The adult consequences on wellbeing of abuse and neglect in childhood

David G. Blanchflower · Alex Bryson

Abstract: Using four cross-sectional data files for the United States and Europe we show that adverse childhood experiences (ACEs) have a substantial and significant apparent impact on subjective wellbeing in adulthood. These ACEs – which include death of a parent, parental separation or divorce, household financial difficulties, the prolonged absence of a parent, quarreling between parents, parental unemployment, sexual assault, experiencing long-term health problems, being bullied at school, and being beaten or punched as a child – are associated with significantly lower subjective wellbeing in adulthood. This association is apparent across fifty different subjective wellbeing measures. These include sixteen positive affect measures such as happiness, life satisfaction and domain-specific life satisfaction, and twenty-three negative affect measures such as the GHQ6, loneliness, and feeling down, depressed and tired. In addition, we find ACEs affect perceptions of the area one lives in as an adult including perceptions of drugs, violence and vandalism.

Keywords: adverse childhood experiences; subjective wellbeing; abuse; neglect

1. Introduction

Adverse childhood experiences (ACEs) can potentially impact an adult's health, wellbeing and life-chances across the life-course, well into adulthood. The concept has its origins in observational studies in the early 1980s indicating that childhood exposures to neglect and abuse led to adverse physical and mental health outcomes later in life (Partridge, 2019). Since then a substantial literature on ACEs provides compelling evidence. For instance, child maltreatment through abuse and neglect affects employment (Metzler et al., 2017), asset ownership, and financial security (Pinto Pereira and Powell, 2017; Liu et al., 2013), obesity and cardiovascular health (Clark et al., 2010; Norman et al., 2012; Gilbert et al., 2009; Power et al., 2015) and even premature mortality (Rogers et al., 2021). However, it is only recently that academics in social sciences such as economics have started to examine ACEs and their consequences.

Our focus on this paper is the effect of ACEs – both individually and in combination – on subjective wellbeing and mental health in adulthood. One might argue that it should not be surprising to find that negative experiences will adversely impact the way people are feeling. ACEs have been shown to be linked to social and health issues in children (Elmore et al., 2020) and in adolescence (Crandall et al., 2020; Isohookana et al., 2013)

However, the literature on individuals' subjective wellbeing (SWB) suggests that, whilst adverse experiences can have a substantial impact on an individual's wellbeing, the effects are often short-lived, with wellbeing returning to the individual's 'set point' after a period of time (Lucas, 2007), a process of mean reversion consistent with adaptation (Diener et al., 1999). Diener

David G. Blanchflower
Dartmouth College & University of Glasgow
Blanchflower@dartmouth.edu

et al. (2013) find adaptation in life satisfaction occurs in response to changes in marital status, assault, disability, unemployment, and childbirth, although full adaptation was not apparent in the case of unemployment and severe disability. Mean reversion occurs quickly even when individuals experience quite extreme events such as terrorist-related incidents (Bryson and MacKerron,2018; Krueger, 2018) or natural disasters (Kimball et al., 2006). If we find ACEs are associated with lower subjective wellbeing into adulthood it is arguable that ACEs may be different to other negative experiences individuals face.

There are various reasons why we might expect ACEs to have longer-term effects into adulthood. One is that, as Powdthavee (2014) argues, psychological resilience in adulthood is determined, to some large degree, in adolescence. If that resilience is impaired due to adverse experiences in childhood, this may make adults less resilient to negative shocks in adulthood. Consistent with this proposition, Powdthavee (2012) finds – using longitudinal data on almost 3,000 children – that the negative effect of unemployment on mental health and life satisfaction is almost four times larger for workers who had been bullied a lot in their early life with zero adaptation to unemployment for these individuals over time.

A second possibility is that ACEs can impact subjective wellbeing in adulthood because they affect processes, such as the accumulation of human capital through educational attainment, which provide resources to mitigate adverse outcomes in adulthood. There is a body of evidence confirming that ACEs do potentially impact individuals' cognition and educational attainment (Geoffroy et al., 2016).

A third possibility is that ACEs, often by their nature, can negatively impact formative, often familial relationships, which can limit positive parental influences on a child's development. There is a literature suggesting that poor parental treatment, such as physical abuse and neglect, has a possible major impact on adult mental health and subjective wellbeing (Afifi et al., 2008; Corso et al., 2009; Kessler et al., 1997; Weich et al., 2009). Currie and Widom (2010) find that abused and neglected children experience large and enduring economic consequences including lower levels of education, employment, earnings, and fewer assets as adults, compared to matched control children.

A fourth possibility is that ACEs may lead to trauma, which can persist for some time. Hamby Elm, Howell, and Merrick (2021) suggest trauma involves "events leading to threats or actual harm and injury, humiliating and shaming or witnessing harm to others" (p. 231, 2021). Trauma can be an outcome of ACEs but the trauma may not be directly observed in data, such that ACEs are used as an empirical proxy.

Although surveys of the factors that determine adult happiness generally contain little on the impact of experiences in childhood (Frey and Stutzer, 2002) and Dolan, Peasgood and White (2008) we are by no means the first to focus on the link between ACEs and subjective wellbeing in adulthood. ACEs predict depressive disorders in adulthood (Heim et al, 2008), poorer mental health (Norman et al., 2012) and lower life satisfaction (Powdthavee, 2014; Mosley-Johnson et al., 2019). They have been linked to increased risk of depression, unhappiness anxiety, aggression, and suicide risk (Chapman et al., 2004, Turner et al., 2006; Poole et al., 2017; Drydakis, 2014; Oshio et al., 2013), personality disorders (Afifi et al., 2010), and related poor health behaviours such as substance abuse (Mersky et al., 2013; Hughes et al., 2017).

Bellis et al. (2013) examined mental wellbeing and life satisfaction in 11,500 households in the North-West of England, from the North-West Mental Well-being Surveys of 2012 and 2013 and confirmed once again that adult wellbeing is strongly linked to childhood experience. Low overall wellbeing and low life worth were significantly associated with reports of childhood violence or unhappiness. Unhappy and especially violent childhoods had negative impacts as

an adult, but it is important to note that unhappy childhoods, even in the absence of violence, were associated with low wellbeing.

Furthermore, it appears that the more ACEs one experiences, the bigger the effect can be on wellbeing in adulthood (Nurius et al., 2015).[1]

We contribute to the literature on ACEs and subjective wellbeing in adulthood by examining the association across four cross-sectional data sets – two for the United States and two for Europe – to measure the extent to which individual ACEs and an additive scale of ACEs plausibly impact wellbeing later in life. The advantage of these data is that they contain a plethora of wellbeing metrics and ACEs. Their drawback is that, because they are cross-sectional, we are reliant on recall to measure ACEs accurately, and we cannot rule out the possibility of reverse causality whereby those with lower wellbeing in adulthood have a greater propensity to recall ACEs. That said, what we present in this paper is consistent with results from longitudinal studies, such as those using prospective birth cohort data, which establish strong associations between ACEs and subjective wellbeing of adults into their 60s (Blanchflower and Bryson, 2024a).

The ACEs available in these data include childhood experiences of parenting and parental relations while young such as death of a parent; parental marital breakdown or separation; long-term absence of a parent; parental arguing; parental financial problems; and parental unemployment. We also consider two aspects of childhood experience linked directly to the child, namely being bullied and having a long-term illness.

We have a vast array of different subjective wellbeing outcomes across these surveys.[2] As shown in Figure 1, we have 16 positive affect and 26 negative affect individual measures and eight relating to the conditions prevailing in the local neighborhood.[3] We include five satisfaction measures relating to work, identified with a * below.

Figure 1. *Dependent variables capturing positive and negative affect*

Negative affect (26)	Felt a failure	Standard of living
Lost sleep	Trouble concentrating	Health status
Unhappy	Bad mental health days	Time to do things you have to do
Could not overcome difficulties	Bad physical health days	Consideration shown by others
Strain	Depressive disorder	Job satisfaction*
Worthless	Anxiety disorder	Pay satisfaction*
High blood pressure	Distress	Job security satisfaction*
Not valued	Tired or little energy	Satisfaction with democracy
No friends		
Left out of my family		
Left out of society	**Positive affect (16)**	**Local Neighborhood (8)**
Not useful	Happiness	Noise
Some people look down on me	Life satisfaction	Unemployment
Fear poverty	Financial situation	Violence
Confidence	Life you lead	Drug abuse
Stress*	Family life	Vandalism
Pain*	Social life	Bad buildings
Little pleasure in doing things	Leisure life	Area you live in
Down, depressed or hopeless	Income	Bad reputation

[1] We examine this data file below for four other states below – Hawaii, Nevada, Vermont and Wisconsin – and the District of Columbia and find similarly for twenty wellbeing measures.

[2] In our examination of gender wellbeing gaps (Blanchflower and Bryson 2023b), we also examined a somewhat different, although with a good deal of overlap, fifty wellbeing measures.

[3] See Blanchflower and Bryson (2023a-2023c) for a discussion of the differences between measures of positive and negative affect.

We find consistent evidence across our four datasets that childhood adversity is negatively correlated with adult wellbeing. The associations are not confined to one time period or data set, or to any particular measure of wellbeing. No matter what measures of ACE we use we find they have long-term adverse effects.

In the following sections we present evidence from each data set in turn, beginning with evidence from the United States in the General Social Survey (GSS) in Section Two followed by the Behavioral Risk Factor Surveillance System survey (BRFSS) in Section Three. We then move onto analyses for Europe from the European Social Survey in Section Four and the Eurobarometer in Section Five. Section Six concludes.

