

# 2018 IF Index:

How does the wellbeing of today's twentysomethings compare to previous cohorts?

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The Intergenerational Foundation ([www.if.org.uk](http://www.if.org.uk)) is an independent, non-party-political charity that exists to protect the rights of younger and future generations in British policy-making. While increasing longevity is to be welcomed, our changing national demographic and expectations of entitlement are placing increasingly heavy burdens on younger and future generations. From housing, health and education to employment, taxation, pensions, voting, spending and environmental degradation, younger generations are under increasing pressure to maintain the intergenerational compact while losing out disproportionately to older, wealthier cohorts. IF questions this status quo, calling instead for sustainable long-term policies that are fair to all – the old, the young and those to come.

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# Foreword

The premise that has long underpinned modern welfare states – that each successive generation would become better-off than the previous generation – is now broken. As has been evidenced over the past 30 years or so, successive governments’ policies – both left and right leaning – have failed to sufficiently include the interests of younger and future generations.

Over the past seven years the Intergenerational Foundation ([www.if.org.uk](http://www.if.org.uk)) has worked to push the issue of intergenerational fairness up the national policy agenda by identifying areas where younger and future generations are most at risk. We’ve had some success with our proposals – on, for example, buy-to-let – but there is still a long way to go to save younger generations from paying too high a price to support our ageing population.

Housing, pensions, asset accumulation, higher education, taxation, and employment are key fault lines and, thanks to our work, and others’, it is now accepted that younger generations have suffered more financial pain than older generations.

Until now, little research has been undertaken into the newly emerging field of “wellbeing” and young people. This is a discipline that seeks to use wellbeing analysis as a way of investigating improvements or deteriorations in an individual’s ability to lead a flourishing life.

We are therefore delighted to be able to publish brand new research that looks beyond the dry analysis of facts and figures, and seeks to understand how jobs, wages, housing costs, health and environmental factors are affecting young people’s wellbeing today.

The ability to add a time dimension to the analysis by taking three groups of twentysomethings over a 20-year period and track their survey responses gives more richness to the data.

We think that we have achieved these objectives with this report. I hope it acts as a wake-up call to policy-makers that we are actually harming the wellbeing of our young people by failing to develop policies that protect their best interests.

**Angus Hanton**

Co-founder

# Executive summary

- The debate about intergenerational fairness in the UK has mainly focused on economic issues. IF wanted to expand the debate by attempting to measure the overall quality of life of young adults in the UK to see whether it is improving from one generation to the next. To do this we looked at “wellbeing” – the academic concept that human happiness is multi-dimensional and needs to be examined across a whole range of different areas of life.
- Previous research into people’s wellbeing suggests that five domains of life are particularly crucial to human happiness:
  - Being employed and income (Economic Wellbeing)
  - Having good personal relationships (Relationships Wellbeing)
  - Physical and mental health (Health Wellbeing)
  - Liking where you live (Personal Environment Wellbeing)
  - A sense of belonging to some type of cause or belief (Belonging Wellbeing)
- IF used data from the British Household Panel Survey and Understanding Society to compare how these domains have changed for three cohorts of young adults aged 20 to 29:
  - 1995 – Participants born 1964-1975
  - 2005 – Participants born 1976-1985
  - 2015 – Participants born 1986-1995
- The results of this research showed that:
  - **Overall wellbeing, rather than improving over the past 20 years, has actually declined by 10%.**
  - Economic Wellbeing: There has been a very large fall in young people's levels of subjective satisfaction with their financial situation since 1995, which has been compounded by lower real incomes since 2005.
  - Relationship Wellbeing: The most dramatic decline in the Index has been in the quality of family relationships in terms of young people identifying one of their relatives as one of their closest friends – declined more than 50% between 2005 and 2015 – and also in another indicator which measures how much contact people have with their closest friends; this suggests this age group may be becoming more socially isolated.
  - Health Wellbeing: There has been an alarming 25% fall since 1995 in an indicator which measures how young people assess their physical health, yet very little change in how they assess their mental health over the same period.
  - Personal Environment Wellbeing: This domain also declined significantly between 1995 and 2015, largely owing to an increase in household overcrowding.
  - Belonging Wellbeing: There have been very large declines in levels of volunteering, interests in politics and observing a religion among this age group since 2005, which are proxies for the level of trust in society and sense of belonging.
- IF calls for more attention to be given to the issue of wellbeing among young adults, in particular the issue of social isolation which clearly affects people of all ages.

# 1. Introduction

## What is “wellbeing” and why does it matter?

*"All [people] want is someone to love, somewhere to live, somewhere to work, and something to hope for."*

Norman Kirk, Former Prime Minister of New Zealand (1972–74)

Humans are complicated creatures, who harbour a wide range of different wants, needs and desires. This fact should be self-evident to most people, yet the vast majority of the public debate surrounding living standards and prosperity in 21<sup>st</sup>-century Britain is relentlessly focused on using narrow economic indicators such as GDP growth, employment, wage levels and house prices as measures of progress or stagnation. While these factors are obviously important to people's quality of life, it is widely recognised that money is far from the only thing which has a large bearing on how good or bad people perceive their lives to be.

A growing awareness of the limitations of using purely economic metrics to assess quality of life has given rise to the field of interdisciplinary wellbeing studies over the past three decades. “Wellbeing” is actually a term for which no single, comprehensive definition has ever been agreed upon,<sup>1</sup> but it essentially relates to a set of different ways of measuring quality of life and human progress which take account of the broad spectrum of human needs, rather than only looking at economic measures. “Wellbeing” is quite often used interchangeably with other terms such as “happiness”, “quality of life”, and “human flourishing”, which attempt to capture a similarly multifaceted sense of what makes for a good life. A variety of different theoretical frameworks have been proposed for attempting to measure wellbeing which will be discussed in detail in a subsequent chapter.

The growth of interest in wellbeing has seen many different bodies launch research projects which attempt to measure wellbeing, either among whole populations or for particular groups of people, while others have sought to compare wellbeing between different countries or regions. Some prominent examples include the OECD's *Better Life Index*, which compares quality of life across the 34 OECD member states, the United Nation's *Human Development Index*, which measures progress on a range of developmental metrics, and the European Quality of Life Surveys. In the UK, the Office for National Statistics (ONS) launched its own programme to measure national wellbeing in 2011, which has now produced a number of studies that analyse both the state of wellbeing in general and how it varies between different population sub-groups.

However, there has never previously been a comprehensive attempt to measure the wellbeing of young adults as a specific age group; given that a large amount of recent research from IF and other organisations has shown that the current generation of young adults is enduring *economic* disadvantages compared to previous cohorts – for example in the form of lower real wages, higher housing costs and fewer opportunities to build up wealth through saving – IF was interested in investigating how the current cohort of young adults compared to their predecessors across a broad range of other wellbeing measures as well, to try to measure how their quality of life has changed beyond just economic factors. This is important for two reasons: firstly, to help us develop an accurate picture of whether young adults' overall wellbeing has deteriorated alongside their economic standard of living, which would obviously mean that their plight was even more acute than previous analyses have suggested it was, and, secondly, because processes of social and economic change never occur in complete isolation from each other but are instead mutually deterministic and self-reinforcing.

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<sup>1</sup> ONS (2011) *Developing a framework for understanding and measuring national well-being* Newport: ONS

Economic changes in people's lives are likely to drive changes in other aspects of how they live and vice-versa, so it is interesting to try to quantify whether, for example, economic pressures may be making young adults less satisfied with their personal relationships, or how the enormous increase in access to technology which this generation has experienced has influenced their overall wellbeing.

The subsequent sections of this report will each address a different aspect of how we undertook this project in detail: Section 2 will provide a summary of the evidence which demonstrates that today's young adults have seen a decline in their economic status compared with previous generations and discuss some of the limitations of these analyses; Section 3 will examine the previous research on wellbeing and its relationship with age to explain how we conceived the subject and why we chose the particular domains of wellbeing that we eventually did; Section 4 will present the methodology which we used to attempt to measure young adults' wellbeing; Section 5 will contain a discussion of our results; and Section 6 presents our conclusions, policy recommendations and the next steps for this area of research.

## 2. “It’s the economy, stupid”

### Economic disadvantages facing today’s young adults

Recent years have borne witness to a profusion of analyses presented by academics and think tanks which demonstrate that today’s young adults have faced a significant number of economic disadvantages compared to previous cohorts when they were at the same stage in life. Since the Intergenerational Foundation was officially launched in 2011 to draw attention to the issue of intergenerational inequality in British society, the issue has risen rapidly up the political agenda, to the extent that there was even an official inquiry into intergenerational fairness conducted by the House of Commons Work and Pensions Select Committee in 2016. The case that today’s young adults have done less well than previous generations in economic terms has tended to coalesce around four specific topics in particular: incomes, housing costs, the cost of attending higher education, and the ability to save, each of which will be fleshed out in detail in the rest of this section.

#### Incomes

It has been clearly demonstrated that the British labour force, as a whole, has suffered an unprecedented decline in real wage levels since the Great Recession began in 2008:

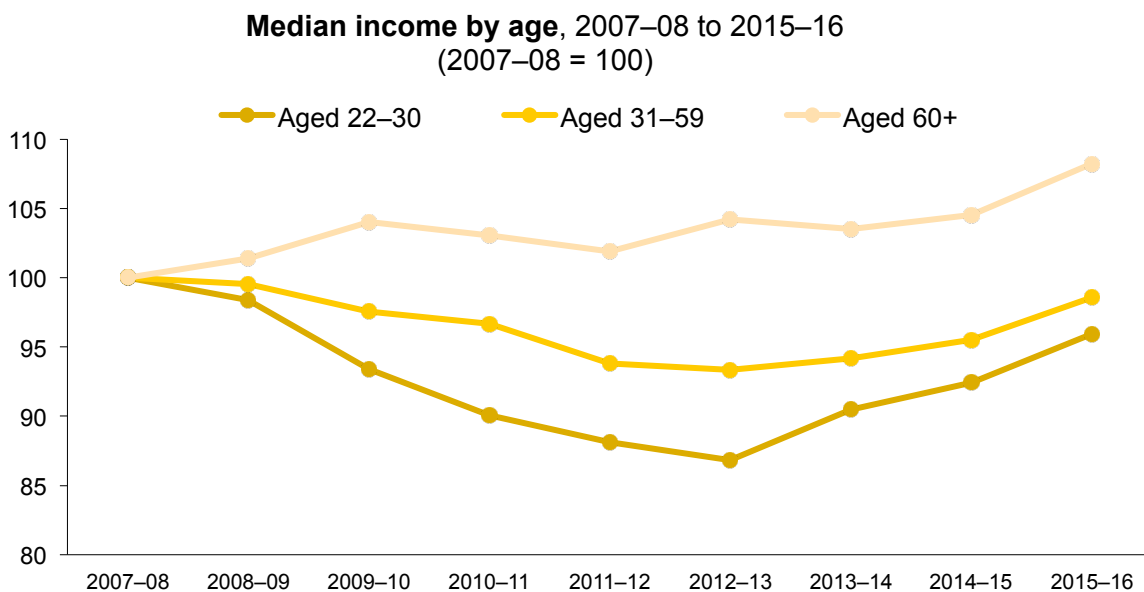


Fig.1 Median income for different age groups, 2007/08 to 2015/16<sup>2</sup>

<sup>2</sup> Browne, J. and Hood, A. (2017) *Living standards, poverty and inequality in the UK: 2015-16 to 2020-21* London: Institute for Fiscal Studies



