

Institution: University of Warwick		
Unit of Assessment: C - Economics and Econometrics		
Title of case study: Well-being and Public Policy		
Period when the underpinning research was undertaken: 2001 - 2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Andrew Oswald	Professor of Economics and Behavioural Science	January 1996 – present
Eugenio Proto	Associate Professor of Economics	September 2003 – December 2017
Daniel Sgroi	Professor of Economics	September 2007 – present
Period when the claimed impact occurred: 2013 - 2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact (indicative maximum 100 words)		
<p>Work on economics and well-being by Andrew Oswald and collaborators over the last twenty years has changed how governments and social scientists conceptualise and measure societal progress. Oswald's ideas have brought the concept of well-being into everyday discourse and embedded it as a central aim of policymaking in the UK and beyond. Oswald is regularly called upon by policymakers to advise on incorporating well-being metrics and objectives into policy design and evaluation, including at the UK Treasury, the Office for National Statistics (ONS) and the European Commission. A study conducted by Oswald, Sgroi and Proto (2015) was the first within Economics to demonstrate a strong relationship between employee well-being and productivity in the workplace. The research attracted extensive media coverage and its findings have been used to improve workplace policies.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>Andrew Oswald has been a central contributor to the literature on the economics of happiness and well-being throughout the current REF period. He has developed measures of well-being and explored how happiness is determined by personal circumstances and economic factors. He has demonstrated how levels of well-being are affected by factors relating to physical health, such as obesity and hypertension, as well as increased fruit and vegetable consumption. His work has also shown how happiness fundamentally affects economic outcomes, such as productivity in the workplace.</p> <p>Through Oswald's research, it has become widely accepted that well-being metrics should play an important role in monitoring trends in quality of life, both for policy and scientific purposes. The Office for National Statistics (ONS) in the UK recently began collecting annual data on life satisfaction, happiness, worthwhileness of life, and anxiety levels.</p> <p>Oswald's work has appeared mainly in economics journals but also in journals from science, public health, epidemiology, statistics and psychiatry. Key findings over the REF period include:</p> <ul style="list-style-type: none"> Oswald and colleagues were the first in the world to develop a method to put a monetary value on the happiness and unhappiness from life events. For example, they calculated 		

that getting married equates to the same amount of happiness, on average, as having an extra GBP70,000 of income per year. They also found evidence that well-being is influenced by comparisons with other people. [3.1]

- Oswald's article in the 2004 *Journal of Public Economics* showed, among many other statistical results, that mental well-being has failed to improve over many decades of data in the UK and USA. [3.2]
- His work on randomised lottery wins was arguably the first in the world to establish formal causality between income and human happiness. Using longitudinal data, the research found that individuals who had medium-sized lottery wins went on to exhibit significantly better psychological health than those who had small wins or no wins. [3.3]
- Research by Oswald and co-authors was the first to use country panels to estimate how macroeconomic conditions, and social safety nets, affect human happiness. The findings demonstrated that people are happier when inflation and unemployment are low. [3.4]
- Oswald and co-authors were the first to demonstrate the now-famous finding that psychological well-being in developed countries is U-shaped through life, providing longitudinal evidence for a 'midlife crisis'. They found that people's well-being gradually drops until midlife, then slowly rises again until the age of 70. [3.5] In a paper in the Proceedings of the National Academy of Sciences of the USA, Oswald also replicated the human pattern in samples of chimpanzees and orangutans.
- Oswald and two Warwick colleagues, Daniel Sgroi (at Warwick September 2007 to present) and Eugenio Proto (at Warwick October 2005 to December 2017), demonstrated that happiness makes people more productive in the workplace. The team ran the world's first large-scale randomised controlled trials in this field of research. [3.6]

3. References to the research (indicative maximum of six references)

Key publications over the period 2000-2020 (45 refereed publications) include:

3.1 Clark, A., and **Oswald, A.** (2002). "A simple statistical method for measuring how life events affect happiness." *International Journal of Epidemiology*, Vol. 31(6), pp. 1139-1144. doi: [10.1093/ije/31.6.1139](https://doi.org/10.1093/ije/31.6.1139)

3.2 Blanchflower, D., and **Oswald, A.** (2002). "Well-being over time in Britain and the USA." *Journal of Public Economics*, Vol. 88(7-8), pp. 1359-1386. doi: [10.1016/S0047-2727\(02\)00168-8](https://doi.org/10.1016/S0047-2727(02)00168-8)

3.3 Gardner, J., and **Oswald, A.** (2006). "Money and mental wellbeing: A longitudinal study of medium-sized lottery wins." *Journal of Health Economics*, Vol. 26(1), pp. 49-60. doi: [10.1016/j.jhealeco.2006.08.004](https://doi.org/10.1016/j.jhealeco.2006.08.004)

