

The SHAPE of Research Impact: key messages

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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. Based on analysis of impact case studies from REF 2021¹, the report underlines that SHAPE research is an investment in innovation, in people and in places. An outstanding array of impact is created across SHAPE subjects and through collaborative research with other disciplines.

The report shows that:

- **SHAPE research is bolstering UK expertise and strength in areas of competitive advantage**
- **SHAPE research is tackling societal challenges**
- **SHAPE research helps to understand people and empower communities here in the UK**
- **SHAPE research spreads beyond traditional disciplinary boundaries to create impact**
- **SHAPE research is a smart investment, with impact providing value for money.**

Drawing on findings from the report, this briefing summarises key messages emanating from the project. The full report helps us to understand the diversity of SHAPE research impact, by organising it into ten 'grand themes' of impact:

- 1) Arts, Literature & Design
- 2) History & Cultural Heritage
- 3) Education & Teaching
- 4) Business, Economics & Management
- 5) Employment
- 6) Crime & Exclusion
- 7) Family & Gender
- 8) Governments & Law
- 9) Health & Wellbeing
- 10) Sustainability & Infrastructure

These ten grand themes of impact were developed with the assistance of state-of-the-art natural language processing (NLP) models. In the report, each grand impact theme is explained with case

studies, statistical summaries, and examples of impact. The methodological approach detailed in the report is similar to that adopted by the recent RAND report² which also examined impact from REF 2021; our report is a complementary resource, but offers a more in-depth analysis of SHAPE impact specifically, as well as allowing readers to interrogate the categorisation of specific projects into the grand themes above, offering methodological openness, accountability and scope for future comparisons.

The reader is encouraged to dive into the main analysis for a fuller picture of the impact under each of the ten grand themes. The British Academy and the Academy of Social Sciences will continue to produce additional explainers and policy briefings on the topic of impact, demonstrating how the SHAPE disciplines are investments in innovation, in people and in places.

¹ 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.

² The Research Excellence Framework 2021 is the most recent research assessment exercise to have taken place in the UK, <https://results2021.ref.ac.uk/>.

SHAPE research is bolstering UK expertise and strength in areas of competitive advantage

We know intuitively that SHAPE research is a vital part of a knowledge-rich and innovation-fuelled economy and the report emphasises some of the specific ways in which SHAPE impact supports areas of excellence in the UK. We see numerous examples of social science research boosting the UK's competitive advantage in the service sectors, including driving innovation in banking & finance and legal services. One whole sub-category of impact uncovered through our analysis is dedicated towards “macro economics and finance”, including examples of where research has improved central bank operations and developed new approaches to financial forecasting by influencing by public and private financial institutions, including central banks, national investment funds, and global investment and asset management companies.

The report also highlights the close relationship between the creative and cultural sectors and SHAPE research, with humanities and arts research playing a critical role in the UK emerging as a superpower in heritage preservation, the creative industries, the arts and in festivals of all kinds. One case study in the report shows how scholars of Scandinavian history and neuroscience used their respective expertise in the design of a video game that has sold 1.5 million copies.

The report picks out a range of public exhibitions, led by research in the arts and humanities, which have been collectively visited by hundreds of thousands of members of the public. These examples of impact correspond to some of the most rapidly evolving parts of civil society and strategically important sectors of the UK economy. In 2020, the cultural sector contributed £27.5bn to the UK economy in GVA, while the creative industries added £103.8bn³. The report shows the UK has a global reputation for excellence in these areas, which helps to generate soft power for the UK as a leader in the cultural and creative sectors.

SHAPE research is tackling societal challenges

SHAPE research is helping to solve some of the most complex and pressing problems facing society – whether that is related to the health sector, the economy, or the environment. Indeed, as outlined above, there is a grand area of impact that directly relates to each one of these.

Within the theme of “Health & Wellbeing”, SHAPE research has informed methods and technologies for the detection, diagnosis, and treatment of major health conditions. SHAPE interventions in mental health have improved diagnosis and treatment, and improved mental wellbeing in the workplace. For example, research led to a landmark change in mental health care for people with cystic fibrosis, with the development of Cystic Fibrosis Mental Health Guidelines. These guidelines have been adopted internationally, helping to foster a more holistic approach to care and unlocking increased levels of funding. There are numerous examples that show how SHAPE research, often in combination with STEM disciplines, is playing a critical role in driving innovation within the healthcare sector. The report features one example of a new health technology that helps to combat Diabetic Retinopathy, a leading cause of blindness amongst working age adults. Researchers from fields of art & design worked with a private company to develop a novel treatment that helps to slow down the onset of blindness.

The report describes how SHAPE research contributes to tackling some of the major contemporary economic problems in the UK and around the world. The sub-category of “Business, Entrepreneurialism, Management and Investment” includes more than a hundred case studies that are spread across the four nations of the UK, bringing together a host of examples where SHAPE research is aimed at improving productivity and firm growth.