A decade on from the global financial crisis, real wage levels for the average working-age person are still below where they were at the time when it struck, owing to a combination of poor economic growth, stagnant productivity and public sector wage restraint. It has also been shown that even the relatively small improvement in real wages which has occurred since 2012/13 has been driven partly by higher employment, rather than people who already had jobs receiving real-terms wage increases.<sup>3</sup> However, workers who are currently in their twenties – many of whom were entering the labour market for the first time when the crisis struck and in its immediate aftermath – have fared even worse than their older colleagues; not only do they earn less, on average, than any other age group in absolute terms, but they have also seen the largest real-terms decline in how much people of their age were earning compared to ten years ago. Other analysis has shown that there has been a long-term decline since the early 1990s in the average wages of men who are in their twenties which has been driven by the gradual shift of young men away from higher-paid, full-time jobs (particularly in manual and technical occupations, where their wage bargaining power was greater because of unionisation) towards lower-skilled, part-time work in the services sector such as retailing and bartending, while average wages for young female workers have broadly been stagnant across the same period.<sup>4</sup> This is reflective of the fact that younger workers who have recently entered the labour market have been more affected by the ways in which technology and casualisation have disrupted the world of work; for example, 36% of workers who are employed using zero-hours contracts are aged 16 to 24, even though this age group only accounts for 11% of the employed workforce.<sup>5</sup>

The overall point to be made about younger workers' incomes is that, while all workers have done badly out of the labour market over the past ten years, the youngest workers have done especially badly, a trend which has also been compounded by retrenchments in the generosity of working-age welfare (e.g. placing a cap on the total value of state benefits which working-age households can receive, capping benefit uprating at 1%, reforms to Child Benefit and Local Housing Allowance etc.), whereas (as shown in Fig.1) the only age group whose average incomes have risen over the past decade has been pensioners, because of the lengthening retirement of the oldest people from the Baby Boomer generation (more of whom had access to good-quality pensions than was the case in previous generations) and the government's decision to protect pensioner benefits from its austerity measures.

## Housing costs

Most parts of the UK, but especially London and the South East, have seen dramatic rises in house prices over the past 25 years which have inevitably benefited property-owners at expense of people who do not own their own homes. This has huge implications for intergenerational equity because property owners are disproportionately likely to be older people who got on the housing ladder when it was still relatively affordable in the 1970s and 1980s, whereas because today's young adults did not have that opportunity, they must either buy or rent their housing in an over-inflated housing market or live with their parents for much longer than was considered usual by previous generations.

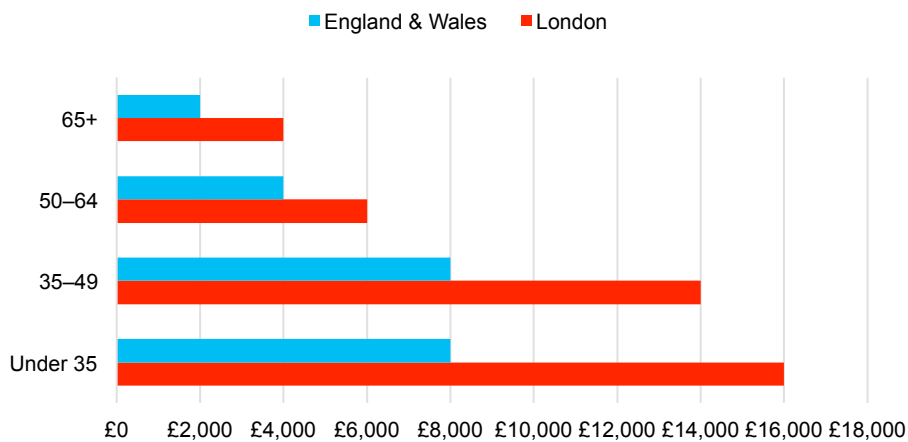
The result of the UK's housing crisis is that young adults have seen a huge increase in their housing costs in comparison to older generations over recent years, as shown in Fig.2.

<sup>3</sup> Johnson, P. (2018) *Income inequality is not rising, but seen from the middle it looks worse* London: Institute for Fiscal Studies

<sup>4</sup> Resolution Foundation (2017) *Millennial men earned £12,500 less than the generation before them by the time they hit 30* London: Resolution Foundation

<sup>5</sup> Office for National Statistics (2018) *Contracts that do not guarantee a minimum number of hours: April 2018* Newport: ONS

### Median annual housing costs by age group, 2015



*Fig.2 Housing costs by age group<sup>6</sup>*

The data in Fig.2 also emphasise how much higher housing costs are in London than they are in the rest of the rest of England and Wales, which is significant for intergenerational inequality because so many of them migrate to London in search of job opportunities during this phase of their lives, whereas people become more likely to move out of London as they get older. Survey evidence suggests that the majority of young adults still aspire to become homeowners, but many of them are very unlikely to ever achieve this aim: 40% of Millennials who are over 30 are now renting their homes privately, twice as many as for Generation X and four times as many as among the Baby Boomers when those two generations were at the same stage in life, and a recent estimate suggested that a third of Millennials could still be renting privately at age 65.<sup>7</sup> It is very unlikely that today's young adults will ever achieve the same levels of home ownership that were enjoyed by their parents' and grandparents' generations, which has serious knock-on effects for social equality as it will make inherited housing wealth more valuable to those fortunate members of the Millennial generation who are lucky enough to inherit property wealth from their families.

## Higher education

One of the most dramatic social changes which has affected young adults in Britain over the past four decades has been the enormous increase in the proportion who attend higher education after finishing at school. Whereas just 12% of young adults went to university as recently as 1979, now around 42% of men and 55% of women aged 17 to 30 have been through higher education.<sup>8</sup> Successive governments have largely paid for this increase in higher education participation by transferring more and more of the costs of attending university onto the student through tuition fees and student debt; the post-2012 higher education reforms, which raised the maximum amount that universities could charge students for a single year's tuition to £9,250 and replaced virtually all maintenance grants with additional loans, means that higher education students in England now graduate with the biggest student debts in the developed world – those from the poorest backgrounds (who qualify for the maximum level of maintenance loans) will accrue debts of £57,000 by the time they graduate from a full-time 3-year degree.<sup>9</sup> These debts are "income-contingent", which means that they are serviced through a pseudo-graduate tax that deducts 9% from their earnings above the

<sup>6</sup> Cook, L. (2015) *Market Examination*, presentation delivered during the 2015 RESI conference at Celtic Manor, Newport, 8 September 2015

<sup>7</sup> Corlett, A. and Judge, L. (2017) *Home Affront: housing across the generations* London: Resolution Foundation

<sup>8</sup> House of Commons Library (2017) *Participation in higher education in England and the UK: Social Indicators* page London: House of Commons Library

<sup>9</sup> Belfield, C. et al. (2017) *Higher Education funding in England: past, present and options for the future* London: Institute for Fiscal Studies

repayment threshold, which is currently set at £25,000 per year (this was originally supposed to rise with inflation, which enable the effects of fiscal drag to maintain its value in real terms, but it was frozen at its initial level in 2015, so that the government could recoup more repayments, and then subjected to a large one-off increase to £25,000 in 2017). When combined with paying Income Tax and National Insurance, this will give the majority of graduates a marginal tax rate of 41% on their earnings above £25,000, further eroding their disposable income. Currently, student debts are due to be written off after 30 years, and it has been forecast that 83% of graduates will never fully repay their debts, which means they will be paying this higher tax rate for a very large proportion of their working lives – and potentially longer, should a future government decide to extend the repayment period beyond its current limit.<sup>10</sup>

## The ability to save

As has been demonstrated in the above paragraphs, today's young adults have less money than people in previous cohorts did because their incomes are lower and they are having to pay more for housing and (for the roughly 50% who attended higher education) student debt repayments. Aside from the immediate problem of not being able to afford the day-to-day cost of life's necessities, for many of them this has greatly eroded their ability to save and build up asset wealth which they can use in the future. However, the problem of building up wealth has been further compounded by the fact that, firstly, interest rates have been at historically low levels for the past ten years, and secondly, the two main types of asset wealth which people use to grow their life savings in the UK – property and pensions – have both become much less accessible than they were for members of previous generations. In addition to the housing crisis facing this generation, which has already been illustrated, it is much more difficult for them to accumulate significant wealth in a pension because of the demise of final salary pension schemes within the private sector, which have largely been replaced with less generous (and riskier) defined contribution pension schemes. The chasm between the relative value of the two types of pension is best illustrated by the difference in average annual contribution rates between them: in 2016, typical private sector workers who belonged to a final salary pension scheme made pension contributions which were worth 22.7% of their salary, compared with their counterparts in a defined contribution scheme who made contributions worth only 4.2% (employer contributions were 16.9% and just 3.2% respectively, which explains most of the difference).<sup>11</sup> Because the vast majority of the remaining private sector final salary schemes are closed to new members, the workers in the second category are significantly younger than those in the first.

These trends mean that today's young adults have accumulated significantly less overall wealth on average than previous generations had done by the same stage in life. Research has shown that the average person who was born between 1981 and 1985 (i.e. the oldest Millennials) had only accumulated *half* of the total net wealth by the age of 30 of someone who was born during the previous five-year birth cohort (i.e. the youngest members of Generation X). In order to match the average wealth levels of their parents' and grandparents' generations, today's young adults would need to save very substantial amounts of money.