2. Evidence from the General Social Surveys, United States

We begin by examining cross-sectional data based on the United States' General Social Survey (GSS), 1972-1994. These data contain information on whether a respondent was living with both parents when they were 16, whether one or both parents died when they were a child, and whether they were beaten or punched as a child and into adulthood. Previous work using the GSS 1972-1998 found death of a parent in childhood entered negatively in happiness equations (Blanchflower and Oswald, 2004). We consider whether these ACEs are associated with happiness and satisfaction with one's family and financial situation in adulthood.

In the GSS surveys for 1973-1994 respondents were asked if they had ever been hit or punched as a child, adult or both. Overall, 64.9% said they had not been hit; 14.8% said they had been hit as a child; 12.4% as an adult and 8% as both an adult and as a child. Of course, we don't know who did the beating or punching as a child, whether it was a parent, a relative, a brother or sister or someone at school or more than one.

The wellbeing questions are as follows.

> *Q1. Taken all together, how would you say things are these days—would you say that you are very happy (=3), pretty happy (=2), or not too happy (=1)?*

> *Q2. We are interested in how people are getting along financially these days. So far as you and your family are concerned, would you say that you are pretty well satisfied with your present financial situation (=3), more or less satisfied (=2), or not satisfied at all (=1)?*

> *Q3. For each area of life I am going to name, tell me the number that shows how much satisfaction you get from that area. – family life – a very great deal (=7); a great deal (=6); quite a bit (=5); a fair amount (=4); some (=3); a little (=2) and none (=1).*

In Table 1 (below) we report the proportions saying they were 'very happy' in the first column, pretty satisfied in the second and satisfied a very great deal in the third for family life. Those reporting having been beaten – especially as a child – reported lower wellbeing. For example 37% of those who were neither beaten as a child or an adult reported being very happy versus 28% of those who said they were beaten as a child or an adult and 23% if they said they were beaten as an adult and as a child.

Table 2 reports regression analyses, updating the work of Blanchflower and Oswald (2004) conditioning on variables they also used, namely demographic traits (age, race, gender), education and labor force status, as well as year and region dummies.[4] The models account for very little of the variance in happiness and satisfaction with family life (below 5 percent) but do a better job capturing variance in satisfaction with one's financial situation, explaining around 10

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[4] Some of these conditioning variables may themselves be a function of ACEs such that their inclusion in the regression may inadvertently partial out some of the ACE 'effects' we are seeking to capture. If so then the ACE coefficients are a lower bound estimate of their negative correlation with wellbeing.

percent. We find the ACE measures are all negatively associated with respondents' wellbeing years later, *ceteris paribus*.

Table 1. *Wellbeing today and hit or punched in the past, General Social Surveys 1973-1994*

	Very happy %	Pretty well satisfied financially %	Satisfied a great deal with family %
Not hit	37	33	43
Hit as child	28	28	38
Hit as adult	28	21	36
Both	23	18	36

Table 2. *Wellbeing and childhood adversity at age 16, GSS 1973-2022*

	Happiness 1973-2022	Happiness 1973-1994	Financial situation 1973-2022	Financial situation 1973-1994	Family life 1973-1994
Beaten or punched as a child		-.1159 (8.29)		-.1046 (6.60)	-.0951 (3.15)
Beaten or punched as an adult		-.1561 (10.99		-.2186 (13.56)	-.3230 (10.50)
Beaten or punched as child & adult		-.2313 (13.08)		-.2889 (14.40)	-.3701 (9.65)
One or both parents died	-.0179 (2.03)	-.0209 (1.46)	-.0234 (2.35)	-.0294 (1.81)	-.0815 (2.63)
Parents divorced/separated	-.0602 (7.96)	-.0763 (4.97)	-.0871 (10.20)	-.0896 (5.14)	-.1613 (4.85)
constant	1.883	2.1514	1.8339	1.907	3.0692
Adjusted R^2	0.0456	0.049	0.092	0.1078	0.0322
N	66,572	19,028	66,711	19,135	19,063

Notes. equations also include age and its square, race, gender, age left school, labor force status (except for work equation), year and region dummies. Excluded living with parents at 16 and not beaten. T-statistics in parentheses. *'Taken all together, how would you say things are these days—would you say that you are very happy (=3), pretty happy (=2), or not too happy (=1)?'. We are interested in how people are getting along financially these days. So far as you and your family are concerned, would you say that you are pretty well satisfied with your present financial situation (=3), more or less satisfied (=2), or not satisfied at all (=1)?" For each area of life I am going to name, tell me the number that shows how much satisfaction you get from that area. – family life - a very great deal (=7); a great deal (=6); quite a bit (=5); a fair amount (=4); some (=3); a little (=2) and none (=1).*

We start in column 1 with the two parental variables at age 16. The 'parents divorced at 16' variable was used by Blanchflower and Oswald (2004) for the period 1972-1998 and was found to be significant and negative in happiness equations overall and for men, women, whites and blacks separately. Here we extend the time series through to 2022 and find 'parents divorced/separated' is significantly negatively correlated with happiness, as is 'one or both

parents died'. They are also negatively correlated with satisfaction with one's financial situation (column 3).

In columns 2, 5 and 6 we add the beaten and punched variables, hence restricting the years to 1973-1994. All three being beaten or punched variables are significantly negative for the three wellbeing variables. Being punched as an adult and as a child has especially marked wellbeing reducing effects. Parents being divorced or separated in the respondent's childhood is significantly negative in all three equations, whereas one or both parents dying is only significantly negative for family life.

It appears that what happens to the family in the respondent's childhood, according to data for the United States, have possible impacts on wellbeing later in life. Intact families with both parents present do especially well. This is consistent with the work of Case and Katz (2001) who found that having teenage mothers was a particular problem in disadvantaged neighborhoods, likely implying no father present.[5]

Our findings underscore Osofsky's (1999) belief that for children the most important resource to protect them from violence is "*a strong relationship with a competent, caring positive adult, most often a parent*" and are consistent with the work of Brown et al. (1999) who found that adolescents and young adults with a history of childhood maltreatment were 3 times more likely to become depressed or suicidal compared with individuals without such a history.

3. Evidence from the Behavioral Risk Factor Surveillance System survey (BRFSS) of 2009-2012 and 2019- 2022 for the United States

Next we examine data from the Center for Disease Control on wellbeing and child adversity. We have data from 2009-2012, and 2019-2022. Each survey has a few observations in the early months of the following year.[6] The files contain information on eight ACEs based on recall in adulthood.[7]

a) Did you live with anyone who was depressed, mentally ill, or suicidal?

b) Did you live with anyone who was a problem drinker or alcoholic?

c) Did you live with anyone who used illegal street drugs or who abused prescription medications?

d) How often did anyone at least 5 years older than you or an adult, ever touch you sexually?

e) How often did anyone at least 5 years older than you or an adult, try to make you touch them sexually?

f) How often did anyone at least 5 years older than you or an adult, force you to have sex? H)
a) Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking.

g) Were your parents separated or divorced?

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[5] They conclude *"(youths) with teenage mothers and parents who were not married are substantially more likely to have children out of wedlock; and those with more-educated parents get more schooling."*

[6] These BRFSS life satisfaction and bad mental health days data were also examined in Blanchflower and Bryson (2024c).

[7] Respondents were told the following in the 2010 BRFSS Questionnaire (https://www.cdc.gov/brfss/questionnaires/pdf-ques/2010brfss.pdf)

"I'd like to ask you some questions about events that happened during your childhood. This information will allow us to better understand problems, that may occur early in life, and may help others in the future. This is a sensitive topic, and some people may feel uncomfortable with these questions. At the end of this section, I will give you a phone number for an organization that can provide information and referral for these issues. Please keep in mind that you can ask me to skip any question you do not want to answer. All questions refer to the time period before you were 18 years of age. Now, looking back before you were 18 years of age"

There are also questions on parental swearing and whether the parents beat each other that we omitted.

These questions are only asked in a subset of states: fourteen in the period 2009-2012 and thirty-two in the later period.[8] The questions were not asked in the 2013-2018 surveys. The means of these variables as proportions by gender are shown in Table 3.

Table 3. *Incidence of adverse childhood experiences, BRFSS*

	2009-2012		2019-2022	
	Male	Female	Male	Female
Live with anyone depressed	13	18	14	19
Live with a problem drinker	21	25	21	25
Live with anyone uses illegal drugs	8	8	10	9
Did anyone touch you sexually	5	15	6	16
Did anyone make you touch sexually	4	9	5	11
Anyone forced you to have sex	2	6	2	6
Parent hurt you	15	15	24	22
Parents divorced/separated	20	22	34	37

The three variables relating to sexual abuse allowed the possibility of responding never, once or more than once. For simplicity we simply recoded all of these variables as (1,0) Yes/No dummies. We also created an additive index running from 0 to 8 which has a mean of 1.18.[9]

Swedo et al. (2023) reported on these ACE data for the period 2012-2020 BRFSS across the twenty-five states that fielded these ACE questions. They say 64% of Americans reported at least one ACE and note that the incidence – obtained by summing the individual scores - was especially high in Oregon and low in New Jersey. ACE intensity was higher among women than men, among the least educated, the unemployed and those unable to work and those age less than 35. Merrick et al. (2019) also examined ACE data in the 2015-2017 BRFSS and found that ACEs were associated with worse health outcomes. These included coronary heart disease, stroke, asthma, chronic obstruction pulmonary disease (COPD), cancer (excluding skin cancer), kidney disease, diabetes, being obese and depression.