3.4 Di Tella, R., MacCulloch, R., and **Oswald, A.** (2001). "Preferences over inflation and unemployment: Evidence from surveys of happiness." *American Economic Review*, Vol. 91(1), pp. 335-341. doi: [10.1257/aer.91.1.335](https://doi.org/10.1257/aer.91.1.335)

3.5 Cheng, T., Powdthavee, N., and **Oswald, A.** (2017). "Longitudinal evidence for a midlife nadir in human well-being: Results from four data sets." *The Economic Journal*, Vol. 127(599), pp. 126-142. doi: [10.1111/eoj.12256](https://doi.org/10.1111/eoj.12256)

3.6 **Oswald, A., Proto, E., and Sgroi, D.** (2015). "Happiness and productivity." *Journal of Labor Economics*, Vol. 33(4), pp. 789-822. doi: [10.1086/681096](https://doi.org/10.1086/681096)

4. Details of the impact (indicative maximum 750 words)Informing policymaking in the UK

Over the REF period, Oswald was repeatedly consulted by UK civil servants on the measurement of well-being and analysis of well-being data, including a talk on 'Well-being: Research and Policy' at HM Treasury (2013), an invited lecture at the 'Government Economic Service at 50' event (2014), and a talk at the Treasury's 'Teach-In on Well-being' (2017).

Oswald has been working closely with the ONS Quality of Life Team on several recent projects. He advised the ONS (2019-20) on a project with the Cabinet Office (CO) to deliver the first phase of the Well-being Pillar of their Strategic Framework, which aims to improve the design of cross-cutting policy priorities to achieve better outcomes for citizens. Oswald helped the ONS to provide the CO with an accurate picture of UK well-being, ensuring the information they reported was based on relevant academic evidence, including his own research. [5.1] Additionally, he has provided advice on different measures of well-being inequality through his role on an ONS advisory group. The ONS has also been liaising regularly with Oswald for advice on improvements to their well-being publications; advice on additional well-being analysis that could be carried out and measurement methodology; and help linking up economic and well-being data. [5.1]

Oswald was one of a small number of experts consulted by HM Treasury in preparation of the 2018 Green Book, which provides guidance for civil servants on how to appraise and evaluate policies and programmes, allowing them to advise Ministers on different options. It is a key document that shapes the day-to-day work of government officials and is used or has been replicated internationally. Well-being was a priority area for the update, and for the first time the book states that improving well-being (referred to as social value) is the underlying aim of policy development and evaluation. Omar Idriss (then HM Treasury) led the project to update the book and consulted Oswald for advice on the well-being evidence base and its practical application, based on his research expertise. Idriss notes that this "enabled me to develop a high-quality, evidence-based draft of the various sections on well-being which were included. This was subsequently agreed across government and highlighted to Ministers as a key development." He comments that without Oswald's input, "it would have been challenging to deliver the work which enables government officials conducting appraisal and cost-benefit analysis [...] to intelligently include well-being evidence in their work to shape policy development." [5.2]

The 2018 Green Book references a DWP and HM Treasury report (Fujiwara D., and Campbell R, (2011). *Valuation Techniques for Social Cost-Benefit Analysis: Stated Preference, Revealed Preference and Subjective Well-Being Approaches. A Discussion of the Current Issues*) which extensively cites Oswald's work and uses a valuation method first outlined in 3.1. [5.3] One of the report's authors, Daniel Fujiwara (a former senior economist in the Cabinet Office who led on the econometric analysis of wellbeing data to input into policymaking), testifies to the impact Oswald's research has had on the way governments evaluate policy: "Over the past 10 years wellbeing analysis and wellbeing valuation have become key methods used by governments across the world to assess policy interventions and Prof. Oswald was one of the first pioneers of these approaches [...] I would say that Prof. Oswald's work over the past 20 years has had a major positive impact on how governments make decisions and spend taxpayers' money for the greater good of society. Organisations in both the public and private sector now want to measure the impacts of what they do on people's wellbeing and I feel that Prof. Oswald's pioneering work in wellbeing economics has been a key driver of this change." [5.4] Dr Fujiwara has now established a well-being analysis consultancy (Simetrica), which employs many of the valuation methods that Oswald pioneered to help clients understand their social impact. [5.4]

Oswald has also played a leading role on the What Works Wellbeing Centre's advisory panel, which has advised on over sixteen systematic reviews of well-being evidence since 2015 (which have had over 50,000 downloads). [5.5] The Centre's work is used across government departments, business and the voluntary sector. Oswald's research is directly cited five times in

the Centre's guide for policymakers on how to consider well-being in policy design and analysis. [5.5] Following publication of the 2018 Green Book, the Centre posted a blog discussing the significance of policies that incorporate well-being in analysis – for example, local economic strategies that focus on job quality and conditions that allow positive social interactions rather than just GDP and make emotional health in schools a priority alongside attainment. [5.5]

