

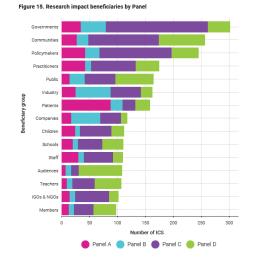
Overview

Research in the SHAPE disciplines (Social Sciences, Humanities and the Arts for People and the Economy) has led to significant innovation and impact across society, according to a new report commissioned by the British Academy and the Academy of Social Sciences.

The full report^{1,2} sets out the key findings across SHAPE as a whole. This briefing focusses on the main emerging messages for the social sciences – their impact, their value, and the ways in which governments can nurture them in the years ahead. The breadth and depth of the UK's social science research base remains world-leading in terms of both the scale of innovation it is driving across a range of different domains, and the real-world impact this has on daily lives. To fully harness this, the Academy of Social Sciences recommends that the UK Government identifies and funds more fully the strategic role of the social sciences as part of a diverse research pipeline.

Key findings

The report's findings are timely, building on research last year from RAND³ which also examined impact from REF 2021. That study – which included all four sectors of medicine (Panel A), science (Panel B), social sciences (Panel C) and arts & humanities (Panel D) – found important evidence of the social sciences' impact, not least where it charted the beneficiaries of different sectors' research (Figure 15, right). Across the four biggest areas of beneficiary – governments, communities, policymakers and practitioners – the biggest contribution came from Panel C (social sciences). Social science research also made major contributions towards the public, children, schools and NGOs. This theme has been reinforced by our own findings, which indicate:



- Social science research is bolstering UK expertise and strength in areas of competitive advantage: The report points to numerous examples of social science research boosting the UK's competitive advantage in the service sectors, including driving innovation in banking & finance and in legal services. One whole sub-category of impact uncovered through the analysis is dedicated towards macro economics and finance, including examples of research improving central bank operations and developing new approaches to financial forecasting.
- Social science research is tackling societal challenges: Some of the most complex and pressing problems facing society are being tackled using research which draws heavily on social science insights. Examples are seen within the healthcare sector, where impacts have improved mental health or informed methods and technologies for the detection, diagnosis, and treatment of major health conditions. Elsewhere, behavioural, geographical and legal research are coming together to play a transformative role within sustainability and infrastructure. Significant areas of impact were also seen within the domains of education (with sociologists and psychologists playing a major role) and in government and law (with political science and international development being prominent).

¹Wagner, S., Rahal, C., Spiers, A. et al (2024) <u>The SHAPE of Research Impact</u>, London: British Academy.

² The full report examined impact case studies from REF 2021 from SHAPE disciplines. These were sorted into ten grand themes of impact (Arts, Literature & Design; History & Cultural Heritage; Education & Teaching; Business, Economics & Management; Employment; Crime & Exclusion; Family & Gender; Governments & Law; Health & Wellbeing; and Sustainability & Infrastructure). These themes were developed with the assistance of natural language processing models, with each grand impact area being explained with case studies, statistical summaries, and examples of impact.

³ Stevenson, C., Grant, J., Szomszor, M., Ang, C., Kapoor, D., Gunashekar, S. & Guthrie, S. (2023) *Data enhancement and analysis of the REF 2021 Impact Case Studies*, California: RAND Corporation.

- Social science research helps to understand people, boost regeneration and empower communities here in the UK: The geographical reach of social science across the UK sees research take place in those areas most in need, through tangible engagement with local communities and civil society, across all of the UK's nations and regions. Social sciences have played a strong role in driving regional development and regeneration in previously deprived areas, helping to revive regional and local economies and boosting community cohesion.
- Social science research spreads beyond traditional disciplinary boundaries to create impact: The report saw social science research complementing scientific disciplines and providing impact in the spheres of technology, industry, health and the environment. There was a notable level of multidisciplinary engagement between the social sciences and the physical sciences – something further supported by a separate recent report⁴ emphasising the symbiosis between STEM and social science research within a thriving research and innovation ecosystem.
- Social science research is a smart investment, with impact providing value for money: The sheer breadth and depth of social science impact indicates a strong return on investment in terms of volume, diversity and quality of impact. Despite having the second-lowest level of research income, Panel C (social sciences) contributed the highest number of impact case studies in the REF 2021 exercise, over a third of the total.

Main panel	Impact case studies (number)	Impact case studies (% of total)	Income (£bn)
Α	1,419	22.31	22.41
В	1,268	19.93	14.34
С	2,146	33.74	3.61
D	1,528	24.02	1.25

Overall, the report shines a light on a wide array of case studies which exemplify the breadth and depth of the UK's social sciences and their contribution. Overleaf are just some examples.