Mental health in the United States has worsened over time, in part due to the Covid pandemic, and the rise in long covid (Blanchflower and Bryson, 2023c, 2022). With the BRFSS we are able to identify the number of bad mental health days (BMHD) people have in a month. This is coded from 0-30 and in the pooled 2019-2022 sample 66.7% of all cases (n=4.4 million) report zero – versus 68.8% for 2009-2012. Blanchflower and Oswald (2020) examined the movement in the proportion of those in the BRFSS reporting that every day in the past thirty was a BMHD – those in extreme distress. They showed distress had risen dramatically over time especially for the least educated.[10]

We also have data in the BRFSS on not just the number of bad mental health days in the last thirty but also on the number of bad physical heath days. This matters because of the evidence

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[8] Arkansas; DC ; Hawaii; Iowa; Louisiana; Minnesota; Montana; Nevada; North Carolina; Oklahoma; Tennessee; Vermont; Washington and Wisconsin in the first period and Alabama; Arizona; Arkansas; Delaware; DC; Florida; Georgia; Hawaii; Idaho; Indiana; Iowa; Kentucky; Michigan; Mississippi; Missouri; Montana; Nevada; New Hampshire; New Mexico; North Dakota; Oregon; Pennsylvania; Rhode Island; South Carolina; South Dakota; Tennessee; Texas; Utah; Virginia; West Virginia; Wisconsin and Wyoming in the second.

[9] The distribution is as follows (n=320,600)-0=47%; 1=25%; 2=12%;3=7%; 4=4%; 5=3%; 6-8=3%.

[10] Blanchflower and Feir (2023) documented that it rose sharply for Native Americans. The proportion in distress rose from 5.3% in 2009 to 6.2% in 2022.

that ACEs have apparent impacts on physical health and even mortality. The exact questions are as follows.

> Q4 *"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?"*
>
> Q5. *"Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"*

In Table 4 (below) we run seven different regressions to estimate the partial correlation between our eight ACE variables and various aspects of adult wellbeing for the period 2009-2013.

Table 4. *Well- and ill-being in adulthood and childhood adversity at age 16, BRFSS 2009-2013*

	Life sat-isfaction	Health status	#BMHD	#BPHD	Distress	Depressive disorder	Anxiety disorder
Live with anyone depressed	-.1097	-.0748	1.7963	.7397	.0307	.1869	.1013
	(11.24)	(8.47)	(27.79)	(10.21)	(15.91)	(52.62)	(14.94)
Live with a problem drinker	-.0258	-.0664	.4754	.4735	.0082	.0315	.0274
	(3.08)	(8.87)	(8.67)	(7.70)	(5.03)	(10.49)	(4.79)
Live with anyone uses illegal drugs	-.0524	-.0460	.6783	.1751	.0153	.0127	.0319
	(4.00)	(3.87)	(7.80)	(1.80)	(5.90)	(2.63)	(3.52)
Parents divorced/ separated	-.0211	-.0234	.1993	.2936	.0060	-.0060	.0031
	(2.54)	(3.09)	(3.59)	(4.71)	(3.59)	(1.95)	(0.53)
Parent hurt you	-.1220	-.1453	1.3450	.9445	.0264	.0733	.0581
	(12.19)	(16.26)	(20.56)	(12.89)	(13.53)	(20.67)	(8.92)
Did anyone touch you sexually	-.0521	-.0495	.8649	.4726	.0135	.0816	.0569
	(3.49)	(3.64)	(8.70)	(4.24)	(4.57)	(15.00)	(5.68)
Did anyone make you touch sexually	-.0378	-.0579	.5134	.5417	.0077	.0325	.0384
	(2.11)	(3.60)	(4.37)	(4.11)	(2.20)	(5.05)	(3.21)
Anyone forced you to have sex	-.0786	-.1092	1.3028	.8538	.0339	.0562	.0990
	(3.82)	(5.93)	(9.68)	(5.65)	(8.43)	(7.60)	(7.17)
constant	3.6156	3.2696	1.4172	0.7598	-0.0127	-0.2007	-0.1439
Adjusted R²	0.0913	0.2225	0.1304	0.1811	0.0696	0.1533	0.1238
N	34,671	110,943	109690	109,229	109,690	94786	19,811

Notes. equations also include age and its square, race, gender, grade of education, labor force status, year and state dummies. T-statistics in parentheses. Life satisfaction available in 2009, 2010, anxiety disorder in 2010 and depression disorder 2010-2013. *Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking. Did you live with anyone who used illegal street drugs or who abused prescription medications? Did you live with anyone who was a problem drinker or alcoholic? Did you live with anyone who was depressed, mentally ill, or suicidal? How often did anyone at least 5 years older than you or an adult, ever touch you sexually? How often did anyone at least 5 years older than you or an adult, try to make you touch them sexually? How often did anyone at least 5 years older than you or an adult, force you to have sex? Were your parents separated or divorced? In general how satisfied are you with your life – very dissatisfied (=1); dissatisfied (=2); satisfied (=3); very satisfied (=4). 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? Distress =1 if #BMHD=30 zero otherwise. Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? Would you say that in general your health is: Poor (=1), fair (=2), good (=3), very good (=4), excellent (=5). Has a doctor or other healthcare provider EVER told you that you had an anxiety disorder (including acute stress disorder, anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, phobia, posttraumatic stress disorder, or social anxiety disorder)? Yes/No. Has a doctor or other healthcare provider EVER told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)? Yes/No.*

Our outcomes in Table 4 are two positive affect variables – 4-step life satisfaction[11] and a 5-step, general health status variable – plus five negative affect variables – the number of bad mental health days, the number of bad physical health days, despair, measured as a (1,0) dummy if the respondent reported all thirty days were bad, and whether the respondent had ever been diagnosed with an anxiety or a depressive disorder.[12] Sample sizes are around 100,000 although smaller for life satisfaction and anxiety disorder due to the questions not being asked in some years. Across all seven equations each ACE is statistically negatively correlated with life satisfaction and health status. And were significantly positive with two exceptions in the remaining five columns for the negative affect variables. In the depressive disorder equation seven of the eight variables are significantly positive except for the parental divorce variable which is significantly negative. In the anxiety disorder equation it is insignificant.

Table 5. *Number of days of negative affect in adulthood and childhood adversity at age 16, BRFSS 2010*

	No Pleasure	Down and depressed	Trouble sleeping	Tired	Trouble concen-trating	Felt a failure
Live with anyone depressed	.3772 (5.69)	.5416 (9.64)	.6524 (7.42)	.8952 (9.91)	.5577 (9.90)	.5782 (10.75)
Live with a problem drinker	.1358 (2.43)	.1508 (3.18)	.3021 (4.07)	.3821 (5.01)	.1975 (4.15)	.0908 (2.00)
Live with anyone uses illegal drugs	.2645 (2.98)	.2400 (3.20)	.5370 (4.58)	.5784 (4.79)	.2488 (3.31)	.3015 (4.20)
Did anyone touch you sexually	.1044 (1.07)	.2655 (3.20)	.3662 (2.82)	.2910 (2.18)	.2524 (3.03)	.3383 (4.26)
Did anyone make you touch sexually	.3481 (2.97)	.2437 (2.45)	.6418 (4.13)	.5243 (3.28)	.1867 (1.87)	.2876 (3.03)
Anyone forced you to have sex	.5249 (3.88)	.7359 (6.43)	.9067 (5.06)	.7849 (4.25)	.7044 (6.12)	.6566 (5.99)
Parent hurt you	.4777 (7.48)	.5208 (9.65)	.8276 (9.80)	.8437 (9.72)	.4294 (7.93)	.5579 (10.80)
Parents divorced/ separated	.1410 (2.43)	.0047 (0.10)	.0993 (1.29)	.1778 (2.25)	-.0158 (0.32)	-.0007 (0.02)
constant	0.4699	0.5837	1.9479	4.9615	0.0975	0.7746
Adjusted R^2	0.0999	0.1364	0.1069	0.1173	0.1053	0.1114
N	19,436	19,570	19,697	19,669	19,758	19,763

Notes. equations also include age and its square, race, gender, grade of education, labor force status and state dummies. T-statistics in parentheses. Not available in District of Columbia. *Over the last 2 weeks, how many days have you had little interest or pleasure in doing things? Over the last 2 weeks, how many days have you felt down, depressed or hopeless? Over the last 2 weeks, how many days have you had trouble falling asleep or staying asleep or sleeping too much? Over the last 2 weeks, how many days have you felt tired or had little energy? Over the last 2 weeks, how many days have you felt bad about yourself or that you were a failure or had let yourself or your family down? Over the last 2 weeks, how many days have you had trouble concentrating on things, such as reading the newspaper or watching the TV?*

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[11] Examined in Blanchflower and Oswald (2011) and Blanchflower and Graham (2021a).

[12] Monnat and Chandler (2015) examined the BRFSS from what appears to be the 2010 and 2011 surveys with a few observations in 2012 (n=52,250) to examine the impact of ACEs on self-reported health, functional limitations plus diabetes and heart attacks, for individuals ages 18-64 and found strong negative effects. We are unable to exactly replicate this sample size. Sample size for those with responses for example to the live with anyone with depression variable ages 18-64 is 16371 in 2010; 33,324 in 2011 and 20438 in 2012.

In Table 5 (above) we examine six further negative affect variables only available in the 2010 survey which ask respondents about the number of days in the prior fortnight where they had those feelings. The models account for roughly 10 percent of the variance in these outcomes. The ACE variables include who you lived with as a child, parental divorce/separation, sexual abuse and being hurt by a parent. All the ACEs are significantly positively associated with negative affect, apart from parental divorce and separation which is mostly insignificant across specifications.

