

Evaluation of the 'IFSSOCA' Large Grant

Executive Summary

Background

Between January and October 2013, the ESRC Evaluation, Strategy and Analysis team conducted an evaluation of the 'Impact of Family Socio-economic Status on Outcomes in Childhood and Adolescence' (IFSSOCA) Large Grant. This evaluation considered evidence from a range of stakeholders to assess IFSSOCA's: design and implementation; academic quality; engagement activity; non-academic impact; capacity building activity; collaborative activity; and management.

IFSSOCA received £3,604,228.05 of funding from the ESRC between 1 April 2007 and 31 March 2012. Working alongside the IFSSOCA Director, Paul Gregg, were 11 co-investigators (based at the University of Bristol and the Institute of Education) and 26 other staff (including PhD and post-doctoral researchers, and administrative staff). The research team consisted of psychiatrists, psychologists, economists, statisticians, educationalists and epidemiologists. The principal aim of IFSSOCA was to improve the understanding of the nature of family socio-economic status for adolescent outcomes and trajectories through childhood, with an emphasis on adding value through the collaboration of researchers from a range of disciplinary backgrounds. Focus was placed on the behaviours and outcomes of individuals in adolescence, including physical health, risky behaviours, school performance and the acquisition of cognitive skills. The grant consisted of seven separate work strands each with distinct areas of focus, which were designed to cumulatively address the aims and objectives of the research. IFSSOCA's principal data source was the Avon Longitudinal Study of Parents and Children (ALSPAC), and IFSSOCA also undertook a major push to improve this data set, increase its accessibility and promote its usage in the social science community.

Design, implementation and contribution to academic field

This evaluation found that IFSSOCA's programme of work and infrastructure was appropriately designed and generally implemented successfully. The evidence suggests that IFSSOCA has advanced understanding in the following areas.

- The social patterning of drinking and smoking behaviours among young people.
- The extent to which poor but bright young children fall behind their wealthier but less able peers.
- The emergence of inequalities in obesity.
- The use of instrumental variables.
- The inequalities in markers of child health and development that can exist across time and national contexts.

The academic quality and the volume of the output produced through the grant were found to be impressive, and the research was reported to have made a substantial contribution to

these fields. The improvement to the condition of the ALSPAC data was also reported to be a substantial academic achievement attributable to this grant.

Interdisciplinarity and achievement

The collaboration that took place between IFSSOCA researchers from different disciplinary backgrounds is one of the major successes of this grant. High levels of interdisciplinary working were reported across IFSSOCA's work strands, and there were notable successes and productive synergies particularly among the methodologists, epidemiologists and economists on the team. It is noteworthy that many of IFSSOCA's achievements were a direct product of successful interdisciplinary collaborations, and that these interdisciplinary endeavours have delivered a strong contribution to science. Evaluation fieldwork participants described the interdisciplinary collaboration that the grant facilitated as the most innovative element of the work. The cross-strand collaborations played a key role in securing co-funding, several advanced quantitative training courses, and to the setting up of an international network for comparative research. A vibrant culture of scholarly exchange was evidenced by notable high profile presentations, a sizable volume of conference papers, time spent at overseas institutions by IFSSOCA researchers, and academic visitors to Bristol.

Engagement and non-academic impact

IFSSOCA's engagement activity and non-academic impact primarily involved UK based policy makers. Political and policy debate, already underway at the time, was focused on the issues of social mobility and childhood development, education and childhood development, and youth unemployment, and IFSSOCA's research has had significant impact upon government thinking and policy in these areas. For example, IFSSOCA research was cited 16 times in Government's Strategy for Social Mobility *Opening Doors, Breaking Barriers* and 19 times in Frank Field's Independent Review on Poverty and Life Chances *The Foundation Years: Preventing Poor Children Becoming Poor Adults*. There were several recurring factors which helped facilitate the non-academic impacts described in this report. The impacts that were achieved each occurred in domains where political debate was already underway, meaning that many of the interactions began with policy makers making a concerted effort to locate evidence to underpin policy and strategy in these areas. The decision to turn to IFSSOCA was often the result of the pre-existing reputation of the IFSSOCA Director, Professor Paul Gregg, and of some of IFSSOCA's more senior researchers. Many of the non-academic contributions made by IFSSOCA were the result of a policy maker or charitable organisation approaching the group for evidence.