<sup>10</sup> Belfield, C. et al. (2017b) *Higher Education finance reform: Raising the repayment threshold to £25,000 and freezing the fee cap at £9,250* London: Institute for Fiscal Studies

<sup>11</sup> ONS (2017) *Occupational Pension Schemes Survey: UK, 2016* Newport: ONS

### Median non-pension household wealth by age of household reference person, 2010–12

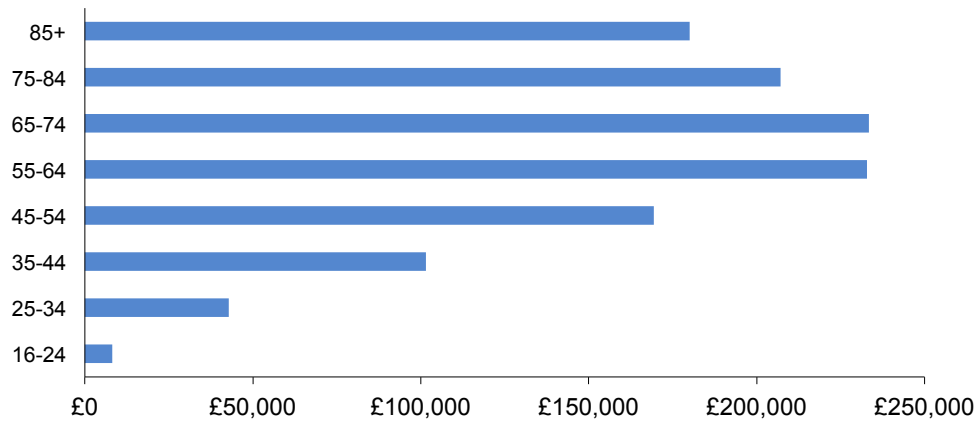


Fig.3 Median non-pension household wealth by age of household reference person<sup>12</sup>

Although you would naturally expect older people to have accumulated more wealth than younger ones, it is the scale of the gaps illustrated by Fig.3 which is remarkable. The average household where the household reference person (who is normally the highest earner) is aged 25–34 would need to become two-and-a-half times as rich as they are now to catch up with the cohort which is ten years older than them and four times as rich to catch up with the cohort which is twenty years older than them. Had pension wealth been included in these figures, the gaps would appear even starker. Professor Sir John Hills of the London School of Economics has estimated that for households aged 25 to 34 to catch up with the levels of wealth enjoyed by older generations they would effectively need to save 50% of their incomes each year, which is clearly unfeasible.<sup>13</sup> As mentioned above with regard to housing, this generational inequality is bad for overall social inequality because it means that young adults who can look forward to inheriting familial wealth will have a bigger advantage when it comes to buying homes or saving for retirement than their poorer peers. Indeed, family wealth is already a hugely significant factor in the property market, as research has shown that around 280,000 property purchases each year currently involve financial assistance from either parents or grandparents.<sup>14</sup>

This section has shown that on the economic front, the position of today's young adults looks especially bleak. But at the same time, this also raises a set of very interesting questions about how their economic predicament has affected young adults' overall wellbeing, such as: Are they themselves especially concerned about their economic futures? Do economic worries "spill over" into other areas of their lives, such as their health and their relationships? And is their overall quality of life possibly being more affected by things which are less closely related to these major economic issues, such as the impact of technology or the ways they conduct their relationships? These broader questions of wellbeing will be explored in subsequent sections.

<sup>12</sup> Hills et al. (2015) *Falling Behind, Getting Ahead: The Changing Structure of Inequality in the UK, 2007-2013* London: Centre for the Analysis of Social Exclusion, LSE

<sup>13</sup> Quoted in: "Young people 'unlikely to attain wealth of parents' generation' – study" *The Guardian*, 12 March 2015

<sup>14</sup> Legal and General (2016) *The Bank of Mum and Dad* London: Legal and General

## 3. Previous wellbeing research

### What really makes us happy?

Human happiness is clearly highly subjective: what brings one individual happiness and fulfilment could have completely the opposite effect upon someone else. However, a large volume of research has now been undertaken into wellbeing which has indicated that certain things are associated with it being higher or lower when you attempt to measure wellbeing across large groups of people. Of course, before you can attempt to measure which things in life are related to wellbeing, you first need to have some kind of understanding or model of *how* you think wellbeing itself operates; in other words, before you can ask “what makes us happy?” you first need to have answered the question “what is happiness, and why do the things which make us happy have that effect on us?” Therefore, before this section delves into what previous research has said about wellbeing, it will first introduce the different models of wellbeing which have been proposed by researchers.

#### Models of wellbeing

Attempts to create models of wellbeing have coalesced around a number of approaches which make different underlying assumptions about the nature of human happiness. The ones which are cited most frequently in the literature on wellbeing are as follows:<sup>15</sup>

**Objective lists** – This model makes the straightforward assumption that wellbeing can be defined according to a reasonably intuitive list of objective characteristics, such as economic resources, political freedom, literacy, good health and so on, and someone’s wellbeing can be measured simply according to how many of these items they have attained. It is largely up to the researcher to decide what is good for people’s wellbeing, so the contents of an objective list, and how progress towards each of the items it contains should be measured, both require the researcher to exercise a substantial amount of judgement, which is likely to lead to a significant level of variation between different wellbeing measures that take an objective lists-based approach.

**Preference satisfaction** – This model assumes that, rather than someone else making judgements on their behalf about what they need to have higher wellbeing, people’s wellbeing increases when they get what they themselves think they want (satisfying their preferences), almost regardless of what that is. The dominant view that ensuring people have more money is what ultimately increases wellbeing is based on the preference satisfaction model, because if having more money is what enables people to satisfy more of their desires then how much money they have becomes a proxy for their wellbeing. Of course, there are myriad obvious flaws with this model: for example, it assumes people select their preferences and ways of fulfilling them completely rationally, and it doesn’t account for the negative externalities for everyone else of individuals exercising their individual preferences (such as the cost to the NHS of people leading unhealthy lifestyles, which would reduce other taxpayers’ ability to satisfy their own preferences if they end up with less money from having to pay higher taxes). There is also a problem which affects all wellbeing models which ask participants to make judgements about their own lives, which is that people tend to compare their own situation with either their own expectations of life or with the situation of other people who are familiar to them; this can lead

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<sup>15</sup> The information provided here is largely based upon two major reviews of the academic literature on wellbeing:

- ONS (2011) *Developing a framework for understanding and measuring national well-being* Newport: ONS
- Dolan et al. (2006) *Review of research on the influences on personal well-being and application to policy making* London: DEFRA

people who live in poverty, for example, reporting having higher wellbeing than they would do using an objective lists approach because there could be things which a completely objective assessor would think are extremely important to wellbeing (such as political freedom) that a person who has never experienced them simply doesn't expect to have.

***Flourishing accounts*** – Rather than looking at either objectively measurable personal characteristics or asking people what they say they want, this model of wellbeing attempts to measure how close they are to achieving what is considered to be their maximum potential as a human being. Instead of using objective characteristics such as income and health, this is measured in relation to concepts such as life purpose, personal growth and autonomy. Clearly this framework also involves making certain normative judgements about what makes for a flourishing human being, but a number of influential frameworks for measuring flourishing have now been developed.

***Hedonic accounts*** – This wellbeing model considers wellbeing to be a directly observable emotional state which is the sum of how much positive emotion (pleasure) and negative emotion (pain) they experience. For example, some researchers who use hedonic accounts ask people to reconstruct all the events they went through within a day and ascribe positive or negative emotions to them, and then calculate how high or low their overall level of wellbeing was.

***Evaluative accounts*** – This model makes the assumption that people themselves are the best judges of their own wellbeing, so it simply asks them how they feel their lives are going and allows them to ascribe their own weights to different aspects of their lived experience. For example, it is up to them to decide whether they have chosen to endure a certain amount of negative emotion in the short-term, which under a Hedonic account would reduce their wellbeing, in order to increase their human flourishing in the longer term (e.g. doing a job they don't particularly enjoy in order to earn enough money to live more autonomously). The field of subjective wellbeing studies, which mainly uses surveys to ask people questions about how happy they feel, is largely based on an evaluative model of wellbeing.

While these different theories of wellbeing each have their merits, in practice attempting to measure wellbeing in the real world often requires an approach which blends together different aspects from several of them. This project mainly employed an objective lists approach, in which the objects which were deemed to comprise wellbeing were chosen on the basis of previous research literature that suggested that these were significant.

## **So, what makes us happy?**

Now that different ways of measuring wellbeing have been discussed, it is useful to summarise the results which the field of wellbeing studies has come up with when it has attempted to use them to actually measure what makes people happy. Research into wellbeing has dramatically expanded since the early 1990s, and growing interest particularly over the past few years has led to the production of several major reviews of the field which have synthesised what we think we have discovered about personal wellbeing so far.

First and foremost, it has been strongly suggested that quite a lot of the variation in wellbeing is created by individual factors which may not be directly modifiable. Most strikingly, heritability studies have suggested that around 50% of the variation in wellbeing between individuals may be the result of genetic factors.<sup>16</sup> In other words, some people appear to be genetically equipped with ways of dealing with life which makes them feel more positive about their situation, regardless of how an outsider might view it objectively. There are also other factors within the environment, both natural and socio-

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<sup>16</sup> Diener, E. (1996) "Traits can be powerful, but are not enough: lessons from subjective wellbeing" *Journal of Research in Personality*, 30, 389–399



political, which an individual has no control over but which could be having a strong impact on their quality of life. For example, environmental pollution has been linked to lower wellbeing across several studies, as has the level of income inequality within their environment.<sup>17</sup> It's important to point out that not everything which could potentially have some impact on wellbeing has actually been investigated, and lots of things have been investigated using different wellbeing models, different datasets or different techniques from study to study which have produced some inconclusive results. However, from an objective lists approach, it is possible to identify a relatively small number of things which are consistently associated with higher wellbeing across multiple studies:

- Employment and income – Multiple studies have suggested that having a job is very important for wellbeing, although there is an important debate about whether having any job is better than no job at all; some research suggests that job satisfaction is very important, as is not working long hours or having an especially arduous commute,<sup>18</sup> whereas other research has argued that doing any kind of work is better for people's wellbeing than being unemployed.<sup>19</sup> By contrast, much of the research is more ambivalent about the relationship between income and wellbeing: while income is definitely important to wellbeing, there is some evidence that the returns start diminishing beyond a certain level, and it has also been suggested that relative income (i.e. how much you earn in relation to people in your own social environment) is more important than how much you earn overall.<sup>20</sup>
- Health – Both physical and mental health have been very strongly associated with higher wellbeing (and poor health has been shown to have a very strong effect on lowering wellbeing) across a wide range of studies. The relationship between mental health and wellbeing is particularly interesting because some researchers have treated positive mental health as an objective measure of wellbeing itself (as in subjective wellbeing research), while others have treated it as one variable among many which may contribute towards overall wellbeing. Both physical and mental health are generally self-assessed by the participants in wellbeing research (for example, using devices such as the Warwick-Edinburgh Mental Wellbeing Scale), rather than being based on official medical diagnoses (which provide a broader range of responses). To some extent, the relationship between health and wellbeing may be explained by people subjectively assessing their overall quality of life to be lower because the world looks bleaker to them when they're in poor health (even if they are relatively successful in other domains of their lives), but this relationship between health and wellbeing appears to be a consistent finding across virtually all models of wellbeing research. Having a disability has been shown to lower people's wellbeing, as has being overweight or obese, and being a smoker.<sup>21</sup>
- Personal relationships – Alongside health, personal relationships is one of the areas of life which have been most closely associated with wellbeing by previous research. Enjoying regular social contact with friends, having strong bonds with family members and forming successful intimate relationships are all strongly associated with wellbeing, while living alone or being generally socially isolated have been shown to reduce wellbeing. Using data from a large-scale social survey in the Netherlands, one study proposed that there is a "hierarchy of intimacy" to personal relationships and wellbeing: people who are in unmarried couples have higher wellbeing than single people, but people who are married have the highest wellbeing of all (although, rather unromantically, their findings suggested that the largest explanation for this effect was that people in couples have access to a higher standard of living than single people through sharing resources such as money and housing, rather than any emotional benefits provided by the

<sup>17</sup> Pickett, K. and Wilkinson, R. (2007) *Child wellbeing and income inequality in rich societies: ecological cross-sectional study* London: British Medical Association

<sup>18</sup> Chandola, T. (2017) "Is any job really better than no job at all?" *LSE Business Review Blog*, 12 October 2017

<sup>19</sup> Layard, R. (2004) *Good jobs and bad jobs* London: LSE Centre for Economic Performance

<sup>20</sup> Dolan et al. (2006) *Review of research on the influences on personal well-being and application to policy making* London: DEFRA