In Table 6 we update the exercise from Table 4 using more recent data for the pooled BRFSS data for 2019-2022. The regressions include the eight ACE variables with a much larger sample size of over 300,000. We also include the same controls as Table 4 plus year dummies. The sample size is only 18371 in column 1 as life satisfaction is only included for a subset of states in 2022.[13, 14] None of the four recent surveys included the six variables used in Table 5 and did not have the anxiety disorder variable, but it did have the other five variables – life satisfaction; health status, bad mental and physical health days, distress and depressive disorder. When we enter the ACE variables separately in panel (a) the models explain between 6 percent (distress) and 19 percent (health status) of variance in the outcomes.

Table 6. *Wellbeing and childhood adversity at age 16, BRFSS 2019-2022*

a) All	Life satisfaction	Health status	#BMHD	Distress	#BPHD	Depressive disorder
Live with anyone depressed	-.1444 (10.75)	-.1474 (28.39)	2.8241 (69.09)	.0468 (38.09)	1.0886 (24.77)	.2101 (106.91)
Live with a problem drinker	-.0304 (2.62)	-.0692 (15.40)	.6360 (17.98)	.0108 (10.20)	.4408 (11.49)	.0348 (20.46)
Live with anyone uses illegal drugs	-.0743 (4.41)	-.0514 (7.77)	.9252 (17.76)	.0213 (13.61)	.2129 (3.80)	.0135 (5.39)
Parents divorced/ separated	-.0142 (3.16)	-.0047 (2.62)	.0745 (5.19)	.0029 (6.76)	.1186 (3.26)	.0005 (0.73)
Parent hurt you	-.1074 (9.87)	-.1208 (27.50)	1.1518 (33.29)	.0202 (19.38)	.9382 (25.17)	.0489 (29.44)
Did anyone touch you sexually	-.0262 (1.29)	-.0654 (8.20)	.7846 (12.48)	.0087 (4.62)	.4413 (6.53)	.0751 (24.88)
Did anyone make you touch sexually	-.0729 (3.10)	-.0400 (4.31)	.9656 (13.23)	.0213 (9.68)	.3137 (4.00)	.0385 (10.99)
Anyone forced you to have sex	-.0611 (2.37)	-.1106 (10.82)	1.5282 (18.96)	.0449 (18.51)	1.0092 (11.65)	.0647 (16.73)
constant	3.0351	3.6748	5.9189	0.0429	-0.5318	0.0392
Adjusted R²	0.1064	0.1875	0.1394	0.0618	0.1454	0.1529
N	18,371	319,925	315,031	315,031	313,889	319,240

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[13] In 2019 state coverage was Alabama; Delaware; Florida; Indiana; Iowa; Michigan; Mississippi; Missouri; New Mexico; North Dakota; Pennsylvania; Rhode Island; South Carolina; Tennessee; Virginia; West Virginia and Wisconsin. In 2022 the coverage was Arkansas; Florida; Iowa; Nevada; North Dakota; Oregon; South Dakota and Virginia. So, there was little overlap in the two years.
[14] Life satisfaction in the 2022 data file is unavailable in sixteen states - Arkansas; Colorado; Hawaii; Illinois; Louisiana; Maryland; Michigan; Nebraska; New York; North Dakota; Ohio; Oklahoma; Oregon; Pennsylvania; South Dak; Virginia plus Guam.

Table 6. *Wellbeing and childhood adversity at age 16, BRFSS 2019-2022 (Cont.)*

b) Aggregate scores	Life satisfaction	Health status	#BMHD	Distress	#BPHD	Depressive disorder
Score=1	-.0796 (7.12)	-.0936 (22.09)	.8694 (25.96)	.0126 (12.64)	.7040 (19.63)	.0580 (35.82)
Score=2	-.1586 (11.25)	-.1816 (33.08)	2.0860 (48.08)	.0318 (24.47)	1.2974 (27.96)	.1286 (61.31)
Score=3	-.2179 (12.21)	-.2459 (35.20)	3.0846 (55.96)	.0498 (30.15)	1.8022 (30.53)	.1909 (71.44)
Score=4	-.2906 (13.21)	-.3131 (35.87)	4.3766 (63.49)	.0755 (36.52)	2.1927 (29.73)	.2455 (73.50)
Score=5	-.3084 (11.30)	-.3748 (33.69)	5.4552 (62.05)	.1026 (38.94)	2.5439 (27.09)	.3123 (73.44)
Score=6	-.4089 (11.65)	-.4590 (31.11)	6.3257 (54.25)	.1227 (35.09)	3.4424 (27.61)	.3616 (64.06)
Score=7	-.4438 (9.80)	-.5187 (28.66)	8.1505 (56.95)	.1817 (42.35)	4.0548 (26.52)	.4123 (59.55)
Score=8	-.4497 (8.09)	-.5754 (23.83)	9.0850 (47.68)	.1993 (34.88)	4.6109 (22.64)	.4669 (50.58)
constant	3.0032	3.689	4.3961	0.0301	-0.1526	0.0481
Adjusted R^2	0.102	0.1862	0.1324	0.0599	0.1462	0.1334
N	18,371	319,925	3,150,311	315,031	313,889	319,240

c) Aggregate score 0-8	All	Men	Women
Life satisfaction	-.0667 (23.71)	-.0777 (16.77)	-.0605 (17.02)
Health status	-.0779 (61.44)	-.0728 (38.77)	-.0798 (57.06)
#BMHD	1.0945 (123.75)	1.0727 (77.97)	1.0886 (93.40)
Distress	.0207 (77.98)	.0200 (49.14)	.0208 (58.82)
#BPHD	.5686 (60.05)	.5262 (34.38)	.5896 (48.62)
Depressive	.0614 (143.35)	.0542 (85.32)	.0646 (111.20)

Notes. Equations also include age and its square, race, gender, grade of education, labor force status, year and state dummies. T-statistics in parentheses.

There is evidence once again of an apparent strong negative impact in adulthood of the three sexual abuse variables and being hurt by a parent. The three neglect variables are also significantly negative in life satisfaction and health and positive for BMDH, BPHD and distress. The parental divorce variable is statistically significant and positive for both bad mental and physical health days and distress.

Nelson et al. (2020) have argued that ACE research provides *"compelling evidence that the risk of adverse health consequences increases as a function of the number of categories of adversities adults were exposed to in childhood. Although this seems intuitive, it belies the fact that, when it comes to severe adversity (e.g., maltreatment), few children are exposed to only a single form of adversity at a single point in time."* In light of this and in order to evaluate this claim, which seems to be right, we examined the extent to which respondents report multiple adversities in panels (b) and (c) of Table 6. The

equations include the same controls as in panel (a). Panel (b) shows that the adverse effects of ACEs are rising monotonically with the number of ACEs experienced in childhood, with the coefficients showing their effect relative to having no ACEs. The adverse impact rises approximately linearly, as the number of adversities rise.

In Table 6 panel (c) we replace the ACE categorical scale with a linear index and present the coefficient and t-statistic for the ACE index for all and by male and female subsample for all six wellbeing outcomes. In each case, the higher the ACE score, the lower the respondent's wellbeing in adulthood. There are no significant differences by sex although it is worth remembering that the incidence of ACEs does vary by sex (for instance, a higher proportion of women than men were sexually abused as children).[15]

4. Evidence from the European Social Survey, 2014

We now turn to European data on ACEs including parental breakdown and arguing, financial difficulties and parental unemployment as well as whether the respondent was bullied as a child at school. These are also retrospective data relating to what happened in childhood reported years later, as was the case in the GSS and the BRFSS.

Santini et al. (2021) used European Social Survey (ESS), wave #7, collected in 2010 across 35,475 participants aged 15 years and older in 19 European countries[16] to assess associations of retrospectively reported family conflict and/or financial strain in childhood with physical and mental health as well as health behaviors and social functioning in adulthood. The variables examined were as follows.

> Q6. "*Please tell me how often you and your family experienced severe financial difficulties when you were growing up?*"

> Q7. "*Please tell me how often there was serious conflict (e.g., tension, verbal arguments or physical violence) between the people living in your household when you were growing up?*"

Response options for both items were: never; hardly ever; sometimes; often; always. They found that individuals reporting family conflict or financial strain during childhood were at increased risk of developing a wide-ranging problem in adulthood, in terms of physical health, health behaviors, mental health and social functioning, with the odds for mental health problems and poor self-rated health being particularly high. They did not examine life satisfaction or happiness.

In Table 7 (below) we report four equations using these same ESS wave #7 data across twenty-one countries. We make use of two 10-step wellbeing variables not used by Santini et al. (2021) – happiness and life satisfaction – which have previously been used by Blanchflower (2021). The questions are:

> Q8. *Taking all things together, how happy would you say you are? 0=extremely unhappy…10=extremely happy*

> Q9. *All things considered, how satisfied are you with your life as a whole nowadays? Please answer using this card, where 0 means extremely18 dissatisfied and 10 means extremely satisfied.*

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[15] The distributions in percentages were as follows for men with women in parentheses – 0=48.2% (45.3); 1=25.9% (23.7); 2=12.3 (12.1); 3=6.5 (7.3); 4=3.7 (4.7); 5=1.9 (3.0); 6=0.7 (1.9); 7=0.5 (1.3) and 8=0.3 (0.7).

[16] Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Lithuania, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland and the UK. They excluded Czech Republic and Israel.