International measurement of well-being

Oswald's research has informed work on well-being at the European Commission. In 2019 the European Council adopted conclusions on the 'Economy of Wellbeing', inviting EU member states and the Commission to put people and their wellbeing at the centre of policy and decision-making. In June 2019, Oswald gave a lecture on well-being measurement and research to 100-150 policymakers at the European Commission and had a meeting at the Commission's Policy and Strategy Centre with the Principal Advisor on European Social Policy, Patrick Develtere, and the Head of Social Affairs, Ruby Gropas. Mr Develtere stated that Professor Oswald's work has been "very inspiring for the work we have been doing in the Commission on wellbeing and quality of life...several colleagues from the European institutions, but also from the member states and civil society have been referring to the work of Oswald in the course of the reflections that have been going on [...] over the past years." [5.6]

Oswald's research is also referenced in the World Happiness Reports 2013, 2015, 2016, 2017 and 2019 (including 19 references in the 2017 report and a special mention of thanks in the 2015 report). The World Happiness Report is the annual publication of the UN Sustainable Development Solutions Network and ranks countries according to national happiness, based on a range of factors that go beyond income alone. [5.7]

Improving well-being and productivity at work

Oswald's work with SgROI and Proto on happiness and productivity has been presented multiple times to civil servants, consultants and policymakers, including at an event supported by the Social Market Foundation in 2015. Seven of Oswald's papers are cited in the New Economics Foundation's report 'Well-being at work: A review of the literature', which makes recommendations on how organisations can foster employee well-being. [5.8]

In 2015-16, SgROI and Proto had extensive discussions with Aberdeen City Council that laid the foundations for a programme of work to transform the way it operates and boost well-being among its 8,000 employees. Following the discussions, the Council developed a set of behavioural principles focussed on employee happiness: purpose, team working, valuing work and each other, pride and recognition, and collaboration and partnerships. These principles have underpinned tangible programmes of work to increase employee well-being, such as a project to improve interpersonal relationships within the organisation by reducing stigma around mental health issues. Practical steps include training mental health First Aiders, a communications campaign, a mental health week, and yoga and mindfulness courses. Other programmes of work include initiatives to create a sense of belonging and common purpose and to increase employee confidence and engagement. Changes to the working environment include flexible working and finding technological solutions to repetitive tasks so employees can concentrate on higher-value work. [5.9]

The research also attracted interest from the United Arab Emirates Minister of State for Happiness and Well-being and Oswald was invited to give a talk to 300 government officials. In 2018, the UAE National Program for Happiness and Well-being launched 'A Guide to Happiness & Well-being in the Workplace' for government entities and other organisations, which cites a briefing paper by SgROI that is based on 3.6. [5.10]

Additional citations and media coverage

Over the impact period, Oswald and colleagues' work has been reported in hundreds of media sources in several languages (including *The Daily Telegraph*, *The Economist*, *The New York Times*, *The Sun*, *Forbes*, and *The Daily Mail*) [5.11], changing public understanding of how human progress should be defined and measured.

According to Altmetric, Oswald's work has been cited 39 times in 32 different policy documents during the impact period by organisations including think tanks, the Department for Digital, Culture, Media & Sport, the Department for Work and Pensions, Public Health England, the Scottish Government and the Inter-American Development Bank. [5.11]

5. Sources to corroborate the impact (indicative maximum of 10 references)

5.1 Testimonial email from Silvia Manclossi, Head of Quality of Life Team, Office for National Statistics (February 2020).

5.2 Email from Omar Idriss (now at the Health Foundation) who led the project at HM Treasury to update the Green Book (February 2020).

5.3 DWP and HM Treasury report (Fujiwara D., and Campbell R, (2011). *Valuation Techniques for Social Cost-Benefit Analysis: Stated Preference, Revealed Preference and Subjective Well-Being Approaches. A Discussion of the Current Issues.*

5.4 Testimonial letter from Daniel Fujiwara, Simetrica (formerly civil service).

5.5 Testimonial letter from Nancy Hey, Director of What Works Wellbeing (February 2020). PDF combined with copy of the Centre's guide for policymakers that cites Oswald (*Well-being in Policy Analysis*), and What Works Wellbeing blog: *Treasury Green Book and Wellbeing: The Analysis* (April 2018).

5.6 Email from Patrick Develtere, Principal Advisor on European Social Policy, European Commission (February 2020).

5.7 World Happiness Reports 2013, 2015, 2016, 2017 and 2019 [Combined PDF].

5.8 Well-being at Work: A review of the literature, *New Economics Foundation* (February 2014).

5.9 Email from Aberdeen City Council (December 2019).

5.10 A Guide to Happiness and Productivity in the Workplace, *United Arab Emirates National Program for Happiness & Well-being*, 2018.

5.11 Altmetric citation reports combined with selected examples of media coverage.