<sup>21</sup> Eurostat (2010) *Eurostat Feasibility study for Well-Being Indicators* Luxembourg: Eurostat

relationship).<sup>22</sup> There is also some evidence that being divorced, widowed or separated is very bad for wellbeing, and that people who belong to these groups may have even lower wellbeing than single people who've never been married do on average.<sup>23</sup>

- **Personal environment** – The effects of personal environment on wellbeing have also been a persistent finding of wellbeing research. These effects take a variety of different forms, which lend a number of different meanings to the term “environment”. Firstly, as mentioned above, there is evidence that living in a physically polluted environment is bad for wellbeing, presumably because it has a negative impact on people’s health. Secondly, there is evidence that housing is quite important for wellbeing, both in terms of how it relates to someone’s social and economic circumstances and in the sense of providing sanctuary and privacy from the outside world. For example, both physical overcrowding and living with parents as an adult have been associated with lower wellbeing.<sup>24</sup> Thirdly, there is evidence to suggest that feeling a sense of safety and security within your immediate personal environment (particularly liking the neighbourhood where you live) is also important for wellbeing.<sup>25</sup> Perhaps unsurprisingly, living in a more affluent neighbourhood has been shown to cause higher wellbeing independently of how affluent an individual is, presumably because wealthier neighbourhoods tend to have lower crime rates and provide greater access to social resources (e.g. public services) than poorer ones.<sup>26</sup>
- **Beliefs** – Finally, there is a significant strand within wellbeing research which has suggested that personal beliefs, broadly defined, are also important to wellbeing. Research has looked at the relationship between people’s beliefs in various different types of institutions. Firstly, there is some research which suggests that trust in political institutions and political participation (which is likely to follow on from the former, as people might be less likely to vote if they distrust the political process) is good for wellbeing, possibly because it contributes to a sense that the society people live in is just and fair.<sup>27</sup> Secondly, having religious beliefs has repeatedly been associated with higher wellbeing, across all the major religions which have been investigated. However, it is still unclear whether this is because of the spiritual and emotional benefits of having something larger than oneself to believe in, or whether it could be explained by more prosaic factors such as the increased social contact which people get from attending religious observances.<sup>28</sup> Thirdly, volunteering and doing community work have also been positively associated with wellbeing, which may reflect the psychological benefits of having a cause which is larger than oneself to believe in and contribute towards.<sup>29</sup>

It’s important to emphasise that this summary has some significant limitations; first and foremost, it is just one interpretation of a vast body of research literature which has been organised around certain key themes within that work which are open to interpretation. Even when a particular attribute or activity has been associated with higher or lower wellbeing, it still requires further research to identify the causal mechanism through which it actually influences it, which means that our understanding of some of them is still quite speculative. Secondly, this summary has omitted many aspects of life which most people would think are very important, either because they haven’t been researched extensively or because the research is very inconclusive. Perhaps most strikingly – given what a key decision in life this is for most people – the effect of having children on wellbeing is very inconclusive; some of

<sup>22</sup> Soons, J. and Liefbrewer, A. (2008) “Together is better? Effects of relationship status and resources on young adults’ well-being” *Journal of Social and Personal Relationships*, 25, 4: 603–624

<sup>23</sup> Dolan et al. (2006) *Review of research on the influences on personal well-being and application to policy making* London: DEFRA

<sup>24</sup> Ibid.

<sup>25</sup> ONS (2014) *Measuring National Well-being: Exploring the Well-being of Young People in the UK, 2014* Newport: ONS

<sup>26</sup> Chanfreau et al. (2013) *Predicting Wellbeing* London: Natcen

<sup>27</sup> Eurostat (2010) *Eurostat Feasibility study for Well-Being Indicators* Luxembourg: Eurostat

<sup>28</sup> Dolan et al. (2006) *Review of research on the influences on personal well-being and application to policy making* London: DEFRA

<sup>29</sup> Ibid.



the best available evidence suggests that the increased burden on time and household finances of having children to look after is to some extent offset by an increased sense of satisfaction and purpose in life from having them, but a strong positive effect on wellbeing from having children has never been conclusively demonstrated.<sup>30</sup> Thirdly, the extreme complexity of human behaviour and the social world means that beyond a certain point it is impossible to prove that any individual factor is having a completely independent effect on somebody's wellbeing, because everything is ultimately connected to everything else. However, what this summary has attempted to do is to group together some of the major themes in previous wellbeing research in order to provide a framework for understanding wellbeing which could inform the design of this research project. To try and summarise an entire academic field in one sentence, the single most important message which comes out of a lot of previous wellbeing research is that having a job (preferably an enjoyable one), plenty of strong personal relationships and being in good health are the three most important keys to human happiness, while inhabiting a good environment and having things that you believe in are both important to a somewhat lesser extent.<sup>31</sup> Or in other words, Norman Kirk was definitely on to something when he said the quote which was reproduced at the beginning of this report.

## What does previous research say about the relationship between age and wellbeing?

Although there has been virtually no previous research into the wellbeing of young adults as a specific age group, there has been some research into the relationship between wellbeing and age. This has consistently produced the interesting conclusion that wellbeing tends to follow a u-shaped curve over the life course, i.e. wellbeing is generally highest for teenagers and older people, and lowest for those of middle age. One piece of research which looked at this issue in significant detail found that the pattern is actually slightly more complicated, with a smaller dip in the early teenage years and a large dip among the oldest old, but the u-shaped pattern still generally held true.<sup>32</sup> The ONS Measuring National Wellbeing project investigated this issue specifically in 2016, demonstrating that when using an evaluative approach to subjective wellbeing which asked survey respondents to numerically score their own levels of life satisfaction, happiness, worthwhileness and anxiety, participants returned results which were broadly consistent with the u-shaped curve pattern (although it was inverted for anxiety, because this characteristic is negatively associated with wellbeing).<sup>33</sup>

Precisely why age and wellbeing appear to have this relationship is unclear, although different explanations have been proposed. Possibly, it could be a cohort effect, which would mean that the groups of people who are currently young and old just happen to have a more favourable outlook on life than the age group which is currently middle-aged, in which case you could expect the pattern to change as cohorts move through the age distribution. On the other hand, explanations which are based on the different amount of time and stress which different age groups face would also be plausible: teenagers and pensioners both usually have more free time and less responsibility for others than working-age adults do, whereas middle age is often the life stage at which pressure in people's working lives, and their level of responsibility for both children and looking after elderly parents coalesce. It seems pertinent to point out that the rate of suicides by age group obeys a reverse u-shape (i.e. suicide rates peak in middle-age and are generally lower among teenagers and older people up to around the age of 80, especially among men).<sup>34</sup>

<sup>30</sup> Dolan et al. (2008) "Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being" *Journal of Economic Psychology*, 29, 94–122

<sup>31</sup> ONS (2013) *Measuring National Well-being - What matters most to Personal Well-being?* Newport: ONS; Chanfreau et al. (2013) *Predicting Wellbeing* London: Natcen

<sup>32</sup> Chanfreau et al. (2013) *Predicting Wellbeing* London: Natcen

<sup>33</sup> ONS (2016) *Measuring National Well-being: At what age is Personal Well-being the highest?* Newport: ONS

<sup>34</sup> ONS (2017) *Suicides in the UK: 2016 registrations* Newport: ONS

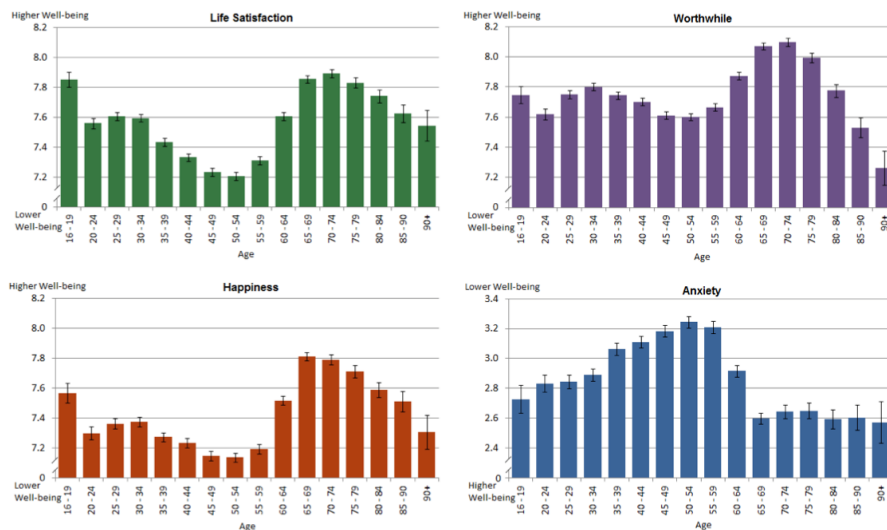


Fig.4 ONS measures of national wellbeing by age of respondent, 2012 to 2015<sup>35</sup>

Of course, as discussed above, the ONS's method only represents one approach to measuring wellbeing, and in any case the purpose of this study isn't to compare wellbeing between different age groups but to compare the wellbeing of today's young adults with that of young adults who belonged to previous cohorts. Nevertheless, this apparent pattern is interesting because it also suggests that whatever the current state of young adults' wellbeing is, it may be likely to trend downwards over the next couple of decades as they get older.

One of the very few pieces of research which has specifically investigated the wellbeing of young adults was an ONS study that examined the wellbeing of 16–24-year-olds in the UK in 2014, using the ONS wellbeing framework, which asks respondents to the Annual Population Survey to subjectively assess their wellbeing by asking them to answer the following four questions and monitoring how people's responses change over time:

1. Overall, how satisfied are you with your life nowadays?
2. Overall, to what extent do you feel the things you do in your life are worthwhile?
3. Overall, how happy did you feel yesterday?
4. Overall, how anxious did you feel yesterday?

Interestingly, the overall picture of wellbeing within this age group was mostly positive: around 80% of respondents aged 16 to 24 were considered to have "high" or "very high" wellbeing when their responses to the four wellbeing questions were amalgamated. However, the report did highlight some broader reasons to be concerned about the wellbeing of certain members of this age group, partly based on their responses to some of the other questions in the survey: one in five of them reported suffering from some symptoms of anxiety or depression during the previous year, one in three were currently overweight or obese, and one in ten said they were finding their financial situation "difficult" or "very difficult".<sup>36</sup> It also highlighted a range of factors which were both positively and negatively associated with wellbeing among this age group. The following were associated with higher wellbeing:

<sup>35</sup> Ibid.

<sup>36</sup> ONS (2014) *Measuring National Well-being - Exploring the Well-being of Young People in the UK, 2014*  
Newport: ONS

- Volunteering at least once per week;
- Participating in exercise at least once per week;
- Participating in artistic or cultural activity;
- Feeling safe walking in their area after dark;
- Liking their neighbourhood and feeling a sense of belonging;
- Having access to the natural environment.

...while these ones were associated with lower wellbeing:

- Regularly arguing with parents;
- Not having a family member who they can rely on;
- Being dissatisfied with their health;
- Experiencing symptoms of anxiety or depression;
- Being overweight or obese;
- Unemployment;
- Being dissatisfied with their amount of leisure time;
- Being a victim of crime;
- Living in a low-income household and perceiving that money is tight;
- NEET status.

