55	.016 (.013, .019)
Age 56	.015 (.011, .019)
Age 57	.013 (.009, .016)
Age 58	.010 (.007, .014)
Age 59	.008 (.004, .012)
Age 60	.004 (.001 .008)
Age 61	.002 (-.001, .006)
Age 62	-.002 (-.006, .001)
Age 63	-.003 (-.007, .000)
Age 64	-.007 (-.010, -.003)
Age 65	-.008 (-.012, -.005)
Age 66	-.008 (-.012, -.005)
Age 67	-.011 (-.014, -.007)
Age 68	-.011 (-.015, -.007)
Age 69	-.013 (-.017, -.009)
Age 70	-.014 (-.018, -.0101)
Age 71	-.015 (-.019, -.011)
Age 72	-.016 (-.020, -.011)

Age 73	-.017 (-.021, -.013)
Age 74	-.017 (-.021, -.013)
Age 75	-.018 (-.022, -.014)
Age 76	-.019 (-.023, -.014)
Age 77	-.019 (-.023, -.014)
Age 78	-.020 (-.024, -.011)
Age 79	-.020 (-.025, -.016)
Age 80	-.025 (-.029, -.020)
Male	-.014 (-.014, -.014)
Self-employed	.007(.006, .007)
Out of work >1yr	.084 (.082, .087)
Out of work <1yr	.057 (.056, .059)
Homemaker	.016 (.015, .017)
Student	.010 (.009, .012)
Retired	.023 (.023, .024)
Unable to work	.176 (.175, .178)
Refused lmkt status	.029 (.023, .035)
Divorced	.027 (.026, .028)
Widowed	.018 (.017, .019)
Separated	.059 (.057, .061)
Never married	.011 (.010, .011)
Member unmarried couple	.012 (.011, .014)
Refuse marital status	.019 (.015, .022)
BMI*100	.100 (.096, .104)
Alaska	-.026 (-.031, -.021)
Arizona	-.011 (-.014, -.007)
Arkansas	-.006 (-.009, -.003)
California	-.012 (-.015, -.009)
Colorado	-.014 (-.018, -.011)
Connecticut	-.009 (-.011, -.007)
Delaware	-.003 (-.006, .001)
DC	-.015 (-.021, -.009)
Florida	-.003 (-.006, .001)
Georgia	-.006 (-.008, -.003)
Hawaii	-.019 (-.024, -.014)
Idaho	-.013 (-.015, -.010)
Illinois	-.014 (-.017, -.012)
Indiana	-.004 (-.007, -.002)
Iowa	-.012 (-.015, -.010)
Kansas	-.010 (-.012, -.008)
Kentucky	.017 (.008, .027)
Louisiana	-.007 (-.011, -.003)
Maine	-.012 (-.015, -.010)
Maryland	-.010 (-.014, -.006)
Massachusetts	-.006 (-.009, -.004)
Michigan	-.008 (-.010, -.006)

Minnesota	-.015 (-.017, -.013)
Mississippi	.001 (-.002, .003)
Missouri	-.003 (-.006, -.000)
Montana	-.015 (-.019, -.011)
Nebraska	-.016 (-.019, -.014)
Nevada	-.011 (-.016, -.007)
New Hampshire	-.010 (-.013, -.008)
New Jersey	-.005 (-.008, -.002)
New Mexico	-.008 (-.012, -.003)
New York	-.013 (-.016, -.009)
North Carolina	-.003 (-.005, -.001)
North Dakota	-.023 (-.027, -.019)
Ohio	-.003 (-.005, -.001)
Oklahoma	.001 (-.003, .004)
Oregon	-.008 (-.011, -.005)
Pennsylvania	-.009 (-.012, -.007)
Rhode Island	-.007 (-.009, -.004)
South Carolina	-.005 (-.007, -.002)
South Dakota	-.018 (-.021, -.015)
Tennessee	-.002 (-.006, .001)
Texas	-.009 (-.012, -.006)
Utah	-.008 (-.015, -.006)
Vermont	-.012 (-.015, -.009)
Virginia	-.010 (-.013, -.006)
Washington	-.013 (-.015, -.010)
West Virginia	.005 (-.000, .009)
Wisconsin	-.012 (-.015, -.010)
Wyoming	-.017 (-.021, -.012)
Black non-Hispanic	-.016 (-.017, -.015)
Asian/Pacific islander	-.007 (-.007, -.005)
Native American	.007 (.005, .010)
Other races	.020 (.018, .022)
Hispanic	-.007 (-.007, -.006)
Refuse race	.013 (.011, .015)
Smoker	.022 (.022, .023)
Grades 1-8	.006 (.001, .012)
Grades 9-11	.001 (-.004, .007)
HSG/GED	-.015 (-.020, -.009)
1-3 yrs college	-.016 (-.022, -.011)
>=4yrs college	-.028 (-.034, -.023)
Refuse education	-.012 (-.019, -.005)
Constant	.0078
N	7,432,061
R <sup>2</sup>	.0611

**Figure C. Rising Extreme-Distress Among Middle-Aged Adults in the USA**  
*Non-College Further Subsamples*

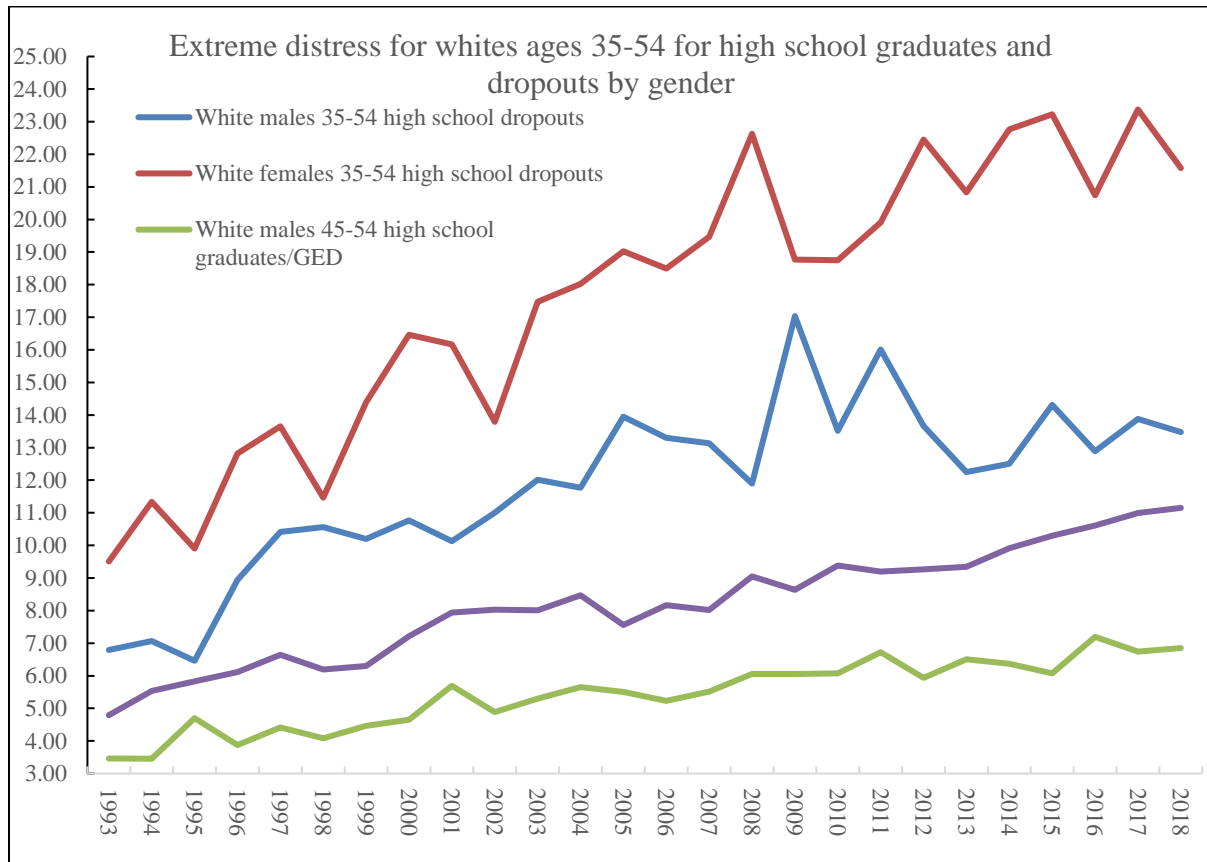


### Notes

The paper's proxy measure of 'extreme distress' is depicted on the vertical axis. It is the % of people who give the extreme answer of 30 days in response to the BRFSS question: Question. "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"