Table 7. *Problems in childhood, ESS Sweep 7, 2010*

	Happiness in Adulthood		Life satisfaction in Adulthood	
Financial strain growing up				
Often	.2776 (3.61)	.2286 (3.01)	.3518 (4.09)	.2255 (3.02)
Sometimes	.4225 (5.73)	.3871 (5.31)	.4789 (5.81)	.3720 (4.57)
Hardly ever	.6085 (8.27)	.5589 (7.66)	.7008 (8.51)	.5638 (6.94)
Never	.7153 (9.69)	.7180 (9.79)	.7684 (9.30)	.6697 (8.19)
Serious conflict growing up				
Often	.2231 (4.09)	.1442 (2.67)	.2350 (3.85)	.1820 (3.02)
Sometimes	.5291 (10.19)	.3672 (7.09)	.5567 (9.58)	.4305 (7.47)
Hardly ever	.7221 (13.71)	.4655 (8.81)	.8432 (14.32)	.6164 (10.48)
Never	.8203 (15.72)	.5543 (10.56)	.9658 (16.55)	.7266 (12.43)
Adjusted R^2	0.099	0.1308	0.1347	0.1737
N	39,077	38,591	39,106	38,612

Notes. Rows 2 and 4 include controls for age, age squared, years of education and labor force status dummies. All equations include country dummies. "*Please tell me how often you and your family experienced severe financial difficulties when you were growing up?*" "*Please tell me how often there was serious conflict (e.g., tension, verbal arguments or physical violence) between the people living in your household when you were growing up?*"

In all four models we include these two ACEs (financial strain growing up and serious conflict growing up) with 'always' the excluded category along with 20 country dummies. In the second and fourth columns we add age and its square, years of education and labor force status. We include two ACEs (financial strain growing up and serious conflict growing up) along with country dummies. In all four models ACEs lower wellbeing in adulthood. The more financial strain and the more serious the conflict in a child's household, the lower his or her happiness and life satisfaction in adulthood.

5. Evidence from the Eurobarometer, 2001

Finally we turn to a second cross-sectional European data set, Eurobarometer which, in 2001, asked respondents about their subjective wellbeing across thirty-eight different measures. This data file includes information on a number of family issues including financial difficulties and arguing as well as being bullied in school.

The data file we use is Eurobarometer #56.1 – Social Exclusion and Modernization of Pension Systems which was undertaken by the European Commission between September and October 2001. One of the authors used these data in an earlier paper (Blanchflower and Oswald, 2008) examining blood pressure and life satisfaction and the GHQ6, which is an unhappiness measure, but did not examine ACEs as we do here. Other studies that have used #56.1 include Pfeifer (2009) and Tomitaka et al. (2019). Henceforth we call this survey EB56.1. There are a total of 15,943 observations across fifteen Western European countries.[17]

EB#56.1 includes eight Yes/No questions we focus on specifically that capture ACEs before the age of eighteen – six relate to their parents, one to whether the respondent was bullied by

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[17] Countries with sample sizes are Austria (n=1,000); Belgium (n=1,032); Denmark (n=1,001); Finland (n=997); France (n=1,002); Germany (n=2,009); Greece (n=1,004); Ireland (n=996); Italy (n=992); Luxembourg (n=600); Netherlands (n=1,006); Portugal (n=1,001); Spain (n=1,000); Sweden (n=1,000) and UK (n=999).

children at school and one which asks whether the respondent had long lasting health problems as a child. Here are the specific questions.[18]

> *Q10. Your parents had major financial difficulties?*
>
> *Q11. You lived with only one parent who had to struggle to maintain the family?*
>
> *Q12. A parent died?*
>
> *Q13. Your parents' marriage broke up?*
>
> *Q14. Your parents quarreled frequently?*
>
> *Q15. One of your parents was unemployed for some time?*
>
> *Q16. You were physically or verbally abused by other children at your school?*
>
> *Q17. You had health problems that lasted for a long time?*

Included in the EB#56.1 data file are variables identifying age, gender, education and labor force status and country of residence, all of which are included in our models as controls.

The wellbeing measures available in these data include life satisfaction and domain-specific satisfaction with leisure, social and family life and general health, standard of living, income as well as negative affect variables including unhappiness, being under strain, not being valued, feeling lonely, feeling left out, being unable to sleep, and feeling worthless, to name but a few.

We also have numerous variables about satisfaction with one's local area including the environment such as buildings, drug abuse, violence and vandalism as well as fear of poverty. We also have satisfaction data for workers on their job, their pay, job security, pain and stress from work. For *every* variable we find a statistically significant apparent impact of most ACEs. In total we report regressions on thirty-eight variables using the Eurobarometer data file.

Table 8 reports the incidence of these ACE variables by country.

Table 8. *Childhood problems before age 18 by country Eurobarometer 2001 (%)*

	Parents - financial problems	One parent	A parent died	Parents' marriage broke up	Parents quarreled frequently	One parent unemployed	Bullied at school	Long term health problems
Austria	17	10	11	9	11	7	8	6
Belgium	12	8	9	8	10	7	2	7
Denmark	24	11	8	16	14	16	18	8
Finland	23	13	13	13	12	14	15	5
France	19	11	12	12	11	8	3	8
Germany	13	5	10	9	9	8	3	5
Greece	42	9	9	2	5	5	0	5
Ireland	12	4	9	4	5	10	5	3
Italy	22	8	9	3	6	5	0	5
Luxembourg	19	7	15	6	13	3	6	9
Netherlands	8	5	7	9	10	6	8	5
Portugal	42	5	11	3	8	5	2	7
Spain	23	6	8	3	4	6	1	3
Sweden	14	9	9	13	12	8	12	6
UK	14	9	8	12	10	10	8	4

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[18] The survey questions on ACEs have not been repeated in the 141 subsequent sweeps of the Eurobarometer.

Parents experiencing financial problems is by far the most common issue. This is so in every country except the Netherlands where the biggest issue is parents quarreling frequently. Financial problems of parents are particularly notable in Greece and Portugal where two-fifths of adults say their parents experienced such problems when they were a child; Scandinavian countries (Denmark, Finland, Sweden), tend to report relatively high childhood problems in domains other than parental financial problems for example, scoring particularly high on marital breakdown, and bullying at school – the problem with lowest incidence was having a long-term health problem.

We start first with five positive affect variables defined at the end of Table 9, relating to four satisfaction variables, referring to life, leisure, social and family. Finally, we examine satisfaction with democracy. Each is measured as a 4-step variable with options from very satisfied to not at all satisfied.

In column 1 of Table 9 we estimate a life satisfaction equation as was reported in Table 3 of Blanchflower and Oswald (2008), incorporating ACEs separately together with controls for country, gender, age and its square, labor force, age left school and marital status.

Table 9. *Satisfaction in adulthood and child problems before the age of 18, EB #56.1, 2001*

	Life	Leisure life	Social life	Family life	Democracy
Characteristics at age 18 or below					
Parents - financial problems	-.0975 (6.89)	-.0823 (5.38)	-.0994 (6.55)	-.0388 (2.59)	-.0640 (3.51)
One parent	-.0328 (1.54)	-.0031 (0.12)	-.0281 (1.24)	.0086 (0.38)	-.0381 (1.39)
A parent died	-.0791 (4.39)	-.0482 (2.48)	-.0615 (3.16)	-.0622 (3.26)	-.0784 (3.37)
Parent's marriage broke up	-.0426 (2.06)	-.0298 (1.34)	-.0189 (0.85)	-.0861 (3.95)	-.0599 (2.24)
Parents quarreled frequently	-.1345 (7.14)	-.1188 (5.83)	-.1315 (6.52)	-.2048 (10.25)	-.1357 (5.58)
One parent unemployed	-.0847 (4.35)	-.0740 (3.72)	-.0815 (3.91)	-.0510 (2.47)	-.0919 (3.62)
Bullied at school	-.1078 (4.82)	-.0842 (3.52)	-.1041 (4.35)	-.1085 (4.57)	-.1297 (4.50)
Long term health problems	-.1949 (8.68)	-.0871 (3.59)	-.1241 (5.14)	-.1343 (5.66)	-.1517 (5.22)
Female	.0105 (0.99)	-.0295 (2.56)	-.0374 (3.28)	.0052 (0.46)	-.0063 (0.45)
Age left school	.0109 (8.27)	.0054 (3.75)	.0070 (4.92)	.0071 (5.06)	.0067 (3.94)
Home worker	-.0130 (0.63)	.1120 (5.62)	.0005 (0.03)	.0705 (3.62)	.0310 (1.29)
Student	.0130 (0.60)	.1310 (5.54)	.0978 (4.22)	-.0208 (0.91)	.0945 (3.32)
Unemployed	-.5084 (24.14)	-.0835 (3.67)	-.2632 (11.66)	-.2250 (10.07)	-.2770 (10.13)
Retired	-.0401 (2.10)	.1697 (8.21)	.0296 (1.44)	.0097 (0.48)	-.0180 (0.73)
constant	-3.2234	3.1058	3.2857	3.2725	2.4793
Adjusted R^2	0.1517	0.0968	0.0906	0.0665	0.1198
N	15,885	15,876	15,772	15,698	14,920

Notes. Equations include 14 country dummies, age and its square. Student set to 18 for ALS, Workers are excluded category for labor market status. T-statistics in parentheses. *Would you say you are very satisfied (=4), fairly satisfied (=3), not very satisfied (=2) or not at all satisfied (=1) with each of the following things? (SHOW CARD WITH SCALE). 1. With the life you lead? 2. Your leisure life at home? 3. Your social life outside the house? 4. Your family life? 5. With the way democracy works in (OUR COUNTRY)?*

The model accounts for around 15 percent of the variance in life satisfaction. Unemployment lowers wellbeing markedly and there is no gender effect.[19] Being brought up by a single parent is the only ACE that is not statistically significant in the life satisfaction equation. This is a pattern that is apparent across all the wellbeing outcomes in Table 9.