Recommendations

- The social sciences receive less than 10% of the total research funding across all sectors yet contribute over a third of its impact case studies⁵. We recommend that research funding allocations be reviewed to reflect more fully the contribution the sector makes; and their substantial contribution be reflected in the forthcoming review of QR funding. It is also vital that the UK Government and its devolved counterparts ensure in the short-term that QR funding retains its real-term value.
- Building on the Grant Review, we recommend that UKRI progressively scale up investments in interdisciplinary research, training and leadership. The next Spending Review represents an opportunity for further targeted support centred on the Economic & Social Research Council, which has a vital role to play as a key national funder, facilitator and amplifier of social science and broader transdisciplinary contributions to the wider R&I system.
- We recommend the UK Government's Office for Science and the Department for Science, Innovation & Technology build on its recent Science & Technology Framework by working with partners in the social sciences, including the Academy of Social Sciences, to articulate a Social Science Framework which can reap the full benefits they offer.
- We recommend the Department for Education in England, and its devolved counterparts, retain an identifiable social science strand in any forthcoming school curriculum reviews, as an essential part of sustaining and growing the pipeline of scholars over the coming years and of embedding an understanding of our contemporary human world in the next generations. The Academy would be pleased to advise on this.

⁴ Wilsdon, J., Weber-Boer, K., Wastl, J. and Bridges, E. (2023) <u>Reimagining the Recipe for Research and Innovation: the secret sauce of social science</u>, London: Sage / Academy of Social Sciences.

⁵ This calculation excludes UoA 4 (Psychology, Psychiatry & Neuroscience) which sits in Panel A despite being considered a social science. UoA 4 contributed 326 ICSs towards REF 2021 (5.12% of the total), with an income stream of £2.68bn. With UoA 4 included, the social sciences would contribute 38.86% of the total ICSs, with 15.11% of available funding.

ACADEMY of SOCIAL SCIENCES

Below are just a few examples from <u>*The SHAPE of Impact*</u>, showing real-world social science impact across a range of different areas. They illustrate the sheer breadth of social science research and underline the extent to which it touches nearly every part of society.

Impacts in the domain of Education drew heavily on inputs from education research and from psychology and sociology, but also reflected the inherently interdisciplinary nature of research in this area. Within Business, Economics & Management, social scientists at UK universities were instrumental in developing policies and tools for financial management that were implemented by key monetary policy institutions. Elsewhere, social science research in the realm of Crime & Exclusion resulted in tangible improvements to the justice system, drug and alcohol problems, counteracting hate crime, and reducing crime through innovative planning and design. Within the domain of Employment, social science research drove changes in maternity protection and the gender pay gap but also improved working conditions, national and international labour standards and general employment practice for marginalised groups of workers. The theme of Government & Law was one of the more diverse clusters, unifying research on topics as broad as human rights and democracy, while also being aligned with conflict and peace studies, international development, and expertise on geography and migration. Finally, social science research actively contributed to understanding and mitigating the impacts of climate change and in working towards the sustainable development goals.

Education case studies

- A <u>20-year research programme on the synergies between teaching, learning and playing</u> led to educational reform for all 4-6-year-old children in Northern Ireland (NI) affecting 720,000 children since 2015.
- Research into the effectiveness of teacher training has <u>led to reforms in the training of Welsh</u> <u>teachers</u>, including a changed accreditation procedure, a revised inspection framework, and extensive investment in educational capacity. About 2,700 teacher trainees in Wales and their subsequent students were affected by this.
- The <u>Pupil Premium Toolkit</u> is a synthesis of research from 200 systematic reviews, metaanalyses and quantitative studies and provides a resource for schools on improving outcomes for learners, particularly those from disadvantaged backgrounds. It guides the work of the Education Endowment Foundation (EEF) and its funding strategy for the £200m being spent over 15 years to reduce inequalities in school outcomes in England.

Business, Economics & Management case studies

- Software modules and service systems that enable manufacturing companies to collaborate more effectively in the supply chain for European aerospace <u>created savings of €10m per</u> <u>annum in operating costs</u>, a 30% increase in speed of procurement, and a 10% increase of throughput for a major European aerospace company.
- Management research <u>helped 465 SMEs access a total of £1.5m of funding</u> as well as providing advice and training support for company finance and growth.
- The Bank of England's Indexed Long-Term Repo (ILTR) operation has become a key policy tool for the Bank of England to ensure sufficient liquidity for the financial system at times of stress. It is based on economic research and has been implemented and tested together with researchers. The design has led to practice changes in other central banks.

Employment case studies

- Research <u>detecting and improving the recovery of unpaid wages</u> showed that wages amounting to £3.1bn annually were being left unpaid. Findings led to better regulation and enforcement of entitlements to holiday pay as well as to greater efforts to pursue directors evading employment obligations. Improved enforcement directly benefited over two million of Britain's lowest paid workers.
- Research exploring effects of the UK National Minimum Wage (NMW) on low-paid workers informed the Low Pay Commission's recommendations to the UK Government to increase the NMW in 2014, 2015 and 2016, which were accepted in full. This raised the pay of around a million workers by as much as £355 per annum.
- Research on the gender pay gap informed the Low Pay Commission (LPC) to introduce the National Living Wage (NLW) from 2016, which was awarded to 1.596m workers. Research subsequently showed the NLW reducing the incidence of low pay amongst women and the aggregate gender wage gap in the UK.