**Figure D. Rising Extreme-Distress Among Middle-Aged Adults in the USA**

*No-College Subsamples*

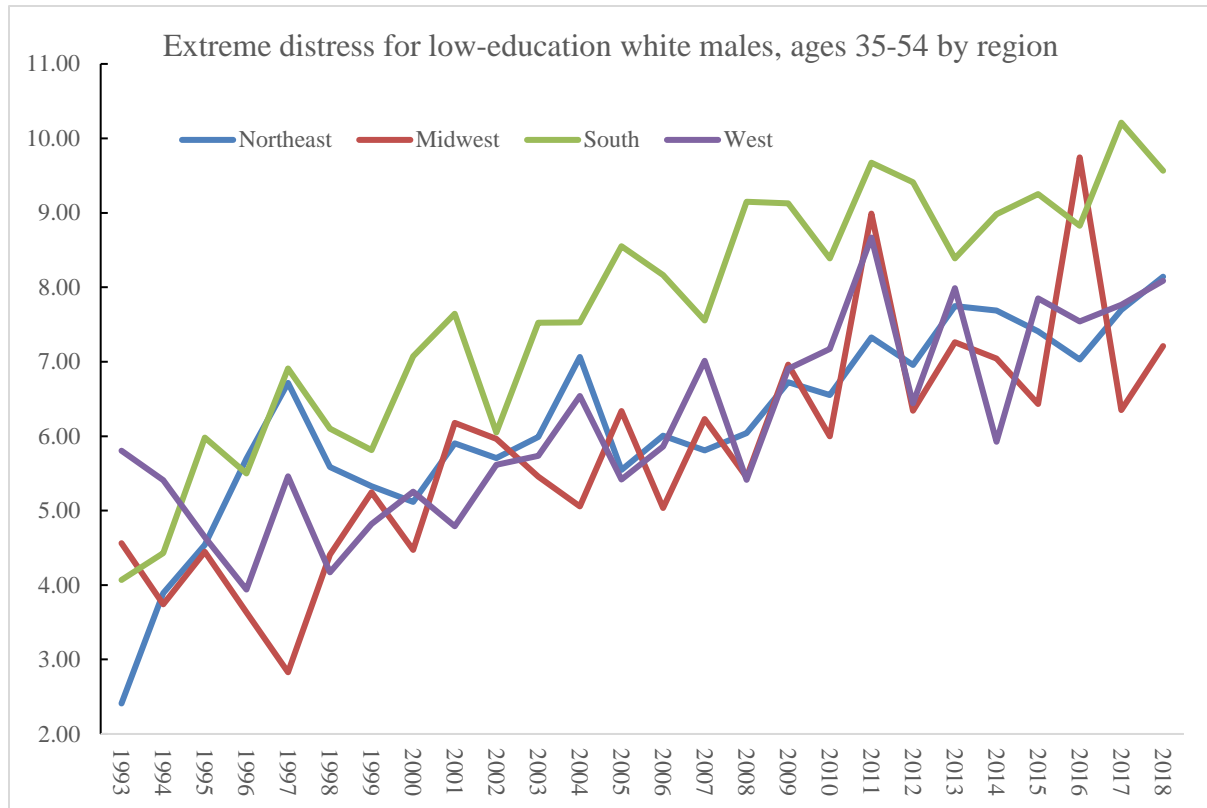


Notes

The paper's proxy measure of 'extreme distress' is depicted on the vertical axis. It is the % of people who give the extreme answer of 30 days in response to the BRFSS question: Question. "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"

**Figure E. Rising Extreme-Distress Among Middle-Aged Adults in the USA**

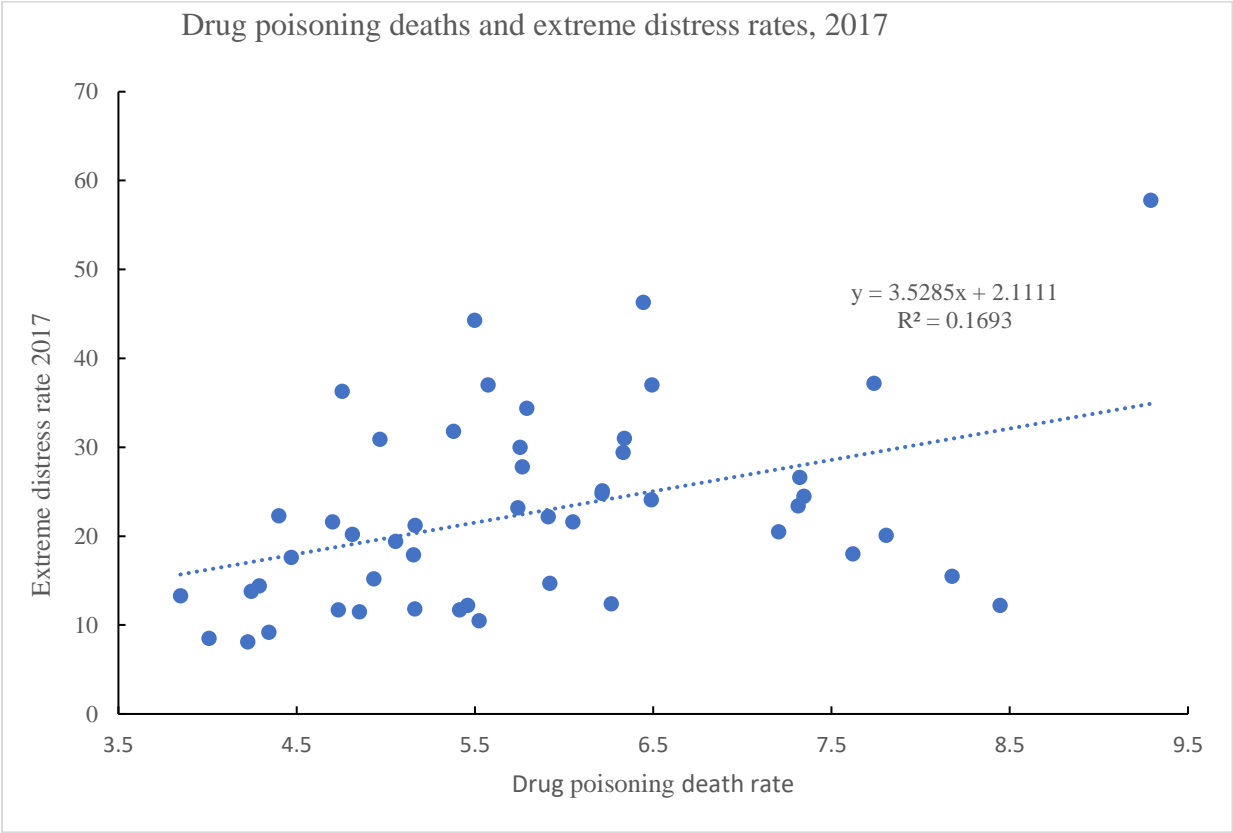
*White Males By Geographical Region*



Notes

The paper's proxy measure of 'extreme distress' is depicted on the vertical axis. It is the % of people who give the extreme answer of 30 days in response to the BRFSS question: Question. *"Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"*