Capacity building and collaboration

IFSSOCA contributed to the training of a new cohort of quantitative social researchers. Capacity building activity was primarily focused towards post-doctoral researchers, who were generally very positive about the development opportunities and guidance that was available to them. IFSSOCA was instrumental to the implementation of a new PhD programme at the ESRC South West Doctoral Training Centre, and contributed to new courses being run through the National Centre for Research Methods. IFSSOCA researchers also made a concerted effort to collaborate with other major ESRC

investments, primarily with the ESRC cohort and resources studies. These studies are reportedly benefitting from the input of IFSSOCA researchers, particularly concerning the use of large datasets with social and medical elements.

Limitations

There were a small number of limitations to this grant, which may well have impacted upon overall achievement. Despite successfully collaborating to conduct interdisciplinary research, few interdisciplinary outputs were produced by the group. Many of the evaluation participants explained that this was caused by the contrasting publication models which exist within the medical and social sciences. Medical researchers are under institutional pressure to publish in leading peer reviewed medical journals, many of which will not publish findings which have already received media attention or been disseminated elsewhere. The model in many of the medical disciplines has been for the journal, having published the research, to undertake dissemination activity and to engage with the media. This model may well have caused some reluctance among the medical researchers to collaborate to produce interdisciplinary outputs, such as working papers, for general dissemination, as any coverage that such outputs received could have subsequently resulted in their work not being published in a medical journal.

IFSSOCA's efforts to use, update and improve the ALSPAC data were reported to have been not without issue. Although IFSSOCA's undertaking in this area was generally successful, the condition and accessibility of the data were stated by IFSSOCA researchers to have caused delays to some of the research, and the IFSSOCA Director noted that one small programme of work had to be redesigned as a consequence of this. Despite the efforts of IFSSOCA to improve, raise awareness and promote use of ALSPAC data in the social science community, access to this data, controlled chiefly by ALSPAC's own management team and ethics committee, is reported to remain restricted.

Conclusions and lessons

The evaluation concludes that IFSSOCA was a highly worthwhile investment for the ESRC. There were many indications that understanding has been advanced and policy has been influenced. Overall, the evaluation evidence suggests that IFSSOCA was well managed, and positive comments were made about the Director's approach to management, research and administration. The grant's aims and objectives were achieved, and the positive reports of the Academic Evaluator and the 10 Output Reviewers are testament to the high academic quality of the work, and the contribution it has made to the respective fields. IFSSOCA's user engagement strategy was both proactive and reactive, and this approach was a factor within the substantial non-academic impact achieved by the group. IFSSOCA made important contributions in several high profile policy areas, and was often 'turned to' by UK based policy makers for evidence. The links with stakeholders typically developed to include a variety of interactions, from the informal and occasional request for information, to the participation in formal events and activities, and the commissioning of additional research.

IFSSOCA has also contributed to the improvement of a valuable cohort research resource through its work with the ALSPAC data, and to an important new PhD pathway in advanced statistical methods at the ESRC's South West Doctoral Training Centre. Capacity building

activity more generally was heavily focused towards post-doctoral researchers rather than PhD researchers; the former generally speaking extremely positively on the development opportunities that were available to them. Academic output and publication, although ample, may have been restricted by the contrasting publication models which exist in the medical and social sciences. However, IFSSOCA should be commended for the way in which the researchers from different disciplinary backgrounds collaborated and used the ALSPAC data in an original and innovative manner. Researcher survey respondents indicated that IFSSOCA's learning around the use of large datasets containing medical elements has been transferred to other ESRC investments.

The evaluation points to some important conclusions and lessons in four key areas. Although mainly of relevance to the ESRC, this information is also likely to be of use to the IFSSOCA team, other ESRC award holders and other stakeholders.

Data use and access

Some delay to IFSSOCA was reported by researchers to have been caused by the accessibility and condition of the ALSPAC data. The challenges around access to data cannot be ignored as they form a substantial barrier to furthering our understanding of how social circumstances and processes translate into developmental and behavioural outcomes. With the drive for increased integration of social and biomedical science and the clear value of the ALSPAC data resource, it is important that both the availability and worth of this data are promoted, and that the issues reported by IFSSOCA researchers to be limiting access to this data are explored. Delays were also reported to have been caused to the IFSSOCA project by the condition of the ALSPAC data, highlighting the need for researchers to undertake a thorough consideration of the practical implications of accessing and using secondary data before starting a project.

