RAND EUROPE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

Jump down to document ▼

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND

Browse Books & Publications

Make a charitable contribution

For More Information

Visit RAND at www.rand.org

Explore RAND Europe

View document details

Policy and practice impacts of research funded by the Economic and Social Research Council

A case study of the Future of Work programme, approach and analysis

Steven Wooding, Edward Nason, Lisa Klautzer, Jennifer Rubin, Stephen Hanney, Jonathan Grant

RAND EUROPE

The research described in this report was prepared for the Economic and Social Research Council.

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

Preface

This report, prepared for the Economic and Social Research Council (ESRC), examines the impact of the ESRC's 'Future of Work' programme on policy makers, professional practitioners and other groups outside academia. It also explores the applicability of the 'Payback Framework', a conceptual model for research evaluation, to social science. The Future of Work programme was an initiative that aimed to bring together leading researchers in the United Kingdom in an investigation of the future prospects for paid and unpaid work. The first phase of the programme started in October 1998, followed by a second phase in January 2001.

The report is presented in two volumes. This volume presents the conclusions of the research and summarises the methods and results. The second volume includes a brief literature review of the evaluation of social science and the influence of research on policy; an overview of the Future of Work programme; detailed analysis of a survey of Future of Work PIs (Principal Investigators); and four complete case study narratives of projects from the programme.

The report will be of interest to the ESRC and policy makers in the wider social science and policy community who are interested in how social science informs policy and practice. It will also be of interest to those developing methods to evaluate research.

The research was led by RAND Europe in collaboration with the Health Economics Research Group (HERG). RAND Europe is an independent not-for-profit think tank and research organisation that serves the public interest by providing evidence for policy making and public debate. HERG, a Specialist Research Institute of Brunel University, has as one of its main research themes, methodological and empirical studies of the impact of research. This report has been peer reviewed in accordance with RAND's quality assurance standards (see http://www.rand.org/about/standards/) and therefore may be represented as a RAND Europe product.

For more information about RAND Europe or this document, please contact

Steven Wooding
Senior Policy Analyst
Tel: +44 1223 273897
Email: wooding@rand.org

Jonathan Grant
Deputy to the President
Tel: +44 1223 293 893
Email: jgrant@rand.org

RAND Europe
Westbrook Centre, Milton Road
Cambridge. CB4 1YG, United Kingdom

reinfo@rand.org

Contents

Overview of impact

The Future of Work (FoW) programme succeeded in bringing together an interdisciplinary group of academics, stimulating constructive discussions and providing access to policy makers to ensure the wider impact of the research.

The FoW programme had significant academic and wider impacts

There was substantial output from the programme in the area of knowledge production. To date this has included 11 books and 69 book chapters; four journal special issues and over 100 peer reviewed articles, alongside over 200 conference presentations. Six of the researchers felt they had changed the direction of their research field.

In terms of capacity development, involvement in the FoW programme was seen as a moderate or considerable contributor to 20 academic promotions, and the most common benefit of the programme cited by researchers were the opportunities to meet other researchers and in providing fora for discussion.

In our survey of Principal Investigators (PIs) they reported 50 policy impacts, across a range of organisations including national government, political parties, employers and unions. Contributions to the policy debate included more than 60 working papers and official reports; seminars for the DTI, Low Pay Commission and Cabinet Office. More directly there were nine secondments, which placed the researchers in a policy environment, including a senior role in the DTI Women and Equality unit, where the researcher was able to influence strategy and policy decisions relating to equality. Further specific examples of policy impact were: the chairmanship of the TUC Partnership Institute by a researcher, allowing him to impact on employer/union relationships; the drafting of guidance notes on complying with employment legislation for the DTI by a research group; direct input into the Work and Families Bill (2003), which introduced new legislation on maternity and paternity leave; and citation in a House of Lords judgement on pay and conditions, specifically looking at unfair dismissal.

Outside the government sectors our case studies identified a number of impacts on employers, including changes in workload policies and career structure; effects on maternity and family friendly working practices in a large consulting organisation and the negotiation of union-employer partnership deals.

Dissemination

Almost half of the PIs felt the extensive networks of the Programme Director, and steering committee, had provided them with direct access to policy makers. These policy makers included those in the Work Foundation and a government agency.

In addition, the FoW Media Fellow enhanced the impact of the research on more distant policy makers. He achieved this by producing research summaries set in the context of current policy and other research findings. Crucially, he worked to timescales suitable for policy makers rather than those of researchers.

Evaluation methodology

This evaluation used the Payback Framework as a conceptual structure and showed that the framework is useful for evaluating the wider impacts of social science. We used a number of techniques to collect data for the study: document review; key informant interviews; an on-line survey; and case studies. However, we found that some impacts are inaccessible to evaluation, because of political sensitivity or anonymity guarantees.