**Figure F. The Correlation Between Drug Poisoning and Extreme Distress by State**

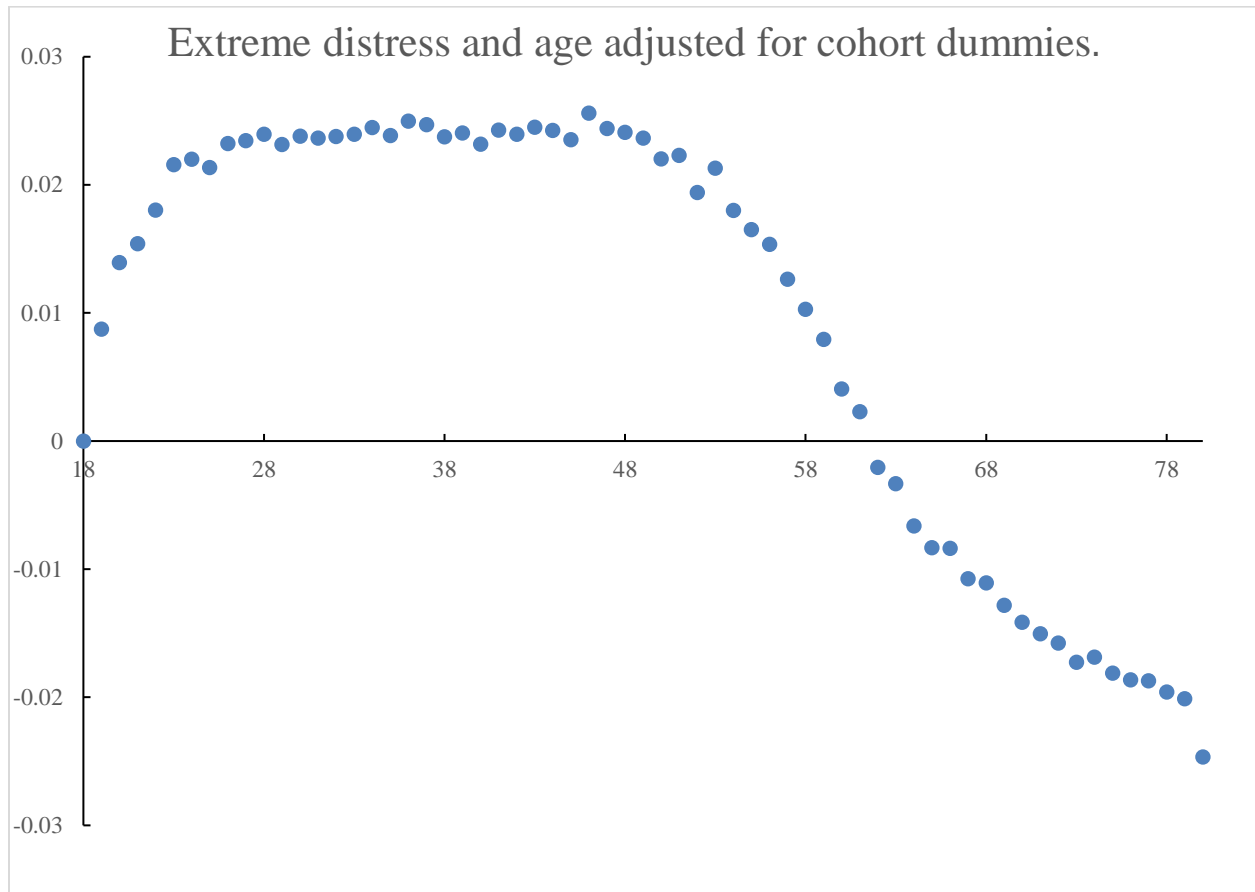


Notes

Further plots -- of state-level correlations between extreme distress levels and other variables (Trump voting, homicide, etc) -- are available on request from the authors.



**Figure G. Profile of the Age Dummies**



Notes

Along with other independent variables, banded five-year birth-cohort dummies are included in the regression equation.

**Table F. OLS Regressions of Extreme Distress 1993- 2019**

[The Full Specification of the Equation in Table 2 in the Paper]

	All	Whites	Non-whites
State Manufacturing%*100	-.044 (-.079, -.009)	-.066 (-.103, -.029)	.031 (-.026, .088)
1994	.003 (-.000, .006)	.003 (-.000, .006)	.004 (-.003, .010)
1995	.007 (.004, .011)	.008 (.003, .011)	.007 (.000, .013)
1996	.007 (.003, .011)	.007 (.002, .012)	.007 (.001, .014)
1997	.007 (.003, .012)	.007 (.002, .012)	.007 (.001, .014)
1998	.009 (.005, .013)	.009 (.004, .013)	.010 (.004, .016)
1999	.009 (.004, .013)	.009 (.003, .014)	.008 (.002, .015)
2000	.009 (.005, .012)	.009 (.005, .013)	.006 (.000, .012)
2001	.011 (.007, .0159)	.011 (.006, .015)	.011 (.004, .017)
2002	.007 (.001, .013)	.007 (.000, .014)	.005 (-.002, .013)
2003	.009 (.005, .012)	.008 (.005, .012)	.009 (.003, .015)
2004	.011 (.007, .014)	.010 (.006, .013)	.013 (.007, .019)
2005	.008 (.005, .011)	.007 (.004, .011)	.009 (.003, .015)
2006	.010 (.006, .013)	.009 (.006, .012)	.011 (.005, .017)
2007	.008 (.005, .012)	.008 (.005, .011)	.009 (.003, .016)
2008	.009 (.006, .012)	.009 (.006, .012)	.011 (.004, .017)
2009	.008 (.005, .012)	.007 (.004, .010)	.012 (.006, .019)
2010	.010 (.006, .013)	.009 (.006, .012)	.012 (.005, .018)
2011	.009 (.006, .012)	.008 (.005, .012)	.012 (.005, .018)
2012	.010 (.007, .013)	.010 (.006, .013)	.012 (.006, .018)
2013	.008 (.004, .011)	.007 (.003, .011)	.010 (.003, .016)
2014	.009 (.005, .012)	.009 (.005, .012)	.009 (.003, .016)
2015	.010 (.006, .013)	.010 (.005, .013)	.010 (.004, .016)
2016	.011 (.008, .015)	.011 (.007, .015)	.012 (.006, .019)
2017	.015 (.011, .018)	.014 (.010, .018)	.016 (.009, .023)
2018	.016 (.012, .019)	.015 (.011, .019)	.017 (.011, .024)
2019	.018 (.011, .025)	.018 (.010, .026)	.019 (.008, .031)
Age 19	.009 (.006, .011)	.012 (.009, .015)	.003 (-.001, .007)
Age 20	.014 (.011, .016)	.016 (.013, .018)	.010 (.006, .015)
Age 21	.015 (.012, .017)	.017 (.014, .020)	.010 (.006, .014)

Age 22	.017 (.014, .019)	.020 (.017, .022)	.011 (.007, .016)
Age 23	.020 (.018, .023)	.022 (.019, .025)	.016 (.012, .020)
Age 24	.020 (.018, .023)	.022 (.019, .024)	.017 (.012, .021)
Age 25	.019 (.016, .022)	.022 (.019, .025)	.012 (.008, .016)
Age 26	.021 (.018, .023)	.023 (.020, .026)	.015 (.010, .019)
Age 27	.021 (.018, .023)	.023 (.020, .025)	.016 (.011, .020)
Age 28	.021 (.018, .023)	.023 (.020, .026)	.015 (.011, .019)
Age 29	.020 (.017, .022)	.021 (.018, .024)	.015 (.011, .019)
Age 30	.020 (.018, .022)	.022 (.019, .024)	.016 (.012, .020)
Age 31	.020 (.017, .022)	.022 (.019, .024)	.015 (.010, .019)
Age 32	.019 (.017, .022)	.022 (.020, .025)	.013 (.009, .017)
Age 33	.019 (.017, .022)	.022 (.019, .025)	.015 (.011, .019)
Age 34	.020 (.018, .023)	.022 (.019, .025)	.016 (.011, .020)
Age 35	.019 (.017, .022)	.021 (.019, .024)	.015 (.010, .019)
Age 36	.020 (.018, .023)	.022 (.019, .024)	.017 (.012, .021)
Age 37	.020 (.018, .023)	.021 (.019, .024)	.017 (.013, .022)
Age 38	.019 (.017, .021)	.020 (.018, .023)	.016 (.012, .020)
Age 39	.019 (.017, .021)	.022 (.019, .024)	.013 (.008, .017)
Age 40	.018 (.016, .021)	.021 (.018, .023)	.013 (.008, .017)
Age 41	.020 (.017, .022)	.020 (.017, .023)	.019 (.015, .024)
Age 42	.019 (.017, .022)	.022 (.018, .023)	.017 (.013, .021)
Age 43	.020 (.018, .022)	.021 (.018, .024)	.017 (.013, .021)
Age 44	.020 (.017, .022)	.021 (.017, .023)	.019 (.015, .024)
Age 45	.019 (.016, .022)	.021 (.018, .023)	.015 (.010, .019)
Age 46	.021 (.019, .024)	.023 (.020, .025)	.018 (.013, .022)
Age 47	.020 (.018, .023)	.021 (.018, .024)	.019 (.014, .024)
Age 48	.020 (.018, .022)	.021 (.018, .023)	.019 (.014, .024)
Age 49	.020 (.017, .022)	.020 (.017, .023)	.020 (.015, .024)
Age 50	.018 (.015, .020)	.019 (.016, .021)	.016 (.012, .021)
Age 51	.018 (.016, .021)	.020 (.017, .022)	.016 (.012, .021)
Age 52	.016 (.013, .018)	.017 (.015, .020)	.012 (.008, .017)
Age 53	.018 (.015, .020)	.019 (.016, .021)	.016 (.011, .021)
Age 54	.014 (.012, .017)	.016 (.013, .018)	.013 (.008, .018)