Tables 10-13 adopt an identical approach estimating ACE correlations with wellbeing in adulthood across a large array of wellbeing outcomes. In nearly all cases ACEs are associated with lower wellbeing, apart from some instances where parental marital breakdown or being brought up by a single parent do not attain statistical significance.

Table 10. *Satisfaction in adulthood and child problems at age 18, EB #56.1, 2001*

	Area you live	Income	Standard living	Health	Time	Consid-eration	Noise
Characteristics before age 18							
Parents - financial problems	-.0516	-.1434	-.1077	-.0793	-.0509	-.0616	-.0312
	(3.77)	(8.93)	(7.75)	(5.31)	(3.32)	(4.71)	(1.71)
One parent	-.0085	-.0486	-.0379	-.0336	-.0391	.0055	-.0549
	(0.41)	(2.02)	(1.83)	(1.50)	(1.70)	(0.28)	(2.01)
A parent died	-.0242	-.0749	-.0662	-.0969	-.0183	-.0255	-.0161
	(1.39)	(3.67)	(3.75)	(5.10)	(0.94)	(1.54)	(0.69)
Parent's marriage broke up	-.0490	-.0695	-.0643	-.0096	.0032	-.0122	-.0153
	(2.45)	(2.95)	(3.18)	(0.44)	(0.14)	(0.64)	(0.58)
Parents quarreled frequently	-.1418	-.0914	-.0526	-.0943	-.0623	-.1100	-.1022
	(7.78)	(4.26)	(2.85)	(4.75)	(3.06)	(6.31)	(4.22)
One parent unemployed	-.0705	-.0866	-.0873	-.0241	-.0684	-.0352	-.0794
	(3.74)	(3.90)	(4.57)	(1.18)	(3.24)	(1.95)	(3.16)
Bullied at school	-.0553	-.0762	-.0558	-.1567	-.1015	-.1205	-.0905
	(2.55)	(3.00)	(2.55)	(6.63)	(4.18)	(5.83)	(3.15)
Long term health problems	-.0921	-.1510	-.1243	-.3405	-.0840	-.0904	-.0783
	(4.24)	(5.91)	(5.65)	(14.38)	(3.45)	(4.37)	(2.71)
Female	.0239	-.0072	.0197	-.0302	-.0408	.0487	-.0041
	(2.32)	(0.59)	(1.89)	(2.69)	(3.53)	(4.95)	(0.30)
Age left school	.0076	.0229	.0205	.0137	.0036	.0113	.0023
	(5.97)	(15.34)	(15.82)	(9.82)	(2.55)	(9.31)	(1.39)
Home worker	-.0277	-.1141	-.0628	-.0665	.2636	-.0109	-.0424
	(1.55)	(5.47)	(3.48)	(3.43)	(13.19)	(0.64)	(1.79)
Student	.0383	-.2778	-.0103	-.0231	.1361	.0541	-.0183
	(1.82)	(10.82)	(0.49)	(1.01)	(5.78)	(2.70)	(0.66)
Unemployed	-.1668	-.7220	-.4466	-.2589	.2793	-.2041	-.1402
	(8.17)	(30.30)	(21.60)	(11.64)	(12.22)	(10.45)	(5.16)
Retired	-.0236	-.1565	-.0810	-.2976	.3720	-.0160	-.0333
	(1.27)	(6.85)	(4.32)	(14.74)	(17.93)	(0.91)	(1.36)
constant	3.1495	2.6028	2.9123	3.9399	3.1747	3.1265	3.1834
Adjusted R²	0.1336	0.1927	0.1896	0.2476	0.1143	0.0786	0.0687
N	15,853	15,427	15,775	15,832	15,817	15,296	15,735

Notes. Question. I am now going to ask you to talk to me about different aspects of your everyday life. For each of them, could you tell me if you think this aspect of your life is very good (=4), fairly good (=3), fairly bad (=2) or very bad (=1)? 1. The area where you live? 2. Your income? 3. Your standard of living? 4. Your state of health? 5. The time you have available to do the things you have to do? 6. The consideration shown to you by other people? 7. The level of noise where you live?

[19] We do not report the age and age squared coefficients that show a U-shape for positive affect and a hump-shape for negative affect as found in a voluminous literature as discussed in various papers (Blanchflower, 2020, 2021, Blanchflower and Graham, 2021a, 2021b, Blanchflower, Graham and Piper, 2023).

The focus in Table 10 is seven aspects of the respondent's everyday life with 4-step answers coded from very good to very bad. The majority of the childhood experience variables are negative with the lone parent variable insignificant, with a t-value below 1.6 in three instances. Parental break up is insignificant in four and parental death in three. The remainder are significantly negative.

Table 11. *Satisfaction in adulthood and child problems at age 18, EB #56.1, 2001*

	Lost Sleep	Unhappy	Lost Confidence	Difficulties	Strain	Worthless	Blood pressure
Characteristics at age 18 or below							
Parents - financial problems	.1457 (8.17)	.1323 (7.70)	.0826 (5.34)	.1535 (9.29)	.1157 (6.69)	.0692 (4.94)	.0596 (3.88)
One parent	.1116 (4.17)	.1074 (4.18)	.0646 (2.78)	.0992 (4.01)	.1244 (4.81)	.0355 (1.70)	.0152 (0.66)
A parent died	.0683 (3.01)	.0983 (4.50)	.0559 (2.84)	.0436 (2.08)	.0325 (1.48)	.0343 (1.92)	.0915 (4.68)
Parent's marriage broke up	.0095 (0.37)	.0246 (0.98)	-.0098 (0.44)	.0369 (1.54)	.0268 (1.07)	-.0089 (0.44)	.0080 (0.36)
Parents quarreled frequently	.1879 (7.89)	.2307 (10.10)	.1859 (9.04)	.1790 (8.16)	.1553 (6.76)	.1493 (8.04)	.0447 (2.18)
One parent unemployed	.0523 (2.13)	.0952 (4.02)	.0751 (3.51)	.0796 (3.50)	.0828 (3.48)	.0420 (2.18)	.0148 (0.70)
Bullied at school	.2118 (7.52)	.2406 (8.86)	.1809 (7.41)	.1497 (5.63)	.2400 (8.82)	.1339 (6.09)	.0761 (3.11)
Long term health problems	.2432 (8.59)	.2725 (10.01)	.2269 (9.25)	.2375 (8.92)	.2204 (8.05)	.1643 (7.40)	.1406 (5.73)
Female	.1494 (11.10)	.1442 (11.13)	.0931 (7.99)	.0949 (7.44)	.0823 (5.80)	.0462 (4.39)	.0073 (0.63)
Age left school	-.0025 (1.48)	-.0053 (3.29)	-.0054 (3.75)	-.0077 (4.96)	-.0008 (0.48)	-.0058 (4.43)	-.0062 (4.32)
Home worker	-.0174 (0.75)	-.0116 (0.49)	.0075 (0.37)	-.0005 (0.03)	-.0826 (3.68)	.0174 (0.96)	.0126 (0.63)
Student	-.0352 (1.28)	.0333 (1.26)	.0326 (1.37)	.0440 (1.70)	.0216 (0.81)	-.0044 (0.21)	.0231 (0.96)
Unemployed	.3147 (11.86)	.3574 (13.98)	.3328 (14.42)	.3763 (4.99)	.1853 (7.19)	.3273 (15.71)	.0697 (3.03)
Retired	-.0257 (1.07)	.0196 (0.85)	.0523 (2.51)	.0228 (1.00)	-.1212 (5.20)	.0068 (0.36)	.0565 (2.73)
constant	1.112	1.2295	1.3019	1.3874	1.253	1.2064	0.0311
Adjusted R^2	0.0921	0.0922	0.0663	0.0865	0.0804	0.0638	0.1205
N	15,782	15,789	15,754	15,752	15,756	15,714	14,786

Notes. Equations include 14 country dummies, age and its square. Student set to 18 for ALS, worker excluded. T-statistics in parentheses. *Questions. Would you say that you have not at all (=1), no more than usual (=2), rather more than usual (=3), much more than usual (=4)? 1. Lost much sleep over worry? 2. Been feeling unhappy and depressed? 3. Been losing confidence in yourself? 4. Been feeling you could not overcome your difficulties? 5. Been feeling constantly under strain? 6. Been thinking of yourself as a worthless person? 7. Had problems of high blood pressure?*

Table 11 examines the six negative components that make up the GHQ6 examined by Blanchflower and Oswald (2008). The questions are as follows.

Have you recently:

Q18. Lost much sleep over worry?

Q19. Felt constantly under strain?

Q20. Felt you could not overcome your difficulties?

Q21. Been feeling unhappy and depressed?

Q22. Been losing confidence in yourself?

Q23. Been thinking of yourself as a worthless person?

These are coded from 'not at all' to 'much more than usual'. We also include a blood pressure measure – *have you had problems of high blood pressure*?" coded the same way. The female coefficient is always positive (Blanchflower and Bryson, 2024b, 2024c). Once again, ACEs worsen mental health in adulthood. The parental breakdown variable is insignificant but one parent having died enters significantly positive in all columns except for strain.

Table 12 repeats the exercise for fourteen more 5-step negative affect variables coded from strongly disagree (=1) to strongly agree (=5).