What stands out most about these findings is that they do not seem to differ particularly significantly from the major positive and negative drivers of wellbeing for the population as a whole (which, as summarised above, are employment, strong relationships and good health). Although the findings of that study are not especially relevant to this project because it investigated a different age group (16–24 rather than 20–29) and used a subjective rather than objective list-based approach, it does nevertheless suggest that the main drivers of young adults' wellbeing probably aren't that different from the those for the general population overall.

## 4. Methodology

### How did we try to measure wellbeing?

Having assessed the pre-existing evidence about wellbeing, we then needed to design our own methodology for how we would specifically investigate the ways in which the multi-dimensional wellbeing of young adults aged 20 to 29 differed between recent birth cohorts. This required us to answer a series of questions which are outlined in this section.

### Whose wellbeing did we want to investigate?

The goal of this research was to compare young adults within the current generation with those who belonged to older generations to see whether their wellbeing had improved or deteriorated. Which generations we were able to compare with each other was affected by the availability of data sources, which led to our decision to compare three different birth cohorts.

It's important to distinguish between age groups, birth cohorts and generations when researching intergenerational inequalities, because interventions in the debate about intergenerational fairness often overlook the issue of defining exactly *who* they are talking about precisely and consistently, which leads to confusion. In particular, *age groups* (people who are of particular ages at a given moment in time), *cohorts* (people who happened to be born during a specified period) and *generations* (a sociological term referring to the idea that specific birth cohorts share a particular set of characteristics or attitudes, or have been subject to some unifying historical experience, e.g. the “silent generation” who were born during the interwar years) are often used interchangeably, when they mean quite different things. Sociologists often divide the UK's current population into four distinct generations: the Pre-War Generation (born pre-1945), the Baby Boomers (born 1945–65), Generation X (born 1966–79) and the Millennials (born post-1980).<sup>37</sup> Whilst ideally we would have liked to have been able to compare wellbeing between these four generations when they were the same age that Millennials are now, in reality there wasn't an available data source which stretched far enough back in time and provided a wide enough range of variables for that to be possible. Instead, once we had decided that the British Household Panel Survey/Understanding Society would be the best available dataset for this task, we decided to compare three different birth cohorts when they were between the ages of 20 and 29 because we knew that this data source could provide data for enough variables which went back over a long enough period of time to make a valid and interesting comparison.

Therefore, knowing that we had access to data for the years between 1991 and 2016 at the point when we were selecting our data, we decided to compare the following three cohorts:

- Aged 20 to 29 in 1995 – participants born 1964-1975
- Aged 20 to 29 in 2005 – participants born 1976-1985
- Aged 20 to 29 in 2015 – participants born 1986-1995

This meant that we would be comparing three completely distinct groups of survey respondents with no overlap between the different birth cohorts. The downside to taking this approach was that these birth cohorts stretch across the established sociological generational dividing lines, but on the other hand, it did mean that we could compare change across the relatively recent past without having to go back too far or needing to combine multiple different data sources.

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<sup>37</sup> For a broader discussion of these terms, see Section 2 of Kingman, D. (2017) *Generation Remain: Understanding the Millennial Vote* London: Intergenerational Foundation

## What was our model of wellbeing?

As explained in the previous section, there are many different ways of conceptualising wellbeing. In the end, we decided to use an objective lists approach because we thought that there was a sufficiently large evidence base about the types of factors which affect people's wellbeing for us to justify producing our own model of wellbeing and then applying it to the available data. In other words, our approach rests on the belief that there is a set of personal characteristics which are strongly associated with greater personal wellbeing and that wellbeing is something which can be measured directly by either the presence or absence of these characteristics, rather than wellbeing being a subjective emotion that people can feel independently of the tangible circumstances of their lives.

In accordance with the way that the evidence from previous studies was organised in the last section, we divided our objective list of characteristics into five separate domains of wellbeing, and then looked for a data source that would enable us to find indicators which could be used as proxy measures for each of them. The five domains were:

- Economic Wellbeing
- Health Wellbeing
- Relationships Wellbeing
- Personal Environment Wellbeing
- Belonging Wellbeing

## What was our data source, and which variables did we use for our indicators?

Within each of these domains were grouped together a certain number of indicators which make up our objective list described above. To reiterate, these are things which previous research has suggested are either positively or negatively associated with wellbeing. Each indicator needed to be capable of being measured using a variable from a survey of the young adult population; for example, as employment is positively associated with wellbeing, we needed a survey which asked young adult respondents whether they worked or not. The sheer breadth of the topics which are associated with wellbeing meant that we needed a social survey which contained a very wide range of variables, which is why the British Household Panel Study/Understanding Society was chosen.

The British Household Panel Survey (BHPS) is a longitudinal household social survey that was run in conjunction with academics at the University of Essex, reaching a sample of roughly 10,500 individuals living in 5,500 households who were questioned in a series of 18 "waves" between 1991 and 2009. From then onwards, the existing BHPS sample group was combined into the sample for a newer, much larger social survey called "Understanding Society" (US), which has essentially replaced it. This survey has a sample size of 40,000 households and also releases data in annual waves, with each wave usually placing particular emphasis on a specific subject. Both surveys are longitudinal, meaning they try to follow the same panel of households across waves, but they can also be used to perform cross-sectional analysis using data from individual waves (and to compare cross-sections from different waves because they contain very similar questions). This survey was ideal for this project because it has a large enough sample size to include a substantial number of people in the target age range, it covers a huge range of variables which capture data on many different topics, and it has been used in a number of previous wellbeing studies.<sup>38</sup>

<sup>38</sup> Examples include the following:

- Chanfreau et al. (2013) *Predicting Wellbeing* London: Natcen
- Age UK (2017) *A summary of Age UK's Index of Wellbeing in Later Life* London: Age UK

We included the following variables and indicators within each domain:

### **Economic Wellbeing**

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Employment:	Current economic activity
Personal income (2015£):	Total monthly personal income gross
Satisfaction with financial situation:	Subjective financial situation – current
Working hours (40+):	Number of hours normally worked per week
Commuting time (1hr+):	Minutes spent travelling to work
Savings:	Whether saves
Membership of a pension:	Whether contributes to personal pension

### **Health Wellbeing**

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General health:	General health
Mental wellbeing:	Subjective wellbeing (GHQ: Caseness)
Smoking:	Smoker

### **Relationships Wellbeing**

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Relationship status:	De facto marital status
Living alone:	Composition of household (LFS-version)
Relationship with family members:	How many of 3 closest friends are also relations
Close friends:	How often you are in touch with your 3 closest friends
Domestic responsibilities:	Hours per week on housework
Informal caregiving:	Hours per week spent caring

### **Personal Environment Wellbeing**

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Housing costs (as % household income, 2015£):	Last total monthly mortgage or rental payment divided by household income
Household overcrowding (persons per room):	Number of bedrooms divided by number of people living at current address
Access to the internet (household):	Has access to the internet from home
Technology (household):	Home computer/pc (include laptop but not games console)
Feelings towards neighbourhood:	Likes present neighbourhood

### **Belonging Wellbeing**

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Volunteered at least once in past 12 months:	Volunteered at least once in last 12 months
Religion:	Whether belongs to a religion
Interest/belief in politics:	Level of interest in politics

All of these variables and indicators are things which have been associated with wellbeing in at least one previous study. However, BHPS/US was not the perfect data source because it didn't contain questions which looked at every single indicator we might have wanted to include; there were a number of items either which the survey didn't cover at all or where there was so much missing data that they were removed from the dataset to avoid skewing the results. While it would have been interesting to include them because previous wellbeing research has suggested they have an association with it, there was no way to measure them using this data source. These items included the following:

- Student debt
- Weight
- Living in an urban or rural area
- Fear of crime
- Pollution
- Membership of social organisations
- Job satisfaction
- Job security
- Disability
- Unstable housing situation
- Satisfaction with leisure time
- Belonging to a trade union
- Exercise
- Responsibility for children

## How did we make sure our model of wellbeing made sense?

Our choices of indicators and domains gave us our “model” of wellbeing – i.e. we had hypothesised that certain things improve wellbeing and suggested what the relationship between them might be on the basis of previous research – but it was necessary to test this model to ensure that it was a good fit with the data.

The most appropriate statistical technique for doing this was called Structural Equation Modelling, or SEM, which has been used for a number of other wellbeing indexes.<sup>39</sup> In broad terms, SEM is used to estimate the statistical “fit” of a model where a number of observed variables (i.e. things which can be directly measured) are being used to estimate a theoretical or “latent” construct (i.e. something which cannot be directly measured).<sup>40</sup> Obviously, in this case the observed variables were the indicators and the latent construct is wellbeing itself. SEM also takes account of the interrelationships between the different observed variables. SEM was performed on the data for the 2015 cohort using the lavaan package in R Studio. The overall goodness of fit of the model is assessed using modification indices which are part of the statistical output from this software. Adding or removing interrelationships between different indicators affected the modification indices, which enabled us to see whether or not they were improving the overall fit between the model and the data. It was possible within the software to assign a direction of causality to these interrelationships (for example, to assume that people who are married are less likely to live alone) but because many of these relationships are somewhat ambiguous the vast majority of them were not assigned a direction of causality (for example, are people who have higher satisfaction with their financial situation more likely to be able to save, or are people who have savings more likely to be satisfied with their financial situation?)

<sup>39</sup> Green et al. (2016) *Methodology of Age UK's Index of Wellbeing in Later Life* London: Age UK

<sup>40</sup> Hox, J. and Bechger, T. (1998) “An introduction to structural equation modelling” *Family Science Review*, 11, 354–373



The specific modification indices which were used to assess the model's goodness-of-fit were Bentler's Comparative Fit Index (CFI) and the standardised root mean square residual (SRMR).<sup>41</sup> The latter is a modified chi-squared value which assesses the plausibility of the fit of the model's covariance matrix, returning a value of 0.027 (below the threshold of acceptability for a good model of 0.06), while the former estimates the non-centrality of the model to see whether the alternative hypothesis can be rejected (producing a value of 0.914, which is above the traditional threshold of acceptability for a valid model of 0.9). Therefore, on the basis of our SEM we concluded that the model of wellbeing we had proposed was statistically valid.

## How did we calculate the Index?

The Index scores were relatively straightforward to calculate arithmetically. Once we had accessed the relevant datasets from BHPS/US, we simply needed to isolate the relevant cases (participants aged 20 to 29), and then clean and edit the data as necessary to ensure that the indicators were measuring the variables we had set out to include within our model (for example, we wanted to include monthly housing costs as a percentage of monthly household income, which required us to combine two separate variables for rental and mortgage payments into a single variable for housing costs and then divide it by the pre-existing household income variable to create the new variable which we actually used within the Index). As we wanted an increase in every single variable to be associated with an improvement in young adults' wellbeing, variables where an increase in the underlying unit was considered to be bad for wellbeing (e.g. housing costs) were multiplied by -1 in order to invert their scale. Once all of our variables had been assembled, we then calculated the actual Index scores using the same statistical equation for calculating multivariate Indexes which has been used by the UN Human Development Index and other similar projects:<sup>42</sup>

$$X \text{ index} = x - \text{minimum}(x) / \text{maximum}(x) - \text{minimum}(x)$$

In other words, we subtracted the minimum value for each indicator from the indicator value itself, and then divided it by the minimum value for that indicator subtracted from the maximum value. The result was a unit-free value between 0 and 100, which enabled us to compare change across all the different indicators on the same numerical scale. The scores for each individual variable were then averaged to give an average score for each indicator that could then be averaged again to create an average score for each of the five domains and for the overall Index itself.