Age 55	.013 (.011, .015)	.015 (.012, .017)	.010 (.006, .015)
Age 56	.012 (.010, .014)	.014 (.011, .016)	.007 (.003, .012)
Age 57	.009 (.007, .012)	.011 (.008, .014)	.006 (.001, .011)
Age 58	.007 (.005, .010)	.009 (.006, .012)	.003 (-.002, .008)
Age 59	.005 (.004, .007)	.006 (.003, .009)	.004 (-.001, .009)
Age 60	.001 (-.002, .003)	.003 (.001, .006)	-.006 (-.011, .002)
Age 61	-.001 (-.004, .001)	.001 (-.002, .004)	-.005 (-.010, .000)
Age 62	-.005 (-.008, -.003)	-.003 (-.006, -.001)	-.011 (-.015, .006)
Age 63	-.007 (-.009, -.004)	-.004 (-.007, -.002)	-.013 (-.018, .008)
Age 64	-.010 (-.012, -.008)	-.008 (-.010, -.004)	-.018 (-.023, .013)
Age 65	-.012 (-.014, -.010)	-.009 (-.011, -.006)	-.022 (-.026, .017)
Age 66	-.012 (-.014, -.010)	-.009 (-.011, -.006)	-.020 (-.025, .015)
Age 67	-.014 (-.017, -.012)	-.011 (-.013, -.008)	-.025 (-.030, .020)
Age 68	-.015 (-.017, -.012)	-.012 (-.014, -.009)	-.025 (-.030, .020)
Age 69	-.017 (-.019, -.014)	-.013 (-.015, -.010)	-.028 (-.033, .023)
Age 70	-.018 (-.020, -.016)	-.015 (-.018, -.012)	-.026 (-.031, .021)
Age 71	-.019 (-.021, -.016)	-.015 (-.018, -.013)	-.029 (-.034, .023)
Age 72	-.019 (-.022, -.017)	-.015 (-.018, -.013)	-.034 (-.039, .029)
Age 73	-.021 (-.023, -.019)	-.017 (-.020, -.014)	-.034 (-.039, .029)
Age 74	-.020 (-.023, -.018)	-.017 (-.020, -.014)	-.030 (-.036, -.025)
Age 75	-.021 (-.024, -.019)	-.019 (-.022, -.016)	-.026 (-.031, -.021)
Age 76	-.022 (-.024, -.019)	-.018 (-.021, -.016)	-.031 (-.037, .026)
Age 77	-.021 (-.024, -.019)	-.018 (-.021, -.016)	-.030 (-.036, .025)
Age 78	-.022 (-.025, -.019)	-.019 (-.022, -.016)	-.029 (-.035, .024)
Age 79	-.022 (-.025, -.020)	-.019 (-.022, -.015)	-.034 (-.040, .028)
Age 80	-.027 (-.029, -.024)	-.024 (-.027, -.022)	-.032 (-.036, .028)
Male	-.014 (-.014, -.013)	-.014 (-.015, -.014)	-.015 (-.015, .014)
Self-employed	.007 (.006, .007)	.007 (.006, .008)	.005 (.004, .007)
Out of work >1yr	.085 (.083, .087)	.093 (.090, .096)	.065 (.062, .068)
Out of work <1yr	.057 (.056, .059)	.064 (.061, .066)	.043 (.041, .046)
Homemaker	.016 (.015, .016)	.016 (.015, .017)	.014 (.012, .015)
Student	.011 (.003, .012)	.009 (.007, .010)	.011 (.009, .013)
Retired	.023 (.023, .024)	.022 (.021, .023)	.031 (.029, .032)

Unable to work	.176 (.174, .178)	.189 (.186, .191)	.147 (.144, .150)
Refused lmkt status	.029 (.023, .034)	.030 (.022, .038)	.025 (.018, .031)
Divorced	.027 (.026, .028)	.027 (.026, .027)	.024 (.023, .026)
Widowed	.018 (.017, .019)	.018 (.017, .019)	.016 (.015, .018)
Separated	.059 (.057, .061)	.077 (.074, .079)	.034 (.032, .037)
Never married	.011 (.010, .012)	.011 (.011, .0121)	.009 (.008, .010)
Member unmarried couple	.013 (.012, .014)	.014 (.013, .016)	.008 (.006, .010)
Refuse marital status	.019 (.015, .022)	.021 (.017, .025)	.019 (.013, .026)
BMI	.001 (.001, .001)	.001 (.001, .001)	.001 (.001, .001)
Alaska	-.026 (-.031, -.021)	-.024 (-.029, -.019)	-.032 (-.040, .024)
Arizona	-.011 (-.014, -.007)	-.013 (-.017, -.009)	-.002 (-.008, .003)
Arkansas	-.006 (-.009, -.003)	-.008 (-.011, -.004)	-.003 (-.007, .001)
California	-.012 (-.015, -.009)	-.013 (-.017, -.010)	-.005 (-.010, .001)
Colorado	-.014 (-.018, -.011)	-.018 (-.022, -.013)	-.003 (-.008, .003)
Connecticut	-.009 (-.011, -.007,)	-.011 (-.014, -.009)	.001 (-.003, .005)
Delaware	-.003 (-.006, .001)	-.006 (-.010, -.002)	.004 (-.001, .010)
DC	-.015 (-.021, -.009)	-.025 (-.032, -.019)	.003 (-.006, .012)
Florida	-.003 (-.006, .001)	-.007 (-.011, -.002)	.010 (.004, .017)
Georgia	-.006 (-.008, -.003)	-.008 (-.011, -.005)	-.001 (-.006, .004)
Hawaii	-.019 (-.024, -.014)	-.020 (-.026, -.015)	-.008 (-.016, .001)
Idaho	-.013 (-.015, -.010)	-.016 (-.019, -.013)	-.002 (-.008, .004)
Illinois	-.014 (-.016, -.012)	-.017 (-.019, -.014)	-.008 (-.012, .004)
Indiana	-.004 (-.006, -.002)	-.006 (-.009, -.003)	-.002 (-.007, .003)
Iowa	-.012 (-.014, -.010)	-.014 (-.017, -.012)	-.004 (-.009, .002)
Kansas	-.010 (-.012, -.008)	-.013 (-.015, -.010)	-.002 (-.005, .002)
Kentucky	.018 (.008, .027)	.015 (.006, .025)	.012 (.004, .020)
Louisiana	-.007 (-.011, -.003)	-.010 (-.015, -.006)	.002 (-.003, .008)
Maine	-.012 (-.015, -.010)	-.016 (-.019, -.013)	.007 (-.006, .019)
Maryland	-.010 (-.014, -.006)	-.014 (-.018, -.010)	-.001 (-.007, .005)
Massachusetts	-.006 (-.009, -.004)	-.011 (-.014, -.007)	.010 (.005, .014)
Michigan	-.008 (-.010, -.006)	-.010 (-.012, -.008)	-.002 (-.006, .002)
Minnesota	-.015 (-.017, -.012)	-.018 (-.020, -.015)	-.002 (-.006, .003)
Mississippi	.001 (-.002, .003)	.001 (-.002, .004)	.003 (-.001, .007)