Table 12. *Satisfaction in adulthood and child problems at age 18, EB #56.1, 2001*

a)	Lonely	Not valued	No friends	Left out society	Left out family	Not useful	Look down at me
Parents - financial problems	.0866	.0846	.0432	.0847	.0137	.0756	.0901
	(3.22)	(3.38)	(1.78)	(4.39)	(0.73)	(3.32)	(4.05)
One parent	.0606	.0951	.0985	.0119	.0469	.0484	.0845
	(1.50)	(2.54)	(2.72)	(0.41)	(1.66)	(1.42)	(2.53)
A parent died	.1982	.1057	.0761	.0646	.0644	.0868	-.0169
	(5.80)	(3.31)	(2.47)	(2.63)	(2.69)	(3.00)	(0.60)
Parent's marriage broke up	.0746	.0737	-.0047	.0642	.0827	.0448	.0418
	(1.90)	(2.03)	(0.13)	(2.30)	(3.03)	(1.36)	(1.29)
Parents quarreled frequently	.3047	.2222	.2122	.1357	.2305	.2083	.1902
	(8.52)	(6.70)	(6.60)	(5.30)	(9.25)	(6.91)	(6.47)
One parent unemployed	.1844	.1406	.1465	.1086	.0436	.1494	.1541
	(4.99)	(4.08)	(4.40)	(4.10)	(1.69)	(4.77)	(4.99)
Bullied at school	.4137	.2053	.2670	.2185	.1930	.1343	.3132
	(9.74)	(5.24)	(6.98)	(7.18)	(6.51)	(3.76)	(8.93)
Long term health problems	.2996	.2608	.2387	.2008	.1524	.2192	.2060
	(7.02)	(6.60)	(6.21)	(6.58)	(5.12)	(6.07)	(5.83)
Female	.2463	.0546	.0621	-.0048	.0086	-.0040	-.0477
	(12.15)	(2.90)	(3.41)	(0.33)	(0.61)	(0.24)	(2.85)
Age left school	-.0073	-.0080	-.0042	-.0116	-.0088	-.0160	-.0166
	(2.92)	(3.44)	(1.85)	(6.47)	(5.03)	(7.57)	(8.03)
Home worker	.0285	.0548	.0240	.1590	.0482	.2140	.0806
	(0.82)	(1.68)	(0.77)	(6.35)	(1.98)	(7.23)	(2.78)
Student	.0378	-.0550	-.1849	-.0377	-.0212	-.0617	-.1193
	(0.92)	(1.44)	(4.99)	(1.28)	(0.74)	(1.77)	(3.48)
Unemployed	.4541	.3399	.2361	.5391	.2765	.5735	.4820
	(11.33)	(9.09)	(6.54)	(18.75)	(9.87)	(16.96)	(14.57)
Retired	.0799	.0098	.0707	.1805	.0942	.2342	.1192
	(2.20)	(0.29)	(2.16)	(6.93)	(3.71)	(7.61)	(3.96)
constant	2.3735	2.3563	2.1956	1.8291	1.8584	2.5216	2.0546
Adjusted R²	0.079	0.0625	0.0504	0.1043	0.0992	0.1018	0.0936
N	15,851	15,160	15,700	15,767	15,800	15,469	15,312

Table 12. *Satisfaction in adulthood and child problems at age 18, EB #56.1, 2001 (Cont.)*

b)	Fear of poverty	Bad build-ings	Lots of unemp-loyment	Drug abuse	Vandalism	Violence	Bad reputation
Parents - financial problems	.2169	.1399	.1166	.0854	.0689	.0467	.0349
	(9.08)	(5.45)	(4.28)	(3.05)	(2.63)	(2.05)	(1.38)
One parent	.0905	.0519	.0876	.0988	.0652	.1054	.0968
	(2.54)	(1.35)	(2.15)	(2.35)	(1.67)	(3.08)	(2.55)
A parent died	.0796	.0942	.0590	.0443	.0413	.0018	-.0331
	(2.62)	(2.88)	(1.70)	(1.23)	(1.24)	(0.06)	(1.03)
Parent's marriage broke up	.0795	.0560	.0850	.0521	.1219	.0486	-.0211
	(2.30)	(1.50)	(2.13)	(1.28)	(3.19)	(1.46)	(0.58)
Parents quarreled frequently	.1902	.1461	.1553	.2387	.1811	.1751	.1713
	(6.02)	(4.28)	(4.29)	(6.44)	(5.21)	(5.79)	(5.08)
One parent unemployed	.1280	.1994	.2239	.1588	.1020	.1528	.1102
	(3.90)	(5.65)	(5.97)	(4.12)	(2.83)	(4.88)	(3.17)
Bullied at school	.2485	.1612	.1040	.2200	.1928	.0918	.0738
	(6.64)	(3.97)	(2.39)	(4.98)	(4.66)	(2.55)	(1.84)
Long term health problems	.1680	.1161	.0949	.1386	.1544	.1302	.1493
	(4.44)	(2.86)	(2.18)	(3.12)	(3.71)	(3.59)	(3.71)
Female	-.0134	-.0101	.0251	-.0078	.0050	-.0181	-.0168
	(0.75)	(0.53)	(1.22)	(0.37)	(0.26)	(1.06)	(0.88)
Age left school	-.0200	-.0087	-.0170	-.0035	-.0057	-.0071	-.0103
	(9.00)	(3.65)	(6.64)	(1.35)	(2.36)	(3.36)	(4.36)
Home worker	.0775	.0005	.0772	-.0091	.0001	.0073	.0760
	(2.49)	(0.02)	(2.19)	(0.25)	(0.00)	(0.25)	(2.31)
Student	-.0335	-.0939	-.1627	-.1034	-.0610	-.0688	-.0387
	(0.91)	(2.37)	(3.83)	(2.42)	(1.52)	(1.97)	(1.00)
Unemployed	.6329	.1569	.6059	.1130	.1513	.1582	.2228
	(17.73)	(4.11)	(15.10)	(2.74)	(3.88)	(4.67)	(5.89)
Retired	.0688	-.0057	.1487	.0339	.0621	.0804	.1634
	(2.14)	(0.17)	(4.01)	(0.89)	(1.76)	(2.61)	(4.79)
constant	1.9384	2.4853	3.1704	2.7652	2.7732	2.5379	2.4087
Adjusted R²	0.1224	0.1094	0.1708	0.1292	0.0674	0.0864	0.0745
N	15,252	15,605	14,206	13,954	15,153	15,193	15,527

Notes. Equations include 14 country dummies, age and its square. Student set to 18 for ALS, worker excluded. T-statistics in parentheses. *Do you agree or disagree with the following statements? (SHOW CARD WITH SCALE - ONE ANSWER ONLY) - Strongly agree (=5) agree (=4) neither agree or disagree (=3) disagree (=2) strongly disagree (=1). 1. I have felt lonely at some time during the last two weeks? 2. I don't feel that the value of what I do is recognised by the people I meet? 3. It's difficult to have close friends in the area in which I live? 4. I feel left out of society? 5. I feel left out of my family? 6. I don't feel that I have the chance to play a useful part in society? 7. Some people look down on me because of my income or job situation? 8. I feel that there is a risk that I could fall into poverty? 9. The area in which I live has buildings in a bad state of repair? 10. There is a lot of unemployment in the area in which I live? 11. There are problems of drug abuse in the area in which I live? 12. The area in which I live has a lot of vandalism and theft? 13. There is a lot of violence in the area in which I live? 14. The area in which I live has not got a good reputation?*

Panel a) includes seven variables relating to how the individual feels ranging from loneliness to being left out of society and the patterns are very similar. Bad childhood experiences worsen mental health. Panel b) then examines seven variables relating to the local environment in which the respondent lives including there is lots of unemployment, bad buildings, problems of drug

abuse, vandalism and violence. Again, ACEs tend to be significantly associated with lower wellbeing.

Table 13 is restricted to workers and estimates equations for job satisfaction, pay satisfaction, and job security and whether work generates stress or pain. Sample sizes are smaller as the sample is restricted to workers (n=7,600). Only a subset of the ACEs are significantly correlated with job-related affect: growing up in a household with financial problems, or where parents quarreled frequently, is linked to lower job-related wellbeing in adulthood.

Table 13. *Satisfaction and in adulthood child problems before the age of 18, EB #56.1, 2001 – workers only*

	Job satisfaction	Pay	Job security	Stress	Pain
Parents - financial problems	-.1594 (3.61)	-.2457 (4.86)	-.1180 (2.11)	.0981 (3.04)	.2040 (5.39)
One parent	-.0938 (1.45)	-.1652 (2.23)	.0643 (0.78)	.0518 (1.09)	.0517 (0.93)
A parent died	-.0359 (0.63)	-.0272 (0.42)	-.0640 (0.88)	-.0049 (0.12)	.0651 (1.32)
Parent's marriage broke up	-.0645 (1.10)	-.0996 (1.48)	-.0301 (0.41)	.0106 (0.25)	-.0076 (0.15)
Parents quarreled frequently	-.1554 (2.82)	-.1665 (2.64)	-.2018 (2.89)	.1079 (2.68)	.1404 (2.98)
One parent unemployed	.0086 (0.15)	-.0049 (0.07)	-.0204 (0.27)	.0345 (0.80)	.0614 (1.21)
Bullied at school	-.1071 (1.68)	-.0564 (0.77)	-.0247 (0.31)	.0250 (0.54)	.1077 (1.96)
Long term health problems	-.1297 (1.80)	-.3960 (4.82)	-.1997 (2.20)	.1026 (1.95)	.1170 (1.90)
Age	-.0031 (0.44)	-.0236 (2.92)	-.0085 (0.95)	.0258 (4.98)	.0164 (2.70)
Age^2*100	.0121 (1.41)	.0413 (4.31)	.0244 (2.30)	-.0302 (4.92)	-.0211 (2.93)
Female	-.0061 (0.20)	-.1851 (5.32)	-.0291 (0.76)	.0095 (0.43)	.0525 (2.02)
Age left school	.0216 (5.76)	.0230 (5.35)	.0219 (4.60)	.0131 (4.78)	-.0351 (10.90)
Employee	-.2783 (6.51)	-.0356 (0.73)	.2386 (4.42)	-.0901 (2.88)	-.1719 (4.69)
constant	4.667	3.9646	3.9683	2.4258	2.7618
Adjusted R^2	0.0652	0.0636	0.0491	0.036	0.0665
N	7,620	7,707	7,697	7,624	7,575