## How did we weight the data?

One of the most challenging problems which all multivariate statistical indexes need to confront is choosing how to weight the data. This choice is hugely important, because the overall results of the Index will be determined to a very large extent by how the individual components have been weighted, i.e. how much importance has been given to each one in calculating the final scores. Fundamentally, choosing how to weight the data in this Index represented a normative decision regarding which indicators are more significant than others, so it was a very important aspect of the overall methodology.

A wide range of different methods has been developed for weighting wellbeing indexes, each of which has its own drawbacks and pitfalls. Broadly speaking, there are three different approaches to this task: firstly, researchers can simply assign the same weight to all the different components of an index (i.e. implicitly stating that they are all of equal importance to wellbeing); secondly, they can assign "subjective" weights which reflect normative judgements about the relative importance of

<sup>41</sup> As recommended by Newsom, J. (2017) *Some Clarifications and Recommendations on Fit Indices* Portland: Portland State University

<sup>42</sup> Green et al. (2016) *Methodology of Age UK's Index of Wellbeing in Later Life* London: Age UK



different components that have been made by a group of experts or expressed by the population as a whole through surveys; or thirdly, they can be “objectively” weighted by using a statistical technique such as principal component analysis (PCA) to assign each indicator a weight which reflects its variability.<sup>43</sup> Whether or not these types of statistical indexes should be weighted at all is a valid area of debate within this field, given that all methodological decisions concerning weighting are to some extent subjective and arbitrary. The difficulties of coming up with a defensible method of weighting has led to the majority of quality of life indexes not being weighted at all, such as the UN Human Development Index. However, it was decided that we had to come up with a weighting scheme for the IF Index for an important practical reason: our decision to include two variables which captured the increased access to technology between different cohorts meant that, because these variables had increased by vastly more than any of the others over time, if we left the Index unweighted then they would enormously skew its results. There has been very little research into the impact of technology on young adults’ wellbeing, but there is absolutely none that suggests that they consider access to the internet to be more integral to their happiness than say, their health or their personal relationships, so the implied trade-off in leaving the Index completely unweighted would have produced a ludicrous outcome. The other alternative would have been to have removed these indicators from the Index completely, but we were reluctant to do that because access to technology is clearly one of the significant social changes which has occurred between the different birth cohorts we were comparing and we wanted to have some way of trying to account for its impact.

Therefore, in the absence of a single, unanimously agreed-upon framework for weighting a wellbeing Index, we decided to take the advice of a major study into this subject and follow our common sense by designing a subjective weighting scheme which was based upon the significance accorded to different determinants of wellbeing within the previously published literature.<sup>44</sup> This was slightly more of an art than a science, but as has already been demonstrated, there is a large amount of evidence to show that employment, relationships and health are the most significant determinants of wellbeing, followed by personal environment and what we have called “a sense of belonging to something larger than oneself” (or Belonging Wellbeing). We decided that the most important indicators would be given a value of 1 (i.e. they would stay the same as the unadjusted values), and the values of all the other indicators would be multiplied by the Index weight to downgrade their scores in a way which was commensurate with their relative significance to wellbeing. On the basis of our review of the existing literature, we assigned the following weights to each indicator:

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<sup>43</sup> Mazziotta, M. and Pareto, A. (2013) “Methods for constructing composite indices: one for all or all for one?”, *Rivista Italiana di Economia Demografia e Statistica*, Volume LXVI, 67–80

<sup>44</sup> Decanq, K. and Lugo, A. (2008) *Setting weights in multidimensional indices of well-being*, paper presented to the OPHI-workshop on Weighting Dimensions (Oxford, 26-27 May 2008)

Weight Score	What does previous evidence suggest about the relationship between this indicator and wellbeing?
0	No relationship
0.2	Small amount of evidence suggests weak relationship
0.4	Large amount of evidence suggests weak relationship
0.6	Evidence is indeterminate
0.8	Small amount of evidence suggests strong relationship
1	Large amount of evidence suggests strong relationship
<b>Variable</b>	
<b>Economic Wellbeing:</b>	
Employment	1
Personal income (2015£)	0.4
Satisfaction with financial situation	1
Working hours (40+)	0.4
Commuting time (1hr+)	0.4
Savings	0.2
Membership of a pension scheme	0.2
<b>Health Wellbeing:</b>	
General health	1
Mental wellbeing	1
Smoking	0.2
<b>Relationships Wellbeing:</b>	
Relationship status	1
Living alone	0.8
Relationship with family members	1
Close friends	1
Domestic responsibilities	0.2
Informal caregiving	1
<b>Personal Environment Wellbeing:</b>	
Housing costs (as % household income, 2015£)	0.6
Household overcrowding (Persons per room)	1
Access to the internet (household)	0.2
Technology (household)	0.2
Feelings towards neighbourhood	0.6
<b>Belief Wellbeing:</b>	
Volunteered at least once in past 12 months	0.2
Religion	1
Interest/belief in politics	0.6

## 5. Results

### How has twentysomethings' wellbeing changed compared to that of previous cohorts?

The results of the Index suggest that the cohort of people who were aged 20–29 in 2015 had significantly lower wellbeing than their predecessors who were the same age in either 1995 or 2005. This finding held to varying degrees across all four of our five domains of wellbeing, with only Economic Wellbeing bucking the trend (for reasons which are explored below). The full set of Index values are provided in the table at the end of this section. A summary of how each of the domains and each indicator within each domain changed is provided below.

#### Overall Index

- Overall, the 2015 cohort of twentysomethings had a wellbeing score encompassing all domains that was -10.38% worse than for the 1995 cohort.
- There was also a less dramatic decline of -2.65% in the overall Index when comparing the 2015 cohort with the 2005 cohort.
- The key finding of this study is that multi-dimensional wellbeing has declined significantly for the 2015 cohort of twentysomethings compared to the 1995 cohort and has also declined by slightly less compared to the 2005 cohort. Given that you would have hoped that societal progress would result in higher wellbeing over time, these results are deeply concerning.

#### a) Economic Wellbeing

- Overall, the 2015 cohort's economic wellbeing score is 0.6% higher than for the 1995 cohort and 1.88% higher than for the 2005 cohort; this implies that they are marginally better-off economically than either of their predecessor cohorts.
- How has this happened, given all the evidence that was presented in Section 2 of this report that today's young adults are economically worse-off than their predecessors?  
Firstly, the main point to emphasise is that the change in this domain is so slight that it practically represents stagnation in young adults' economic circumstances, when ordinarily you would hope that each successive cohort would do significantly better than the previous one in terms of its living standards.  
Secondly, this result occurred because of different indicators cancelling each other out: in particular, the decline in employment and real wages between 2005 and 2015 was offset by improvements in access to pensions and savings, fewer young adults working long hours and shorter commuting times. Despite our best attempts to weight these indicators in relation to how important they are to young adults' wellbeing, decisions about what should be allowed to cancel something else out are ultimately subjective and open to interpretation.
- The key message is that things have not got significantly better for young adults economically for over two decades, when you might have hoped they would have done.

## Employment

- The employment indicator improved by 1.93% between 1995 and 2015, although it actually fell by 3.8% between 2005 and 2015.
- This finding is unsurprising, given that the rate of employment rose for most age groups during the long period of economic growth that Britain enjoyed between 1992 and 2007 and then fell back following the Great Recession.
- This is an example of an indicator where the real picture may be more negative than the indicator score suggests because of the growth of more tenuous forms of employment, particularly in the “gig economy”, which disproportionately employs younger workers (as explained in Section 2).

## Personal income (2015£)

- Similarly, the personal income indicator also rose between 1995 and 2015, by 1.38%, but it fell by 5.11% between 2005 and 2015.
- Again, this is mainly due to the impact of the Great Recession, which was one of the main reasons why real wage growth has been stagnant since 2007, a trend from which younger workers have done especially badly (as also explained in Section 2).
- Under normal economic conditions you would have expected wages to have risen significantly; average wage growth in the UK in every decade between the 1920s and the 2000s was at least 20%, so even a very small increase in this indicator is actually indicative of the 2015 cohort’s misfortune.<sup>45</sup>

## Satisfaction with financial situation

- The satisfaction with subjective financial situation indicator fell by 11.45% between 1995 and 2015 but improved by 2.28% between 2005 and 2015.
- This appears to present a rather peculiar conundrum: twentysomethings in 2015 are a lot less satisfied with their financial situation than their counterparts were in 1995, but they are slightly *more satisfied* than the 2005 cohort was, even though they have lower real wages and have faced a greater burden from the gamut of socio-economic challenges that were discussed in Section 2.
- This could be for several different reasons: either the 2.28% increase in the indicator score between 2005 and 2015 isn’t very significant, or differences in the sample between the two years could mean that one group was marginally more affluent than the other, for example.

## Working hours (40+)

- The working hours indicator has improved for the 2015 cohort in comparison to both of the earlier ones, by 2.95% compared to 1995 and by 1.89% compared to 2005.
- This means that fewer twentysomethings are working more than 40 hours a week, which is the working definition of “long hours” used in this research. Although the indicator treats working fewer than 40 hours as a good thing (because working long hours is bad for wellbeing), this analysis can’t actually tell us whether this indicator has increased for broadly positive reasons - i.e. changed working patterns and technology are enabling younger workers to spend less time than they used to at their jobs, or whether this reflects the growth of part-time and casual work among this age group (which may well not be a positive phenomenon).

<sup>45</sup> Fenton, S. (2016) “UK workers’ wages growing at lowest levels since turn of 20th century, forecasters predict” *The Independent*, 24 November 2016

## Commuting time (1hr+)

- The commuting time indicator improved significantly between 2005 and 2015, by 12.14%; however, it only improved by 7.04% between 1995 and 2015, which means it must have fallen between 1995 and 2005.
- There are two particularly plausible reasons why this indicator might have improved between 2005 and 2015: firstly, improvements in technology may have made remote working more common, as may have the shift towards self-employment and labour market casualisation, which means more people are working from home; secondly, there has also been a major shift towards younger adults living in city-centre areas since the 1990s, many of which have been gentrified by the creation of new-build apartments, which may mean they are living nearer to their places of work and so have shorter commutes.

## Savings

- The savings indicator is another one where the 2015 cohort has a significantly higher score than its counterparts in either 1995 or 2005, by 23.37% and 33.9% respectively; this means that members of this cohort are more likely to have some level of personal savings than in the earlier ones.
- Why this should be the case is difficult to work out, given that the 2015 cohort is economically worse-off in various ways which have already been described. One possibility is that members of this cohort are having to wait longer to build up enough money to enable them to get on the property ladder, so those who can afford to do so are accumulating savings for that purpose.