Missouri	-.003 (-.006, -.000)	-.007 (-.011, -.004)	.010 (.005, .016)
Montana	-.015 (-.019, -.010)	-.018 (-.023, -.014)	-.008 (-.015, .000)
Nebraska	-.016 (-.016, -.014)	-.019 (-.022, -.016)	-.008 (-.013, .003)
Nevada	-.011 (-.016, -.007)	-.016 (-.022, -.010)	.002 (-.006, .009)
New Hampshire	-.010 (-.013, -.008)	-.013 (-.016, -.010)	.002 (-.007, .011)
New Jersey	-.005 (-.008, -.002)	-.008 (-.012, -.004)	.005 (.000, .010)
New Mexico	-.008 (-.012, -.003)	-.013 (-.018, -.008)	.006 (-.001, .013)
New York	-.013 (-.016, -.009)	-.017 (-.021, -.013)	.000 (-.006, .006)
North Carolina	-.003 (-.005, -.001)	-.004 (-.006, -.000)	-.004 (-.007, -.001)
North Dakota	-.023 (-.026, -.019)	-.026 (-.030, -.022)	-.015 (-.023, .007)
Ohio	-.003 (-.005, -.001)	-.007 (-.009, -.004)	.011 (.007, .015)
Oklahoma	.001 (-.003, .004)	-.004 (-.007, .000)	.011 (.006, .017)
Oregon	-.008 (-.011, -.005)	-.011 (-.014, -.008)	.002 (-.004, .007)
Pennsylvania	-.009 (-.012, -.007)	-.014 (-.016, -.010)	.005 (.001, .010)
Rhode Island	-.007 (-.009, -.004)	-.010 (-.012, -.006)	.002 (-.003, .007)
South Carolina	-.005 (-.007, -.003)	-.005 (-.007, -.001)	-.004 (-.007, .001)
South Dakota	-.018 (-.021, -.015)	-.019 (-.021, -.016)	-.023 (-.027, .018)
Tennessee	-.002 (-.006, .001)	-.005 (-.009, -.001)	-.002 (-.007, .004)
Texas	-.009 (-.012, -.006)	-.011 (-.015, -.008)	.000 (-.005, .005)
Utah	-.008 (-.011, -.006)	-.011 (-.014, -.009)	.000 (-.005, .005)
Vermont	-.012 (-.015, -.010)	-.015 (-.018, -.013)	.007 (-.001, .015)
Virginia	-.010 (-.012, -.006)	-.013 (-.017, -.010)	-.002 (-.007, .004)
Washington	-.013 (-.015, -.010)	-.016 (-.019, -.013)	-.004 (-.008, .000)
West Virginia	.005 (.000, .009)	-.000 (-.005, .004)	.018 (.009, .027)
Wisconsin	-.012 (-.015, -.010)	-.015 (-.018, -.012)	.000 (-.005, .005)
Wyoming	-.017 (-.021, -.012)	-.021 (-.026, -.012)	-.004 (-.012, .005)
Black non-Hispanic	-.016 (-.017, -.015)		
Asian/Pacific islander	-.006 (-.008, -.005)		.004 (.002, .006)
Native American	.007 (.005, .009)		.024 (.022, .027)
Other races	.020 (.018, .022)		.032 (.030, .034)
Hispanic	-.007 (-.008, -.006)		.008 (.007, .010)
Refuse race	.013 (.011, .015)		n/a
Smoker	.022 (.021, .0238)	.020 (.020, .020)	.030 (.029, .031)

Grades 1-8	.006 (.001, .0118)	.018 (.011, .025)	-.007 (-.015, .000)
Grades 9-11	.001 (-.005, .006)	.007 (.000, .015)	-.009 (-.017, .001)
HSG/GED	-.015 (-.021, -.010)	-.012 (-.020, -.005)	-.020 (-.028, -.012)
1-3 yrs college	-.017 (-.022, -.011)	-.015 (-.023, -.008)	-.016 (-.024, .008)
>=4yrs college	-.027 (-.034, -.023)	-.027 (-.034, -.020)	-.028 (-.036, .020)
Refuse education	-.012 (-.019, -.005)	-.008 (-.017, .000)	-.014 (-.026, .003)
Constant	.0078	.0082	-.0097
N	7,432,061	5,901,896	1,455,077
R <sup>2</sup>	.0610	.0650	.0509

#### Notes

Non-white excludes 'race refused'

**Table G. OLS Regressions of Extreme Distress for Sub-Periods**

	<u>1993-1996</u>	<u>2015-2019</u>	<u>2015-2019</u>
Unable to work	.153 (.149, .156)	.173 (.172, .175)	.091 (.089, .093)
Self-employed	.004 (.002, .006)	.006 (.005, .007)	.005 (.003, .006)
Out of work ≥1 year	.068 (.063, .073)	.087 (.084, .089)	.057 (.055, .060)
Out of work < 1 year	.043 (.039, .047)	.060 (.058, .063)	.046 (.043, .048)
Homemaker	.010 (.008, .013)	.019 (.017, .021)	.011 (.009, .012)
Student	.009 (.006, .013)	.006 (.003, .008)	.002 (.001, .004)
Retired	.015 (.013, .018)	.025 (.024, .026)	.013 (.011, .014)
Education Grades 1- 8	.025 (.017, .033)	.001 (-.010, .012)	.002 (.009, .013)
Grades 9- 11	.011 (.003, .018)	.002 (-.009, .013)	.009 (.003, .020)
Grade 12/GED	-.001 (-.008, .006)	-.015 (-.025, -.004)	.001 (.011, .012)
College 1-3 years	-.003 (-.011, .004)	-.014 (-.025, -.003)	.002 (.009, .014)
College ≥4 years	-.011 (-.018, -.003)	-.027 (-.038, -.017)	-.004 (.015, .007)
Divorced	.025 (.023, .027)	.027 (.026, .028)	.017 (.016, .018)
Widowed	.018 (.015, .020)	.019 (.018, .020)	.013 (.011, .014)
Separated	.057 (.053, .061)	.054 (.052, .057)	.040 (.037, .042)
Single	.005 (.003, .007)	.013 (.012, .014)	.007 (.006, .008)
Living together	.009 (.005, .014)	.014 (.012, .016)	.008 (.006, .010)
Black non-Hispanic	-.007 (-.009, -.004)	-.018 (-.019, -.016)	-.020 (.022, -.019)
Asian/Pacific Islanders	-.006 (-.011, -.002)	-.011 (-.014, -.009)	-.012 (.015, -.010)
Native American	.010 (.004, .016)	.007 (.004, .010)	.001 (.002, .004)
Other	.008 (-.001, .016)	.018 (.016, .021)	.009 (.007, .012)
Hispanic	.002 (-.001, .005)	-.009 (-.011, -.008)	-.012 (.013, -.010)
Race refused	.019 (.004, .034)	.015 (.012, .018)	.009 (.006, .012)
BMI*100	.072 (.060, .086)	.019 (.012, .021)	.003 (.000, .007)
Male	-.013 (-.015, -.012)	-.014 (-.015, -.013)	-.013 (.013, -.012)
Smoked 30 cigarettes ever	.016 (.015, .017)	.026 (.025, .027)	.018 (.017, .018)
Rent home			.009 (.008, .010)
Other home type			.018 (.016, .020)
Veteran			.012 (.011, .013)
Health insurance			-.015 (.016, -.014)
# children			.000 (.001, .000)
Blind			.035 (.033, .036)
Heart			.002 (.000, .004)
Angina			.007 (.005, .008)
Stroke			.008 (.006, .010)
Asthma			.016 (.015, .017)
Skin cancer			.005 (.004, .006)
COPD			.023 (.022, .024)
Arthritis			-.008 (.009, -.008)
Kidney			.006 (.004, .008)
Diabetes			.003 (.002, .004)
Difficulty climbing stairs			.018 (.017, .020)
Difficulty dressing/bathing			.043 (.041, .045)
Difficulty doing errands			.097 (.095, .099)
Any exercise last 30 days			-.020 (.021, -.019)
Cell phone survey		.003 (.002, .004)	.002 (.001, .003)
1994	.0033 (.002, .005)		
1995	.0073 (.006, .009)		



1996	.0071 (.005 .009)		
2016		.002 (.001, .002)	.002 (.001, .003)
2017		.005 (.004, .005)	.004 (.003, .005)
2018		.006 (.005, .007)	.006 (.005, .007)
2019		.007 (.003, .010)	.007 (.003, .010)
Constant	-.0071	.0406	.0474
N	423,069	1,591,858	1,497,191
Adjusted R <sup>2</sup>	.0339	.0406	.0678

### Notes

All equations include a full set of age dummies, and 50 state and District of Columbia dummies, plus Guam, Puerto Rico and Virgin Islands. Excluded categories” own home; white; employee; married; and no formal education. 95% confidence intervals in parentheses.