Notes. Equations include 14 country dummies, age and its square. Student set to 18 for ALS, self-employed excluded category. T-statistics in parentheses. *1) All in all, how satisfied would you say you are with your job? (SHOW SAME CARD) 1= completely satisfied….7 completely dissatisfied? I am going to read out a list of various aspects of jobs. Please choose between the two ends of this scale. If you are completely dissatisfied with that particular aspect of your present job, you give a score of 1. If you are completely satisfied with that particular aspect of your present job, you give a score of 7. The scores between 1 and 7 allow you to say how close to either side you are. (SHOW CARD WITH SCALE). 2) Your pay? 3) Your job security? 4) How often do you find your work stressful – always (=5); often (=4); sometimes (=3); hardly ever (=2); never (=1)? 5) Bodily pains as a result of work – always (=5); often (=4); sometimes (=3); hardly ever (=2).; never (=1)?*

Once again, we constructed an additive scale capturing the intensity of ACEs along a scale ranging from zero to eight. The overall distribution was (n=15,943) as follows – 0=56.5%; 1=24.3%; 2=11.3%; 3=5.1%; 4=1.8% and 5+=1.0%. We then proceeded to examine a positive affect variable (life satisfaction) in Table 14 panel (a) and a negative affect variable (GHQ6) in Table 14 panel (b). We retain labor market status as a control but do not incorporate other controls which may partial out some of the possible impacts of the childhood experience variables. We simply retain fixed

demographic traits such as age left school, region, year and age. We then separate out the two samples by age – under 45 and 45 and over – to capture time since exposure.

Table 14. Wellbeing in adulthood and *Index of childhood problems before the age of 18, EB #56.1, 2001*

a) Life satisfaction			Age <45	Age≥45
Index 1 item	-.1584 (12.53)	-.1469 (11.81)	-.1681 (9.64)	-.1063 (5.99)
Index 2 items	-.2252 (13.27)	-.2068 (12.39)	-.2044 (8.89)	-.1871 (7.75)
Index 3 items	-.2996 (12.42)	-.2779 (11.72)	-.3259 (10.21)	-.1984 (5.66)
Index 4 items	-.3743 (9.47)	-.3537 (9.11)	-.3740 (7.93)	-.2848 (4.29)
Index 5+ items	-.4393 (8.56)	-.4004 (7.94)	-.4007 (7.12)	-.3854 (3.59)
Age	-.0140 (9.42)	-.0123 (6.99)	-.0300 (3.96)	.0229 (2.96)
Age^2*100	.0147 (9.53)	.0128 (7.03)	.0399 (3.28)	-.0148 (2.49)
Female	.0047 (0.46)	.0085 (0.80)	.0451 (3.12)	-.0296 (1.90)
Age left school	.0118 (8.86)	.0104 (7.96)	.0101 (4.83)	.0075 (4.32)
Home worker		-.0130 (0.71)	-.0389 (1.52)	.0061 (0.23)
Student		.0091 (0.42)	-.0310 (1.26)	-.0506 (0.44)
Unemployed		-.5061 (24.03)	-.4851 (19.10)	-.5788 (15.73)
Retired		-.0422 (2.21)	-.4204 (6.83)	-.0553 (2.37)
constant	3.2292	3.2258	3.5374	2.2305
Adjusted R^2	0.1192	0.1511	0.1529	0.1682
N	15,885	15,885	8,180	7,705
b) GHQ6			Age <45	Age≥45
Index 1 item	.8785 (12.69)	.8423 (12.26)	.8566 (8.82)	.7286 (7.52)
Index 2 items	1.6094 (17.30)	1.5524 (16.80)	1.6413 (12.78)	1.3368 (10.10)
Index 3 items	1.9566 (14.74)	1.8814 (14.28)	1.9501 (10.87)	1.6838 (8.77)
Index 4 items	2.7324 (12.66)	2.6856 (12.54)	2.9173 (11.08)	2.0565 (5.71)
Index 5+ items	3.5502 (12.65)	3.4215 (12.29)	3.4300 (10.93)	3.5340 (6.03)
Age	.1043 (12.75)	.1047 (10.69)	.2002 (4.70)	-.1532 (3.61)
Age^2*100	-.1101 (12.98)	-.1056 (10.38)	-.0024 (3.56)	.1001 (3.07)
Female	.6279 (11.07)	.6303 (10.68)	.4725 (5.84)	.7825 (9.16)
Age left school	-.0270 (3.70)	-.0233 (3.19)	-.0107 (0.92)	-.0155 (1.62)
Home worker		-.0895 (0.88)	.1884 (1.32)	-.3434 (2.32)
Student		.1603 (1.34)	.4986 (3.63)	-.4994 (0.82)
Unemployed		1.9040 (16.30)	1.8151 (12.79)	2.2999 (11.38)
Retired		-.2087 (0.27)	3.2031 (9.41)	-.1016 (0.80)
constant	7.399	7.107	5.3573	14.6801
Adjusted R^2	0.0885	0.1045	0.1266	0.1084
N	15,441	15,885	7,952	7,489

Notes. Equations include 14 country dummies, age and its square. Student set to 18 for ALS, workers and zero items excluded category. T-statistics in parentheses.

In Table 14, panel a) we examine the life satisfaction reported in column 1 in Table 5, but this time we include the index of items from 1-5, with zero the excluded category. All five are statistically significant and negative without labor force status controls in column 1 and with them in column 2. There is little change in the size of the coefficients in columns 1 and 2. Column 3 is for those

age forty-five and column 4 is for those at least age 45. The coefficient sizes are smaller for the older group but all are statistically significant and negative.

In Table 14, panel b) we explore the patterns in a different measure of mental well-being favored by, for example, Goldberg et al. (1997). It is a version of a so-called GHQ (General Health Questionnaire) psychiatric measure called GHQ6 and was also examined in Blanchflower and Oswald (2008). The six components are examined individually in Table 11 above. In this case, the dependent variable is a measure of psychological distress that comes from amalgamating answers to these questions: They are coded from not at all (=1), no more than usual (=2), rather more than usual (=3), much more than usual (=4)? GHQ6 is coded from 6-24 and has a mean of 9.56 and 49% of the distribution is scored from 6, the lowest, to 8.[20]

In Table 14, panel b) the ACE index variables are all significantly positive as expected – childhood issues worsen mental health – and once again the inclusion of labor force status dummies has little impact on the sign or significance of the index. They are all positive for both age groups with a decline in their coefficients for the older group.

The evidence is overwhelming from every one of the 38 wellbeing variables we examined using the EB #56.1 data, that ACEs – be they from financial problems, unemployment, marriage breakup, parental death, parental quarreling, poor health or bullying – tend to negatively affect wellbeing in adulthood. Having more ACEs reduces wellbeing still more.

6. Conclusion and discussion

There are consistent patterns in the cross-section data we examined, no matter which of the fifty measures of wellbeing were analyzed. The evidence is consistent over time, country and dataset. We find ACEs are associated with lower positive affect and higher negative affect. ACEs also have apparent impacts on views on the local community and may well impact the individual's success in life. This is not always true, everywhere: one or two of the ACEs are not statistically significant on occasions. But most of the time ACEs do have apparent impacts on wellbeing in adulthood. This matters, because as we showed in the BRFSS for the US, around half of adults reported they had at least one ACE including a quarter who had more than one. Multiple adversities compounded one another and produced even worse outcomes.

The cross-sectional nature of our data means it is difficult making causal inferences about the links between ACEs and wellbeing outcomes in adulthood. Nevertheless, in related work where we use longitudinal birth cohort data we confirm that childhood bullying negatively impacted a range of outcomes in adulthood, including wellbeing, through to people in their 60s (Blanchflower and Bryson, 2024a).

Whether we use measures of positive affect such as life satisfaction and happiness or of negative affect such as being lonely, depressed, unhappy and under strain, childhood abuse hurts in adulthood. Being bullied in school, having a parent die or experience financial problems or unemployment when the respondent was a child, as well as parental arguing, all lower wellbeing in childhood. Childhood adversity, which may be based on low parental income, predicts bad neighborhood effects when an adult. Disadvantage begets disadvantage.

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[20] The distribution is 6=29.1%; 7=10.0%; 8=9.4%; 9=8.7%; 10-7.1%; 11=6.7%; 12=11.7%; 13-16=11.4%; 17-24, the highest=5.8%.

Authors

David G. Blanchflower

Bruce V. Rauner Professor of Economics, Department of Economics, Dartmouth College, Adam Smith Business School, University of Glasgow, IZA, GLO and NBER.

https://orcid.org/0000-0002-2856-7039

Blanchflower@dartmouth.edu

Alex Bryson

Professor of Quantitative Social Science, Social Research Institute, University College London, NIESR and IZA.

https://orcid.org/0000-0003-1529-2010

Author contributions statement

Blanchflower conducted the data analysis and both authors wrote the paper.

Data availability statement

All data used in this paper are publicly available.

a) The General Social Survey is publicly available here https://gss.norc.org

b) The BRFSS data is publicly available here - https://www.cdc.gov/brfss/

c) The European Social Survey is publicly available here https://www.europeansocialsurvey.org

d) The Eurobarometers are available here https://www.gesis.org/en/eurobarometer-data-service/about

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