³ Department for Culture, Media & Sport (2023) [DCMS Sectors Economic estimates 2020: annual GVA](#), UK Government website (accessed October 2023).

One example featured in the report shows how research in business studies and psychology influenced the training of 800 mid-level managers, generating impact and raising performance within these companies. Another example shows how research in management studies drove forward an initiative that supported 465 local small and medium enterprises (SMEs) in a deprived area of the UK. The programme, which was developed based on recommendations from the underpinning research, provided financial support and business guidance to maximise absorptive capabilities in these firms.

The report also identifies a large number of SHAPE case studies that are focused on “Sustainability & Infrastructure”. The underpinning research within this category was frequently an interdisciplinary enterprise, with behavioural and legal research coming together to play a transformative role. SHAPE researchers have contributed to better environmental protection practices and legislation, improvements in natural and agricultural resource management, and technological and legislative changes to mitigate climate change. This has affected UK, EU and international regulations and multiple practices around energy use, ecosystems and infrastructure, resulting in substantial gains in energy efficiency and CO2 reductions.

SHAPE research helps to understand people and to empower communities here in the UK

SHAPE research has global impact, spreading knowledge, improving lives and bolstering the UK’s position and global status. And just as important, within the UK, the geographical reach of SHAPE research is similarly broad. Impact often takes 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. SHAPE research has driven regional development and regeneration in previously deprived areas, helping to revive regional and local economies and boosting community cohesion.

This was evident in the “Arts, Literature & Design” theme, where literature and poetry were used in engaging the public in performances and events, rediscovering the voices of past artists

or marginalised communities, and providing forums to perform, read and celebrate the diverse language traditions of the British nations. This was particularly apparent in the work being done to revitalise and grow the UK’s minority languages. One research team contributed towards the Geiriadur Prifysgol Cymru, an online Welsh language dictionary and mobile app, which was used more than 3 million times by Welsh Learners. A separate example picked out in the report focuses on the creation of the Electronic Dictionary of the Irish Language receiving nearly 3,400,000 million page views over the last five years. In Scotland, research in Celtic and Scottish Studies influenced the third National Gaelic Language Plan which has led to a 34.4% increase in the number of pupils enrolled in Scottish Gaelic between 2013 and 2020.

In the area of “Sustainability & Infrastructure”, SHAPE research projects helped disadvantaged groups to reshape and regenerate their local communities, achieving shared goals like sustainable travel and improving legislation on homelessness. Within the “Education” theme, research provided guidance and direction for initiatives that worked to increase social mobility and equal access to education. The report highlights one educational research unit that developed a teaching and learning toolkit for educational practitioners. By synthesising the work from 200 systematic reviews, meta-analyses and quantitative studies this research has helped schools improve outcomes for pupils, particularly those from disadvantaged backgrounds.

SHAPE spreads beyond traditional disciplinary boundaries to create impact

SHAPE research moves beyond traditional disciplinary boundaries, and the report identifies SHAPE research complementing scientific disciplines and providing impact in the spheres of technology, industry, health and the environment. The report shows multidisciplinary linkages growing in areas that are being shaped by the most recent developments in 21st century society. There is for example a notable level of multidisciplinary engagement between the

social sciences and the physical sciences, whilst the humanities have growing links with the medical sciences.

One example saw clinical scientists, psychologists and researchers in public health collaborate on a project which revealed how 42,000 of the current UK prison population has some form of traumatic brain injury, leading to impulsivity and problems in social reasoning. This resulted in changes to judicial and health policies in the UK and at the UN as well as reform in practice across the prison system. Other examples of interdisciplinary working included using music and drama therapy in health interventions to fostering community cohesion through language and artefacts. One case study featured in the report explores the influence of performance studies on the training of nurses in the UK. This initiative has improved training in care-giving aspects of the profession, bolstering the development and wider skillset of the next generation of practitioners.

SHAPE research is a smart investment, with impact providing value for money

SHAPE research is delivering real-world impact across all nations and regions of the UK, aligned to the priorities of the UK Government, but also to the needs of communities. SHAPE researchers work alongside local partners to enrich the social and cultural fabric of the UK.

The sheer breadth and depth of impact in SHAPE, as demonstrated by the ten grand areas of impact, shows that society is getting a strong return on investment in terms of volume, diversity and quality of impact. All this is generated from a relatively modest proportion of overall research funding. In 2023-24, core allocations for the Arts and Humanities Research Council & the Economic and Social Research Council (combined) amounted to 3.31% of the total United Kingdom Research & Innovation (UKRI) budget.

As the world faces an increasing number of complex problems requiring an interdisciplinary response, and as the economy becomes more knowledge-based, the need for a thriving SHAPE research base will only become more important. Our report demonstrates the interconnectedness and impact of SHAPE but also of collaboration between SHAPE and STEM researchers. This research base can and should play a critical role, alongside other disciplines, in tackling some of the greatest challenges we face as a society.