Extreme distress here is measured as those who give the answer 30 to the BRFSS question “*Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?*”

**Table H. OLS Regressions of Extreme Distress, Whites Age 35-54 With <=High School Education, 2015-2019.**

Unable to work	.026 (.017, .034)	.011 (.003, .019)
Self-employed	.007 (.001, .014)	.003 (-.003, .010)
Out of work ≥1 year	.134 (.123, .144)	.067 (.057, .078)
Out of work < 1 year	.083 (.072, .095)	.049 (.038, .061)
Homemaker	.058 (.018, .097)	.040 (.000, .079)
Student	.052 (.037, .067)	.010 (-.005, .025)
Retired	.214 (.208, .220)	.079 (.071, .086)
Education Grades 1- 8	.054 (-.008, .115)	.055 (-.008, .117)
Grades 9- 11	.023 (-.038, .084)	.034 (-.028, .095)
Grade 12/GED	-.002 (-.062, .059)	.023 (-.038, .085)
Divorced	.034 (.029, .040)	.019 (.014, .025)
Widowed	.042 (.029, .055)	.031 (.019, .044)
Separated	.081 (.071, .092)	.052 (.042, .063)
Single	.014 (.008, .020)	.005 (-.002, .011)
Living together	.008 (-.003, .019)	-.004 (-.015, .007)
BMI	.001 (.001, .001)	.000 (-.027, .028)
Male	-.038 (-.042, -.033)	-.027 (-.032, -.023)
Smoked	.037 (.032, .041)	.020 (.016, .024)
Cell	.009 (.005, .014)	.015 (.010, .020)
Rent home		.042 (.032, .052)
Other home type		.010 (.002, .017)
Veteran		-.019 (-.025, -.013)
Health insurance		-.001 (-.003, .001)
# children		.049 (.041, .058)
Blind		.009 (-.002, .021)
Heart		.000 (-.013, .012)
Angina		.003 (-.009, .015)
Stroke		.018 (.012, .023)
Asthma		.004 (-.007, .014)
Skin cancer		.046 (.038, .053)
COPD		-.016 (-.020, -.012)
Arthritis		-.011 (-.023, .002)
Kidney		.009 (.002, .015)
Diabetes		.036 (.029, .043)
Difficulty climbing stairs		.039 (.029, .049)
Difficulty dressing/bathing		.162 (.154, .170)
Difficulty doing errands alone		-.030 (-.034, -.026)
Any exercise last 30 days		.006 (.001, .010)
2016	.002 (-.003, 0.008)	.004 (-.001, .010)
2017	.004 (-.001, 0.010)	.004 (-.001, .010)
2018	.007 (.001, 0.013)	.008 (.002, .014)
2019	.023 (.001, 0.046)	.029 (.007, .051)
Constant	.0338	.0979
N	83,750	78,227
Adjusted R <sup>2</sup>	.1050	.1482

Notes All equations include 50 state dummies plus Guam, Puerto Rico and Virgin Islands, and 19 single year-of-age dummies from age 36-54 (not reported). Equations also include marital and labor market status refused variables. 95% confidence intervals in parentheses

Extreme distress here is measured as those who give the answer 30 to the BRFSS question *“Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?”*

**Table I. Time-Series Weighted Means**

	1993-1996	2015-2019
<u>Full sample</u>		
Extreme distress	4.0%	5.7%
Employed for wages	54.2	47.5
Self-employed	8.1	8.8
Out of work for 1 year or more	1.8	2.7
Out of work for less than 1 year	2.6	2.9
Homemaker	8.3	6.5
Student	4.6	5.8
Retired	16.8	17.9
Unable to work	2.9	6.9
Married	60.4	50.2
Divorced	8.7	10.8
Widowed	7.3	6.9
Separated	2.2	2.6
Never married	18.9	24.0
Living together	2.3	4.8
White non-Hispanic	78.0	61.9
Black non-Hispanic	9.2	11.6
Asian/Pacific Islander non-Hispanic	2.3	5.3
Native American	0.8	1.0
Other	0.6	1.8
Hispanic	8.9	16.6
Smoked 100 cigarettes ever	47.7	43.4
Never attended school/kindergarten	1.0	0.3
Grades 1 through 8 (Elementary)	4.9	4.7
Grades 9 through 11	8.9	8.9
Grade 12 or GED (High school grad	32.37	28.1
College 1 year to 3 years	26.8	30.9
College 4 years or more	25.5	26.7
BMI	25.6	27.9
<u>White less-educated age 35-54 sample</u>		
Extreme distress	5.6	10.5
Employed for wages	65.0	55.0
Self-employed	11.1	12.5
Out of work for 1 year or more	2.6	4.3
Out of work for less than 1 year	2.8	3.2
Homemaker	11.0	7.5
Student	0.3	0.2
Retired	1.2	1.7
Unable to work	5.3	14.9
Married	76.0	58.4
Divorced	13.2	17.8
Widowed	1.7	2.5
Separated	2.4	3.9
Never married	5.4	13.7
Living together	1.3	3.7
Smoked 100 cigarettes ever	62.6	63.5
Never attended school/kindergarten	2.0	0.2
Grades 1 through 8 (Elementary)	3.6	4.1
Grades 9 through 11	13.2	18.1
Grade 12 or GED (High school graduate)	81.2	77.7
BMI	26.5	29.3

**Table J. Percentages of Those in Extreme Distress and Those Not, 2015-2019**

	<u>Ex dist.</u>	<u>Not in Ex dist.</u>
Unable to work	26.6%	5.5%
Ever had depressive disorder	62.2	14.9
BMI	29.3	27.8
Male	41.9	49.1
Age	46.1	47.2
Smoker ever	60.1	39.8
Veteran	10.2	10.6
Health insurance	84.4	88.4
% with children	35.4	36.5
Blind	14.1	4.1
Deaf (2016-2019 only)	11.5	5.6
Any exercise last 30 days	56.9	75.5
Heart attack	8.3	4.0
Angina	8.0	3.9
Stroke	7.3	2.8
Asthma	25.7	13.1
Skin cancer	5.9	5.9
COPD	17.4	5.7
Arthritis	43.2	23.6
Depressive	62.2	14.9
Kidney	6.2	2.7
Diabetes	16.7	10.3
Difficulty concentrating or remembering	48.0	8.3
Difficulty walking	38.2	12.2
Difficulty dressing	16.7	3.0
Difficulty doing errands alone	30.3	5.5
Excellent health	6.4	19.3
Very good health	14.5	32.9
Good health	27.3	32.0
Fair health	28.4	12.3
Poor health	23.4	3.5
White only, non-Hispanic	62.0	52.1
Black only, non-Hispanic	12.5	11.5
Native American	1.8	0.9
Asian only, non-Hispanic	2.6	5.5
Multiracial, non-Hispanic	3.0	1.7
Hispanic	15.7	16.5
Never attended school or only kindergarten	0.4	0.3
Grades 1 through 8 (Elementary)	6.5	4.4
Grades 9 through 11 (Some high school)	15.6	8.5
Grade 12 or GED (High school graduate)	32.0	27.9
College 1 year to 3 years (Some college)	32.1	31.1

College 4 years or more (College graduate	13.5	27.9
Employed for wages	32.4	48.7
Self-employed	6.2	9.0
Out of work for 1 year or more	6.0	2.5
Out of work for less than 1 year	5.1	2.8
A homemaker	6.2	6.5
A student	4.4	5.9
Retired	12.3	18.2
Unable to work	26.6	5.6
Married	36.6	51.6
Divorced	17.3	10.4
Widowed	7.9	6.7
Separated	5.6	2.4
Never married	27.0	24.0
Living together	5.7	4.8

**Table K. Percent ‘Unable to Work’ By Year**

	% unable to work	% of the extr. distressed unable to work	unemployed >1 year as % workforce
1993	2.6	13.0	3.2
1994	3.0	15.1	2.7
1995	3.1	14.8	2.6
1996	3.1	13.6	2.6
1997	3.2	16.6	2.5
1998	3.4	15.1	2.2
1999	3.7	17.4	2.3
2000	4.0	17.2	1.9
2001	4.1	18.8	2.1
2002	4.4	19.9	2.6
2003	4.7	20.9	3.0
2004	4.8	20.6	3.4
2005	5.0	23.3	3.1
2006	4.9	23.5	3.0
2007	5.2	24.1	2.9
2008	5.2	23.7	3.3
2009	5.3	22.8	4.9
2010	5.5	24.9	6.6
2011	6.5	26.3	7.5
2012	6.7	27.1	6.4
2013	6.8	27.7	6.1
2014	7.1	29.0	5.1
2015	6.9	27.5	4.6
2016	6.9	27.6	4.1
2017	6.8	24.7	4.4
2018	6.9	25.7	4.0
2019	6.9	27.0	4.5

Column 2 restricts the sample to those with 30 bad mental health days in the last thirty, while the last column limits the sample to the labor force which is employed plus unemployed.