## Membership of a pension scheme

- Members of the 2015 cohort also have substantially higher scores for the pensions indicator, by 47.2% compared to the 1995 cohort and by 21.83% compared to the 2005 cohort; this means they are far more likely to belong to a pension scheme.
- The main reason for this is likely to be the roll-out of auto-enrolment pensions within the private sector, which has been implemented gradually over recent years and means that most younger workers in the private sector do now belong to a pension.
- However, doubts persist over whether the current contribution levels are likely to be adequate for these pensions to actually provide a decent level of income in retirement.

## b) Health Wellbeing

- Overall, health wellbeing has fallen precipitously for successive cohorts: the 2015 cohort's health wellbeing score was -11.4% lower than for the 2005 cohort, and -5.77% lower than for the 2005 cohort.
- This change has been driven by a very significant decline in how twentysomethings assess the level of their own general health (i.e. physical health), whereas how they assess their own mental health has actually changed very little between the three cohorts. The decline in their general health is also offset to some extent by a significant decline in smoking among this age group since 2005.

## General health

- One of the most interesting findings from the Index was that the 2015 cohort has much worse general health than either of its predecessors, by 24.69% compared to 1995 and by 15.30%

compared to 2005; this means that the 2015 cohort gave significantly more negative answers to the self-assessment health questions on the survey than its predecessors did.

- This finding would appear to be somewhat in tension with the narrative that today's young adults are exceptionally healthy, which is based on evidence that they are consuming less alcohol and taking more exercise than previous cohorts. There are several possible explanations for this more negative finding: as this is based on their subjective view of their own health it could be that they are wrong, or it could be reflective of the fact that more of them are overweight or obese than in previous cohorts (as suggested by the ONS research into young adults' wellbeing that was referenced in Section 3), or it could be that greater exposure to social media and the internet has made more young adults dissatisfied with their health and fitness.

## **Mental wellbeing**

- Interestingly, the mental wellbeing indicator scores have barely changed between the three cohorts: although the 2015 cohort did have the lowest scores, the difference between the 2015 and 1995 cohorts was just -0.5% and between the 2015 and 2005 cohorts it was only -1.37%.
- This finding also goes against the recent attention which the issue of young people's mental health has attracted from the media and policy-makers. Looking at the physical and mental health indicators together, it is not inconceivable that young adults could be experiencing mental health difficulties which are manifesting themselves as physical health problems, as there is strong evidence that the two are linked. Comparing the incidence of mental health problems over time is extremely difficult because of changes in diagnostic criteria and levels of awareness of mental health problems, but this subjective measure does suggest that the mental health of young people as they directly experience it on a day-to-day basis (as opposed to the rate of diagnosis of actual psychological disorders such as depression) may not be worsening as much as is often supposed.

## **Smoking**

- The smoking indicator (which simply measures the proportion of people who smoke within each cohort) got worse between 1995 and 2015 by -6.9% but improved between 2005 and 2015 by 13.45%; in other words, the 2015 cohort contains significantly fewer smokers than the 2005 cohort, but still more than the 1995 cohort.
- This suggests that there was a rise in smoking among people who were in their 20s between 1995 and 2005, but the level of smoking has since reduced again.

## **c) Relationships Wellbeing**

- The Relationships Wellbeing score deteriorated by a very large amount between the 1995 and 2015 cohorts (-10.78%) but remained essentially flat between the 2005 and 2015 cohorts – (-0.72%).
- The biggest reasons for this were a very large decline in the indicator which measures the strength of people's family relationships between the three cohorts, and a smaller but still important decline in how much contact people have with their friends, as well as an increase in informal caregiving responsibilities among this age group.
- The positive news story for this indicator was that members of the 2015 cohort were significantly more likely to be either married or in a long-term relationship than the 2005 cohort, although this was still less likely than for the 1995 one.

## Relationships status

- The relationships indicator declined by -8.05% between the 1995 and 2015 cohorts but improved by 22.11% between the 2005 and 2015 cohorts; this means that twentysomethings in 2015 were significantly more likely to be married or in a long-term partnership than their counterparts in 2005 were, but their counterparts in 1995 were even more likely to be living in settled relationships than the 2015 cohort.
- It's unclear why this indicator should have changed so much between the three different cohorts, although it would appear to suggest one of two things: either attitudes towards relationships differ significantly between the cohorts, or the likelihood of meeting a suitable partner and forming a stable relationship has changed significantly because of changes in the wider socio-economic and cultural context (the two could be linked, of course).
- Many aspects of the wider backdrop against which relationships are formed changed enormously between 1995 and 2015 in ways which could help to account for these differences: for example, there has been a transformation in attitudes towards homosexual relationships (including the legalisation of civil partnerships and gay marriages); it has become more common for people of all orientations to live together and have children without being married; technological changes and the impact of social media have made it easier for people to meet strangers; and the ability to pool resources makes being in a relationship more valuable for people who are under economic strain. It is likely that all of these factors, among others, will have some impact on this indicator.

## Living alone

- The living alone indicator score was higher by 0.56% for the 2015 cohort compared to the 1995 cohort, and 1.75% higher for the 2015 cohort compared to the 2005 cohort; this means that there has been a small drop in the proportion of twentysomethings who live alone between the three cohorts.
- Adults in the UK are relatively more likely to live alone than in other European countries, but you would expect the number to decline as the cost of housing rises because the relative cost of living alone should increase.
- Although this indicator has gone up it is not automatically positive for young adults' wellbeing, for example if it is because they are more likely to be living with their parents, or if they are living in overcrowded conditions (which they are more likely to be because the household overcrowding indicator has deteriorated).

## Relationships with family members

- This indicator was one of the ones where the 2015 cohort did worst compared to both of the two previous ones: the indicator score fell by -80.93% between 1995 and 2015 and -55.19% between 2005 and 2015; this means that young adults in 2015 were a great deal less likely to say that one of their three closest friends was also a relative in 2015 than they had been in either 2005 or 1995.
- While the utility of this indicator as a measure of the strength of familial relationships can always be debated (and this topic is very difficult to measure), it was measured consistently across the three cohorts, which adds credibility to the strength of this finding.
- Possible explanations for the size of this change are inherently speculative, but they could include the fact that young adults have become significantly more likely to leave their families to attend a university and then move to a major city afterwards during their 20s in each successive cohort than they were in the previous one. It could also have something to do with technology enabling people to maintain more friendships and have more contact with their friends online, which makes them less likely to have strong friendships with members of their own families (although obviously social media can also be used to help families communicate with each other, so this is probably far from the whole explanation).



## **Close friends**

- The indicator score for close friends also declined for the 2015 cohort compared to its two predecessors, although by less than the indicator score for family relationships did. This indicator fell by -1.72% between the 1995 and 2015 cohorts and by -6.55% between the 2005 and 2015 cohorts; this implies that members of the 2015 cohort have significantly less regular contact with their closest friends (including all forms of contact, not just meeting them in person) than was the case for their predecessors.
- This would appear to run counter to the notion that social media have made today's young adults more sociable than was the case among previous cohorts. Speculatively, it could be that social media are resulting in people having more superficial interactions with a larger number of people rather than having more meaningful interactions with their close friends; it could also relate to the economic pressures facing this cohort, as many forms of socialising require both time and money.

## **Domestic responsibilities**

- The domestic responsibility indicator changed a small amount between the three cohorts, with the 2015 cohort's score being 1.91% higher than for the 1995 cohort and 4.02% higher than for the 2005 cohort; this implies that the 2015 cohort is spending a bit less time, on average, devoted to domestic responsibilities, which in principle is good for wellbeing.
- This indicator may well be related to some of the other indicators – for example, one of the benefits of living with other adults (particularly partners) is that domestic chores can be shared; from a more negative perspective, it may also reflect the growth in young adults living with their parents, which may not be a good thing for their wellbeing overall.

## **Informal caregiving**

- Scores for the informal caregiving indicator declined by a small amount between the three cohorts: members of the 2015 cohort scored -2.71% less than members of the 1995 cohort, and, -1.98% less than members of the 2005 cohort; this implies that they are slightly more likely to have informal caregiving responsibilities, on average, than their predecessors were, which previous research suggests is bad for their wellbeing.
- This is more or less the trend you would expect to see in this indicator because of the increase in the number of people living with disabilities which has taken place over recent decades, caused by both rising longevity among older people and improvements in life-saving medical interventions for people of all ages, which may leave them with permanent disabilities that mean they require support. It could also be indicative of public sector cutbacks over recent years, which have left more people with disabilities having to rely upon informal caregivers because state services have become more tightly rationed.

## **d) Personal Environment Wellbeing**

- Overall, Personal Environment Wellbeing scores declined by 7% between the 1995 and 2015 cohorts, but it improved by 9.28% between the 2005 and 2015 cohorts.
- In other words, Personal Environment Wellbeing was significantly lower for the 2015 cohort compared to the 1995 cohort, but significantly higher compared to the 2005 cohort.
- This domain was affected to a large extent by the growth in the ownership of computers between 1995 and 2005 and in internet access between 2005 and 2015; there was also a significant increase in household overcrowding which lowered young adults' wellbeing, although they became happier with the neighbourhoods in which they live.



## Housing costs (as % household income, 2015, £)

- Somewhat surprisingly given the state of affairs *vis-à-vis* housing that was outlined in Section 2, the 2015 cohort actually has slightly higher indicator scores for housing costs than either the 1995 cohort (2.1%) or the 2005 cohort (2.83%); this implies that housing has actually become slightly *more* affordable for this cohort than was the case for either of its predecessors.
- How can this be the case, when we know that the UK has an ever-worsening housing crisis which disproportionately affects young adults? One part of the explanation for this surprising finding is that the number of respondents within the 2015 cohort who reported having either zero or very minimal housing costs has increased, which is likely to be because they are living with their parents or using alternative options such as “sofa-surfing” (potentially making them part of Britain’s problem of the “hidden homeless”), rather than buying or renting. Additionally, it should be remembered that housing has become more affordable for people who can overcome the major hurdle of actually getting on the housing ladder in the first place because of very low interest rates, a factor which has increased the divide in housing affordability between renters and mortgagors significantly. Thirdly, the housing crisis is also a distinctly regional problem that mainly affects London and the South East (although housing affordability decreased in virtually every region of the UK between 1995 and 2015); the fact that Understanding Society achieves national coverage with its sample means that it includes a lot of people who live in much less unaffordable regions of the UK.
- What this indicator score demonstrates is that attempting to describe a complex social problem like the housing crisis with a single statistical indicator is fraught with difficulty and can lead to somewhat perverse outcomes. As explained in Section 6, investigating how young adults’ wellbeing varies between different housing tenures would be an interesting avenue for future research in this area.

## Household overcrowding (persons per room)

- The household overcrowding indicator worsened significantly for the 2015 cohort compared to the 1995 one, by -8.0%, although the 2015 cohort was slightly better-off than the 2005 cohort (by 1.78%); this implies that on average, twentysomethings now inhabit homes with more people per room than was the case in 1995, but roughly the same number of people per room as in 2005.
- This finding is unsurprising given the increase in the general cost of housing since 1995, which you would expect to lead to people living at higher densities because it means living space is becoming more expensive.