Training and capacity building

Links between Doctoral Training Centres and other ESRC investments can lead to new and innovative postgraduate training pathways. The links between IFSSOCA and the South West Doctoral Training Centre facilitated the input that the research had into the creation of a new doctoral training pathway in advanced statistical methods. Further developments of this sort could be achieved by encouraging and facilitating links between ESRC training investments (such as Doctoral Training Centres) and other ESRC investments.

With the explosion in biosocial data from cohort and panel surveys and rapid developments in 'big data', the need to build capacity in skills required to interrogate and exploit to maximum effect these sorts of data is self-evident. Recent ESRC effort to 'grow' a new generation of quantitative researchers competent in the use of longitudinal data in these fields does not mean that the need is now satisfied. There is a continuing need to provide new and advanced training courses and PhD pathways to help ensure that researchers have the right skills to work with biosocial data.

Engagement and impact

There is no single approach to user engagement for researchers that could be considered optimal in all circumstances. Even within the specific policy areas mentioned in this report, different ways of engaging in the policy process were apparent. One of the factors in the non-academic impact achievements of IFSSOCA was the proactive (disseminating outputs and hosting conferences, for example) and reactive (responding to requests for evidence from policy makers) nature of their engagement strategy. It is important that researchers are not overly rigid with their engagement tools and strategies, as this could reduce capacity to react to unforeseen engagement opportunities.

Exploring the pathways to the non-academic impacts achieved by IFSSOCA has provided further evidence to support the findings from the ESRC's Impact Evaluation Programme¹. Tailoring output to target audiences outside of academia, and considering the timing of communicating findings can increase the uptake and usage of research findings. IFSSOCA researchers tailored some of their output and engagement activities to existing political and policy debate; a factor in increasing the uptake of their research findings among research users. This strategy was a significant feature in the non-academic impacts achieved by IFSSOCA. The non-academic impact achieved by IFSSOCA occurred partly as a result of the pre-existing network of contacts held, primarily, by the IFSSOCA Director. It was through this network that the Director facilitated many of the non-academic impacts achieved by other IFSSOCA researchers, by putting them forward when requests for evidence or input came his way. In addition to this, it is important to note that intermediation between researchers and policy audiences was crucial in the cases presented in this report. The role that associations and foundations eventually acquired was not pre-planned in the IFSSOCA Grant. In areas where the "valorisation" (processes for productive use) of research is likely to occur through contributions to the policy and/or practice process, foundations, associations and other intermediary organisations and individuals can have an important role in linking researchers with user stakeholders.

Future ESRC funding activity

IFSSOCA's research was positioned at the interface of social and biomedical science. New and existing links between these two broad research areas have the potential to tell us huge amounts about society, and the ESRC is well-placed to facilitate such links and such research. The ESRC (and others) should continue to invest in research that spans the medical and social science arena, and work to maximise the impact of such research. The broad scientific aim of improving understanding of family socioeconomic circumstances for health and development through childhood and into adolescence remains as relevant as ever. Future research will be well placed to benefit from expanding longitudinal data resources coming on stream, including the Millennium Cohort Study, UK Household Longitudinal Study and Life Study. To drive forward research in this area, advances in theoretical approaches are needed, including about how we think social conditions link

¹ For the most recent overview please see the 'Cultivating Connections' report, available at: http://www.esrc.ac.uk/_images/Cultivating_connections_tcm8-25678.pdf

plausibly with biological pathways. Advances in longitudinal modelling, and their application (and training in the use of these methods), are also essential to further our understanding of the processes at play. There are clear opportunities here for funding bodies to join forces and maximise returns from research investment in this area. Understanding how social circumstances influence healthy development, because of its interdisciplinary nature, is arguably better pursued within the synergies of large investments than left to uncoordinated funding of isolated projects.

However, as demonstrated in this report, issues can occur during medical and social science collaboration which can be detrimental to the success of research. A deepening in the understanding of institutional and disciplinary cultures could be part of what is needed here so that expectations, for example on publication, dissemination and engagement activities with policy makers, practitioners and the public, can be realised. Further efforts are required to overcome these challenges and successfully facilitate collaborative working between social scientists and medical researchers. This provides further evidence to support the decision to include an expert in biosocial research among the recently appointed consortium of Strategic Advisors for ESRC Data Resources. Continuing to appoint researchers with experience of working with biosocial datasets in ESRC advisory or research positions will also help address this issue.