**Table L. Means of Those Unable to Work and Those Not Unable to Work, 2015-2019.**

	Unable to work	Not unable to work
Extreme distress	22.5%	4.5%
Ever had depressive disorder	51.5	15.3
BMI	30.5	27.7
Male	43.7	49.0
Age	52.7	46.8
Non-smoker	38.8	60.5
Veteran	9.3	10.7
Health insurance	90.3	87.9
Children	0.5	0.7
Blind	19.4	3.7
Deaf	13.5	5.5
Any exercise last 30 days	50.2	76.0
Heart attack	13.3	3.6
Angina	12.2	3.6
Stroke	12.5	2.4
Asthma	27.6	12.9
Skin cancer	6.0	6.0
COPD	24.7	5.1
Arthritis	58.7	22.4
Depressive	51.5	15.3
Kidney	10.0	2.4
Diabetes	28.2	9.4
Difficulty concentrating or remembering	46.2	8.2
Difficulty walking	64.3	10.1
Difficulty dressing	27.4	2.1
Difficulty doing errands alone	43.2	4.3
Excellent health	3.7	19.5
Very good health	7.5	33.4
Good health	23.7	32.4
Fair health	35.0	11.8
Poor health	30.1	2.9
White only, non-Hispanic	56.2	62.4
Black only, non-Hispanic	19.1	11.0
Native American	2.2	0.9
Asian only, non-Hispanic	1.8	5.6
Multiracial, non-Hispanic	2.6	1.8
Hispanic	15.9	16.6
Never attended school or only kindergarten	0.6	0.3
Grades 1 through 8 (Elementary)	10.5	4.3
Grades 9 through 11 (Some high school)	22.2	8.0
Grade 12 or GED (High school graduate)	33.6	27.8
College 1 year to 3 years (Some college)	26.2	31.4
College 4 years or more (College graduate)	7.0	28.3



Married	34.1	51.8
Divorced	22.6	10.0
Widowed	10.3	6.7
Separated	6.6	2.3
Never married	22.7	24.3
Living together	3.7	4.9

**Table M. Exploratory OLS Regressions of ‘Unable to Work’, 1993-1996 and 2015-2019**

	1993-1996	2015-2019	2015-2019
1994	.004 (.003, .003)		
1995	.005 (.004, .004)		
1996	.005 (.004, .004)		
2016		.002 (.001, .003)	.003 (.002, .004)
2017		.002 (.001, .003)	.001 (.000, .002)
2018		.004 (.003, .005)	.004 (.003, .005)
2019		-.002 (-.006, .002)	.000 (-.004, .004)
BMI	.002 (.002, .002)	.000 (.000, .000)	.000 (.000, .000)
Male	-.002 (-.003, -.003)	-.016 (-.017, -.015)	-.001 (-.001, .000)
Age	.007 (.006, .006)	.017 (.017, .017)	.016 (.015, .016)
Age squared *100	.000 (.000, .000)	.000 (.000, .000)	.000 (.000, .000)
Black non-Hispanic	.016 (.014, .014)	.034 (.033, .036)	.015 (.014, .016)
Asian non-Hispanic	.001 (-.003, -.003)	.002 (-.001, .005)	-.005 (-.007, -.002)
Native American	.023 (.018, .018)	.053 (.050, .057)	.019 (.016, .023)
Other non-Hispanic	.013 (.006, .006)	.042 (.039, .045)	.009 (.007, .012)
Hispanic	.002 (.000, .000)	-.008 (-.010, -.007)	-.014 (-.015, -.012)
Race refused	.020 (.008, .008)	.030 (.027, .034)	.009 (.006, .012)
Divorced	.032 (.030, .030)	.079 (.077, .080)	.033 (.032, .034)
Widowed	.019 (.017, .017)	.044 (.043, .046)	.010 (.008, .011)
Separated	.046 (.043, .043)	.125 (.122, .127)	.058 (.056, .061)
Never married	.030 (.028, .028)	.080 (.079, .081)	.041 (.040, .042)
Living together	.019 (.016, .016)	.038 (.035, .040)	.013 (.011, .015)
Smoked 100	.012 (.011, .011)	.034 (.033, .035)	.009 (.008, .009)
Alaska	-.026 (-.032, -.032)	-.081 (-.087, -.076)	-.048 (-.053, -.043)
Arizona	-.010 (-.015, -.015)	-.054 (-.058, -.050)	-.035 (-.039, -.032)
Arkansas	-.002 (-.007, -.007)	-.012 (-.017, -.008)	-.012 (-.016, -.008)
California	-.004 (-.009, -.009)	-.066 (-.070, -.062)	-.048 (-.051, -.044)
Colorado	-.009 (-.015, -.015)	-.069 (-.073, -.065)	-.039 (-.042, -.035)
Connecticut	-.017 (-.023, -.023)	-.070 (-.074, -.066)	-.043 (-.046, -.039)
Delaware	-.017 (-.022, -.022)	-.065 (-.070, -.059)	-.043 (-.048, -.039)
DC	-.036 (-.042, -.042)	-.075 (-.080, -.070)	-.053 (-.057, -.048)
Florida	-.015 (-.020, -.020)	-.040 (-.044, -.037)	-.029 (-.032, -.026)
Georgia	-.017 (-.022, -.022)	-.045 (-.049, -.040)	-.031 (-.035, -.027)
Hawaii	-.021 (-.027, -.027)	-.083 (-.087, -.079)	-.051 (-.055, -.047)
Idaho	-.011 (-.016, -.016)	-.055 (-.060, -.050)	-.032 (-.037, -.028)
Illinois	-.014 (-.019, -.019)	-.067 (-.072, -.063)	-.045 (-.049, -.041)
Indiana	-.007 (-.012, -.012)	-.049 (-.053, -.045)	-.031 (-.035, -.028)
Iowa	-.017 (-.022, -.022)	-.074 (-.078, -.070)	-.044 (-.048, -.040)
Kansas	-.014 (-.020, -.020)	-.058 (-.062, -.054)	-.038 (-.041, -.034)
Kentucky	.008 (.004, .004)	-.012 (-.016, -.008)	-.016 (-.019, -.012)
Louisiana	-.005 (-.011, -.011)	-.035 (-.039, -.030)	-.028 (-.032, -.023)
Maine	-.009 (-.015, -.015)	-.047 (-.051, -.043)	-.021 (-.025, -.017)
Maryland	-.024 (-.029, -.029)	-.071 (-.075, -.067)	-.046 (-.050, -.043)
Massachusetts	-.007 (-.013, -.013)	-.054 (-.059, -.050)	-.037 (-.041, -.033)
Michigan	-.006 (-.011, -.011)	-.048 (-.052, -.044)	-.033 (-.036, -.029)
Minnesota	-.020 (-.024, -.024)	-.078 (-.082, -.075)	-.047 (-.050, -.044)
Mississippi	.003 (-.003, -.003)	-.011 (-.016, -.007)	-.009 (-.013, -.004)