Crime & Exclusion case studies

- Evidence-based interventions in the prison service have shown that behaviour monitoring can predict risk of reoffending after release, and that digital technology terminals (for prisoners to request visits, health care, order food, etc) bring significant benefits to behaviour within prisons and enhance rehabilitation. Funding of £7m for the introduction of digital kiosks in UK prisons was announced as a consequence.
- Crime Prevention through Environmental Design (CPTED) creates housing developments that are less vulnerable to crime, with housing built to Secured by Design (SBD) standards experiencing 55% less burglary. This changed government planning guidance and building regulations in the UK and the United Arab Emirates, increasing the number of secure homes -44% of new homes built between 2013 and 2017 were SBD.
- Research outlining prevalence, impact and prevention of hate crime formed the primary source of information for the Welsh Government's Framework for Action on Tackling Hate Crime (2014). Researcher developed technologies were also embedded within the National Cyber Hate Crime Hub (run by the UK's National Police Chiefs' Council), allowing policymakers and police to address the problem.

Health & Wellbeing case studies

- A review of the New Medicine Service (NMS) by researchers informed the decision by NHS England to formally adopt the service which was delivered by community pharmacists. Over 5,348,000 NMS consultations have been delivered to patients starting a new medicine for a chronic condition in England from 2014-2020. The increased medicine adherence created by NMS has provided long-term savings of £558,000,000 for the NHS, and 213,952 quality adjusted life years gained for patients overall.
- Social prescribing (SP) is a community-based approach to health and care which aims to tackle health inequalities by addressing social determinants and broader wellbeing in disadvantaged communities. Based on <u>research evidence demonstrating the effectiveness of</u> <u>SP</u>, NHS England invested £35m in local SP services, including £3m per year in Rotherham alone. 900,000 people per year will be referred to SP schemes, reducing the cost-burden of long-term health conditions on NHS England.
- Research on suicide deaths and unique features of suicidal behaviour in Northern Ireland significantly shaped NI's suicide prevention strategies. These include the refreshed Protect Life Strategies and the Towards Zero Suicide programme. Research with Samaritans Ireland also led to changes in delivery of services during the COVID-19 pandemic.

Government & Law case studies

- In 2018/19, the UK Government spent over £38 billion on defence but <u>research played a</u> <u>critical role</u> in identifying the UK's failure to reap the wider economic and strategic benefits of such expenditure. It helped to shape the 2015 Strategic Defence and Security Review, and to create a new National Security Objective 3, promoting UK prosperity, meaning that wider economic benefits are now factored into all major defence procurement decisions.
- After Brexit, <u>research on international trade law has been critical</u> in helping the UK to establish itself as an independent actor in trade at the international level. It has had a direct impact on the UK Government's approach to its independent membership of the WTO, with the research being utilised by the UK and Scottish governments and parliamentary committees, and featuring in the UK Government's training programme for over 500 trade negotiators.
- Mapping out everyday movements of citizens in Belfast has given policymakers a better understanding of the psychology of sectarian divisions in the city. This has shaped the approaches of the Neighbourhood Services and City Regeneration & Development teams of Belfast City Council. It informed the council's encouragement of residents to live in the city centre, and the creation of a new campus site for Ulster University to support this.

Family & Gender case studies

- Research <u>shaped the Domestic Abuse Bill 2020</u>, banning cross-examination of victims by their abusers in family court proceedings, and underpinned the UK Government's plan to improve family court protection for victims of domestic abuse and children.
- Research on <u>early childhood development interventions in low- and middle-income countries</u> provided a scalable programme which has been implemented by governments in Colombia, Peru and Ecuador, as well as the largest education NGO in India to improve development and cognition for an estimated 100,000+ children between 2014-2021. The model has also been endorsed by the Inter-American Development Bank and World Health Organisation.
- Research on child poverty <u>led to changes in legislation and local authority policies in Scotland</u>. As a direct result, approximately 120,000 children annually who are living in poverty across Scotland now have access to a £100 school clothing grant. In several local authorities, they also have access to free meals in breakfast clubs and during school holidays.

Sustainability & Infrastructure case studies

- Research has aided the European Space Agency and European Commission's capability to monitor global vegetation from space in near real-time. The innovative and robust data products have generated major benefits for agricultural and environmental service providers, including timely and targeted response to poor harvests and plant disease outbreaks, thus helping to underpin food security. Their work has also contributed to quality assurance of operational applications ranging from monitoring biodiversity to drought surveillance.
- Research into <u>energy efficient construction</u> led to changes in UK Building Regulations, estimated to reduce 120,000 tonnes of CO₂ emissions and saving British households £66m pounds in energy consumption due to higher energy efficiency.
- Research on how to reduce homelessness via a focus on prevention resulted in new legislation: the Housing (Wales) Act 2014 and England's Homelessness Reduction Act (2017).