## Access to the internet (household), and Technology (household)

- These two indicators can both be grouped together because they tell a virtually identical story. As you would expect, access to both the internet and computers within twentysomethings’ households has mushroomed between the three cohorts: scores for the access to the internet indicator rose by 149.91% between the 2015 and 2005 cohorts (the question wasn’t asked in the 1995 British Household Panel Study because internet access was so narrowly available), and the scores for the access to a home computer indicator increased by 194.63% between the 1995 and 2015 cohorts, and 14.62% between the 2005 and 2015 cohorts.
- As discussed in previous sections, evidence about the impact this has had on wellbeing remains scant and appears to be closely related to how young adults use these forms of technology rather than simply its presence in their lives. For this reason, the scores for these two indicators were weighted so that they make the smallest contribution towards the overall Index scores, in order to prevent their extremely high values from becoming too dominant.

## Feelings towards neighbourhood

- The feelings towards neighbourhood indicator improved fairly significantly between the 1995 and 2015 cohorts, by 6.4%, and was almost exactly the same for the 2005 and 2015 cohorts; this suggests that young adults are quite a lot more favourably disposed towards their immediate social environment in both 2005 and 2015 than they were in 1995.
- It is hard to say why this should be the case, although one plausible explanation is the significant drop in crime which occurred between the early 1990s and the late 2000s, especially since young people are more likely to experience crime than older age groups.

## e) Belonging Wellbeing

- Overall, this indicator saw a very large decline of -32.31% between the 2005 and 2015 cohorts because of significant falls in the indicator scores for volunteering, religious belief and political interest.
- Comparing the 1995 and 2015 cohorts is much harder because political interest was the only indicator used in this domain which went back that far in time, but that also fell by -34.97% between the two cohorts.

## Volunteered at least once in past 12 months, and Religion

- The scores for both of these indicators need to be interpreted with a degree of caution because data are only available to compare the 2015 and 2005 cohorts; however, they both suggest that a significant decline occurred. The indicator scores for volunteering were -43.98% lower for the 2015 cohort compared to the 2005 cohort, and -38.72% lower for the religion indicator; this suggests that members of the 2015 cohort were significantly less likely either to have volunteered for a cause in the previous 12 months or to say that they have a religion than members of the 2005 cohort.

## Interest/belief in politics

- The indicator score for interest in politics (which simply asked people to say how interested they were in politics) also declined a lot between the different cohorts; the score for the 2015 cohort was -14.75% lower than for the 1995 cohort and -20.35% lower than for the 2005 cohort; obviously, this suggests that the 2015 cohort reported much lower levels of interest in politics than its two predecessors did.
- This corresponds to levels of turnout by the youngest members of the electorate in general elections, which had been falling significantly up until the recent “youthquake” general election in 2017. This disengagement from politics could also have been fuelled by various political events and scandals which took place between the mid-1990s and 2015, such as the Iraq War controversy and the parliamentary expenses scandal in 2009. Obviously, there is now reason to suppose that this trend will have gone into reverse, although how long this can be sustained is an open question.

	2015		2005		1995		1995 vs 2015		2005 vs 2015	
	Unweighted Score	Weighted Score	Unweighted Score	Weighted Score	Unweighted Score	Weighted Score	Index Change	% Change	Index Change	% Change
<b>Economic Wellbeing</b>										
Employment	93.18	93.18	96.86	96.86	91.41	91.41	1.77	1.93%	-3.68	-3.80%
Personal income (2015£)	29.40	11.76	30.99	12.39	29.01	11.60	0.16	1.38%	-0.63	-5.11%
Satisfaction with financial situation	58.50	58.50	57.20	57.20	66.07	66.07	-7.57	-11.45%	1.30	2.28%
Working hours (40+)	90.49	36.20	88.81	35.52	87.90	35.16	1.04	2.95%	0.67	1.89%
Commuting time (1hr+)	96.73	38.69	86.25	34.50	90.36	36.15	2.55	7.04%	4.19	12.14%
Savings	27.37	5.47	20.44	4.09	22.19	4.44	1.04	23.37%	1.39	33.90%
Membership of a pension	39.47	7.89	32.40	6.48	26.85	5.37	2.52	47.02%	1.41	21.83%
<b>Score:</b>	<b>62.16</b>	<b>35.96</b>	<b>58.99</b>	<b>35.29</b>	<b>59.11</b>	<b>35.74</b>	<b>0.21</b>	<b>0.60%</b>	<b>0.66</b>	<b>1.88%</b>
<b>Health Wellbeing</b>										
General health	56.67	56.67	66.90	66.90	75.25	75.25	-18.58	-24.69%	-10.23	-15.30%
Mental wellbeing	84.47	84.47	85.64	85.64	84.90	84.90	-0.43	-0.50%	-1.17	-1.37%
Smoking	76.88	15.38	67.77	13.55	82.58	16.52	-1.14	-6.90%	1.82	13.45%
<b>Score:</b>	<b>72.67</b>	<b>52.17</b>	<b>73.44</b>	<b>55.37</b>	<b>80.91</b>	<b>58.89</b>	<b>-6.72</b>	<b>-11.40%</b>	<b>-3.19</b>	<b>-5.77%</b>
<b>Relationships Wellbeing</b>										
<b>Relationships status</b>	63.29	63.29	51.83	51.83	68.83	68.83	-5.54	-8.05%	11.46	22.11%
Living alone	87.43	69.95	85.93	68.74	86.95	69.56	0.39	0.56%	1.20	1.75%
Relationships with family members	7.17	7.17	15.99	15.99	37.58	37.58	-30.42	-80.93%	-8.83	-55.19%
Close friends	71.31	71.31	76.31	76.31	72.56	72.56	-1.25	-1.72%	-4.99	-6.55%
Domestic responsibilities	91.40	18.28	87.87	17.57	89.68	17.94	0.34	1.91%	0.71	4.02%
Informal caregiving	94.25	94.25	96.16	96.16	96.96	96.96	-2.71	-2.79%	-1.91	-1.98%
<b>Score:</b>	<b>69.14</b>	<b>54.04</b>	<b>69.02</b>	<b>54.44</b>	<b>75.43</b>	<b>60.57</b>	<b>-6.53</b>	<b>-10.78%</b>	<b>-0.39</b>	<b>-0.72%</b>

	2015		2005		1995		1995 vs 2015		2005 vs 2015	
	Unweighted Score	Weighted Score	Unweighted Score	Weighted Score	Unweighted Score	Weighted Score	Index Change	% Change	Index Change	% Change
<b>Personal Environment Wellbeing</b>										
Housing costs (as % household income, 2015£)	88.42	53.05	85.99	51.59	86.60	51.96	1.09	2.10%	1.46	2.83%
Household overcrowding (persons per room)	77.56	77.56	76.20	76.20	84.31	84.31	-6.75	-8.00%	1.36	1.78%
Access to the internet (household)	96.11	19.22	38.46	7.69	0.00	0.00	19.22		11.53	149.91%
Technology (household)	92.49	18.50	80.70	16.14	31.39	6.28	12.22	194.63%	2.36	14.62%
Feelings towards neighbourhood	46.69	28.01	46.73	28.04	43.88	26.33	1.69	6.40%	-0.02	-0.08%
<b>Score:</b>	<b>80.25</b>	<b>39.27</b>	<b>65.61</b>	<b>35.93</b>	<b>61.54</b>	<b>42.22</b>	<b>-2.95</b>	<b>-7.00%</b>	<b>3.34</b>	<b>9.28%</b>
<b>Belonging Wellbeing</b>										
Volunteered at least once in past 12 months	8.95	1.79	15.98	3.20	n/a	n/a	n/a	n/a	-1.41	-43.98%
Religion	18.37	18.37	29.97	29.97	n/a	n/a	n/a	n/a	-11.61	-38.72%
Interest/belief in politics	26.07	15.64	32.74	19.64	30.58	18.35	-2.71	-14.75%	-4.00	-20.35%
<b>Score:</b>	<b>17.80</b>	<b>11.93</b>	<b>26.23</b>	<b>17.60</b>	<b>30.58</b>	<b>18.35</b>	<b>-6.42</b>	<b>-34.97%</b>	<b>-5.67</b>	<b>-32.21%</b>
<b>Overall Index Score</b>	<b>60.41</b>	<b>38.67</b>	<b>58.66</b>	<b>39.73</b>	<b>61.52</b>	<b>43.15</b>	<b>-4.48</b>	<b>-10.38%</b>	<b>-1.05</b>	<b>-2.65%</b>

## 6. Conclusions, recommendations & next steps

This report represents the culmination of a lengthy project which has attempted to quantify whether the quality of life of young adults in the UK has been improving over the last three decades, by employing a multi-dimensional model of wellbeing to data from the British Household Panel Study. As the previous section demonstrated, the results are not encouraging: the 2015 cohort of young adults aged 20 to 29 had an overall wellbeing score which was over 10% worse than their counterparts in 1995 had, and almost 3% worse than those in 2005. Even more concerning were the very sharp declines in both young adults' assessment of their own health and the strength of their relationships with friends and family members – because there is so much previous wellbeing research which suggests that these are two of the most important domains for determining people's overall quality of life. By contrast, although the declining economic fortunes of today's young adults are frequently discussed by policy-makers and in the media, this research suggests that this may not be the area of life in which they are struggling the most.

The reasons for the trends that have been observed in this study are difficult to pinpoint, because of the difficulty of disentangling precise causes and effects. Where possible, we have attempted to offer what we consider to be the most plausible explanations for what we've shown, but it would be remiss not to acknowledge that these all involve a certain degree of speculation. This makes recommending specific government policies which could address them even more difficult, as does the fact that issues such as the quality of family relationships – although vital to most people's lives – are not included directly within the policy ambit of any government department. However, we would like to make the following recommendations on the basis of what we've discovered about young adults' wellbeing so far:

- Firstly, as much of our previous work has shown, alongside that from other organisations, young adults are clearly in a deteriorating economic position compared to previous cohorts at the same stage in life; fixing this, through measures which aim to improve productivity and life wages, and by addressing the housing crisis, needs to be a top priority for the government in order to avoid storing up social problems that will hit harder in future years.
- Secondly, the decline in the closeness of people's personal and familial relationships that we have observed, plus the move away from following, or volunteering for, causes, and the decline in how young adults feel about their health could all possibly have one thing in common: they could be linked by a growing problem of loneliness among young adults. If that is the case, then it should provide an important wake-up call that loneliness is a problem which affects people of all generations, which is something that government policy-makers should bear in mind as they are building the government's official Loneliness Strategy, which is intended to tackle the problem.
- Thirdly, the decline in how young adults perceive their health status is striking and raises a host of important questions which should demand further investigation. Does it really reflect mental problems, such as anxiety and depression, which could be manifesting themselves in an unexpected way? Or is it more to do with genuine changes in the health of this age cohort, such as the rise in levels of obesity? Given that this is another area where problems could be being stored up for the future, it is important for health policy-makers to take the concerns of young adults seriously, particularly regarding their mental health, and to ameliorate the problem of a so-called "cliff-edge" in access to services between children and young adults.

This is intended to be the first part of what will become a series of annual reports looking at changes in wellbeing among this age group, which will enable us to see how the trends we have observed change in the future. It will also be interesting to probe deeper into this dataset to explore how wellbeing varies among young adults by their personal characteristics, such as housing tenure, level of education and where they live, in order to obtain a fuller picture of the wellbeing of young adults in the UK.