Missouri	-.012 (-.018, -.018)	-.040 (-.044, -.036)	-.031 (-.035, -.027)
Montana	-.011 (-.017, -.017)	-.067 (-.072, -.063)	-.044 (-.048, -.039)
Nebraska	-.019 (-.024, -.024)	-.069 (-.073, -.066)	-.041 (-.045, -.038)
Nevada	-.010 (-.015, -.015)	-.067 (-.072, -.062)	-.047 (-.051, -.042)
New Hampshire	-.012 (-.017, -.017)	-.052 (-.056, -.047)	-.029 (-.033, -.025)
New Jersey	-.018 (-.023, -.023)	-.066 (-.070, -.062)	-.047 (-.051, -.044)
New Mexico	-.004 (-.010, -.010)	-.049 (-.053, -.044)	-.027 (-.031, -.023)
New York	-.019 (-.024, -.024)	-.058 (-.061, -.054)	-.039 (-.042, -.036)
North Carolina	-.006 (-.011, -.011)	-.042 (-.047, -.038)	-.027 (-.031, -.023)
North Dakota	-.020 (-.026, -.026)	-.083 (-.088, -.079)	-.048 (-.052, -.044)
Ohio	-.010 (-.015, -.015)	-.052 (-.056, -.048)	-.036 (-.040, -.033)
Oklahoma	-.010 (-.015, -.015)	-.037 (-.041, -.032)	-.032 (-.036, -.028)
Oregon	-.007 (-.012, -.012)	-.060 (-.065, -.055)	-.040 (-.044, -.036)
Pennsylvania	-.010 (-.015, -.015)	-.058 (-.062, -.054)	-.037 (-.041, -.033)
Rhode Island	-.005 (-.010, -.010)	-.048 (-.052, -.043)	-.029 (-.033, -.025)
South Carolina	-.011 (-.017, -.017)	-.037 (-.041, -.034)	-.020 (-.024, -.017)
South Dakota	-.018 (-.023, -.023)	-.073 (-.077, -.068)	-.043 (-.047, -.039)
Tennessee	-.018 (-.022, -.022)	-.016 (-.021, -.012)	-.014 (-.018, -.010)
Texas	-.006 (-.011, -.011)	-.046 (-.050, -.042)	-.034 (-.037, -.030)
Utah	-.008 (-.013, -.013)	-.063 (-.067, -.059)	-.042 (-.045, -.038)
Vermont	-.012 (-.018, -.018)	-.062 (-.067, -.058)	-.034 (-.038, -.030)
Virginia	-.016 (-.021, -.021)	-.064 (-.068, -.060)	-.041 (-.045, -.037)
Washington	-.010 (-.015, -.015)	-.059 (-.063, -.055)	-.038 (-.041, -.034)
West Virginia	.002 (-.003, -.003)	-.011 (-.015, -.006)	-.018 (-.022, -.014)
Wisconsin	-.011 (-.016, -.016)	-.072 (-.077, -.067)	-.041 (-.045, -.037)
Wyoming	-.009 (-.015, -.015)	-.066 (-.071, -.061)	-.042 (-.046, -.037)
Guam		-.080 -.087 -.072	-.063 (-.069 -.056)
Puerto Rico	.006 (-.003, -.003)	-.065 (-.070, -.060)	-.068 (-.073, -.064)
Virgin Islands		-.121 -.136 -.106	-.068 (-.081 -.055)
Grades 1-8	.054 (.048, .048)	.024 (.011, .036)	.021 (.010, .032)
Grades 9-11	.025 (.018, .018)	.009 (-.003, .022)	.022 (.011, .033)
High school graduate	-.016 (-.022, -.022)	-.097 (-.109, -.085)	-.039 (-.050, -.028)
College 1-3 years	-.025 (-.031, -.031)	-.127 (-.139, -.115)	-.059 (-.070, -.048)
College ≥4 years	-.037 (-.043, -.043)	-.169 (-.181, -.157)	-.076 (-.087, -.065)
Refused education	.010 (-.004, -.004)	.053 (.051, .054)	.044 (.042, .045)
Health insurance			.045 (.044, .046)
Rent home			.052 (.050, .054)
Other home type			-.003 (-.004, -.002)
Blind			.054 (.053, .056)
Exercise last 30 days			-.012 (-.012, -.011)
Heart			.019 (.017, .021)
Angina			.011 (.009, .012)
Stroke			.047 (.045, .049)
Asthma			.020 (.019, .021)
Skin cancer			.000 (-.001, .001)
COPD			.054 (.053, .055)
Arthritis			-.015 (-.016, -.015)
Kidney			.029 (.027, .031)
Diabetes			.020 (.019, .021)
Difficulty climbing stairs			.118 (.117, .119)
Difficulty dressing/bathing			.130 (.128, .132)

Difficulty doing errands alone			.178 (.176, .179)
Cell			-.005 (-.005, -.004)
Constant	-.159	-.2480	-.2578
N	429,747	1,609,786	1,519,257
Adjusted R <sup>2</sup>	.0447	.1031	.2774

Notes: BRFSS. Excluded categories: white non-Hispanic; homeowner; married; never attended school and Alabama.

regr unable i.iyear bmi male age agesq i.raced i.marital smoke1 i.state i.educ i.hlthpl i.rent  
blind exerany heart-diabetes diff\*

#### *Difficulty variables*

Do you have serious difficulty walking or climbing stairs?

Do you have difficulty dressing or bathing?

Because of a physical, mental, or emotional condition, do you have difficulty doing errands  
*alone* such as visiting a doctor's office or shopping?

**Table N. Bad Mental-Health Days Distribution by Early, Mid and Late Periods**

	<i>1993-1999</i>	<i>2000-2010</i>	<i>2011-2019</i>
0	68.69%	65.97%	65.06%
1	3.52	3.67	3.31
2	6.02	5.83	5.10
3	3.24	3.41	3.21
4	1.59	1.67	1.64
5	3.43	3.91	3.85
6	0.39	0.42	0.47
7	1.76	1.68	1.78
8	0.31	0.32	0.35
9	0.04	0.05	0.06
10	2.08	2.62	2.85
11	0.02	0.02	0.02
12	0.15	0.18	0.22
13	0.02	0.02	0.04
14	0.66	0.62	0.66
15	2.20	2.38	2.67
16	0.02	0.03	0.06
17	0.02	0.03	0.04
18	0.03	0.04	0.06
19	0.01	0.01	0.01
20	0.98	1.34	1.65
21	0.12	0.11	0.11
22	0.02	0.03	0.03
23	0.01	0.01	0.02
24	0.01	0.01	0.02
25	0.30	0.43	0.55
26	0.02	0.02	0.02
27	0.02	0.04	0.05
28	0.10	0.14	0.16
29	0.08	0.10	0.09
30	4.17	4.87	5.84
Mean	2.95	3.40	3.87

**Table O. Background Information on the Distribution of Subjective General-Health Over Time in the US Population (%)**

a) Time-series distribution in BRFSS data					
	Excellent	Very good	Good	Fair	Poor
1993	25	34	28	10	4
1994	25	34	28	10	4
1995	25	33	28	10	4
1996	23	33	29	11	4
1997	24	34	28	11	4
1998	24	33	29	11	4
1999	23	33	29	11	4
2000	22	33	30	12	4
2001	22	33	29	12	4
2002	22	33	30	12	4
2003	21	33	30	12	4
2004	21	32	30	12	4
2005	21	32	30	12	4
2006	21	32	30	12	4
2007	20	33	30	12	4
2008	21	33	31	12	4
2009	21	33	30	12	4
2010	20	33	30	12	4
2011	19	31	31	13	5
2012	19	32	31	13	5
2013	19	32	31	13	5
2014	19	32	31	13	5
2015	19	32	32	13	5
2016	19	32	32	13	5
2017	18	31	32	14	5
2018	18	32	32	14	5
2019	17	29	33	15	5

b) General health by extreme distress levels in BRFSS data				
	<i>In Extreme distress</i>		<i>Not in Extreme distress</i>	
	1993-2000	2010-2019	1993-2000	2010-2019
Excellent	11.0%	6.6%	24.5%	19.7%
Very good	19.9	14.5	34.1	33.1
Good	28.3	27.3	28.5	31.6
Fair	22.2	28.0	10.0	12.1
Poor	19.1	23.7	3.0	3.5

c) Distribution of "poor" or "fair" general health for those age 35-54 with HS education and below in BRFSS data

	Whites	Non-whites
1993	13.8%	24.7%

1994	14.9	25.3
1995	14.1	24.6
1996	14.8	26.2
1997	14.5	27.7
1998	15.2	28.0
1999	15.6	28.5
2000	16.0	31.4
2001	16.3	31.6
2002	17.7	30.7
2003	17.7	32.5
2004	17.7	33.4
2005	18.3	33.8
2006	18.8	33.3
2007	19.1	32.0
2008	19.6	33.0
2009	19.5	32.0
2010	20.1	32.4
2011	21.8	31.6
2012	23.0	33.9
2013	22.9	31.8
2014	23.8	31.6
2015	23.0	31.3
2016	23.0	31.5
2017	24.4	31.1
2018	23.8	31.5
2019	22.1	35.6

d) General health from the General Social Survey

	Excellent	Good	Fair	Poor
1970s	32%	41%	21%	6%
1980s	32	44	19	6
1990s	31	47	17	5
2000-2008	29	47	19	5
2009-2018	24	47	22	6