Executive summary

We examined how the ESRC Future of Work (FoW) programme influenced policy and professional practice. While doing so we reflected on the methods used to assess and identify impacts. Specifically, we considered whether the Payback Framework, a conceptual model for research evaluation, was appropriate for social science. Here we summarise the key findings.

The FoW brought together an interdisciplinary group of academics, stimulated constructive discussion and provided access to policy makers.

This may be especially significant given the view expressed by key informants that employment policy and management practices may be especially hard to reach with evidence as they are heavily contextual and apt to be influenced by fashion and ideology.

Impacts
The FoW programme had significant impacts on knowledge and research. This was evident in the numerous publications and conference presentations attributed to the programme. Most Principal Investigators (PIs) attributed incremental changes in their field of research to their projects, and some attributed a clear change of direction in their field of research to their projects. Most of the projects also influenced other researchers.

The FoW programme had significant impacts on public policy. Although some PIs could identify specific impacts of their research, many found it difficult to identify actual policies they had influenced. PIs generally thought they had influenced policy in an incremental way and informed the policy debate. PIs also gave many presentations of FoW research to policy audiences.

The FoW programme had significant impacts on career development. More than 75% of PIs thought the FoW programme had helped them to form networks with researchers, policy makers and practitioners; nearly half of PIs attributed career development for researchers to their FoW projects, including nine secondments to government.

The FoW programme impacted on the policies and practice of organisations. There were many presentations given in organisations; PIs thought organisational practices were influenced by the research, but only some were easily identifiable.

The policy environment determines policy impact. In one case the heightened awareness among policy makers of issues around maternity leave and women returning to work

provided fertile ground for research on how women make these decisions. In a second case the waning interest in union-employer partnerships was thought to have reduced the impact of a TUC institute chaired by a former FoW researcher. In general, the FoW research seldom caused major changes in policy but often resulted in impacts such as stimulating debate, fine-tuning policy, dispelling myths and providing confirmatory support.

Dissemination

The FoW programme provided access to policy makers. It effectively combined the networks of the Director and steering committee, and provided the researchers access to these networks which included key policy makers in the DTI, Low Pay Commission (LPC) and Cabinet Office.

The FoW Media Fellow enhanced the impact on policy makers. This was achieved largely for two reasons. First, because his summaries of the FoW research were produced to a timescale suitable for policy makers, rather than researchers. And second because they were accessible to policy makers: setting the FoW research in the context of other research and current policy discussions.

Researchers and policy makers differed in their views on how best to disseminate to policy makers. The two groups consider different channels to be important: researchers favouring academic publications, policy makers favouring the Media Fellow's publications.

The Payback Framework is a useful model for evaluating social science research.

The Payback Framework provides a structure for research evaluation. It comprises a logic model of the research and dissemination process and a classification scheme for the immediate and wider impacts of research. This consists of five categories: Knowledge; Impacts on future research; Impacts on policy; Impacts on practice and Wider social and economic impacts. Both the literature review and fieldwork showed that the Framework could be effectively applied to social science research.

Impacts and attribution

Some impacts may be inaccessible to evaluation, for example some impacts were politically sensitive, so participants requested that they were not discussed. Also, subjects of the original research may have been influenced by their participation in that research, but their identity could not be revealed to the researchers in this evaluation.

A confluence of inputs and incremental 'knowledge creep' make it difficult to attribute policy change to a given input. The Payback Framework provides a structure in which to explore the context within which projects are developed. However, the incremental nature of policy remains a difficulty in assessing impact at the project level.

There are few mechanisms in social science to codify and synthesise research. In contrast to biomedical science, in the fields covered by the FoW programme there are fewer formal mechanisms to systematically review research; these mechanisms can offer tracers of policy influence.

Timing

Research on impacts may happen too early or too late. If research on impacts occurs too early, some impacts may not yet have occurred. If it occurs too late, certain impacts may have already come and gone. This possibility of transience makes it harder to investigate the impacts, as they may not be captured by a current snapshot of policies and policy debates. In order to provide a comprehensive view of the wider impacts of research this project suggests it would be important to warn researchers at the start of the project about likely evaluations; provide researchers with a mechanism to capture early impacts; and then evaluate research after further impacts have had time to develop, probably 5-10 years after completion of the research. The literature suggests that for research relating to 'hot topics' in policy, initial impact is likely to occur earlier and that 2 years post completion may provide the best time frame for evaluation.

Implementation of evaluation

There was widespread cooperation in the evaluation. The majority of PIs (including all case study PIs), 80% of nominated research users, and others nominated by PIs, agreed to participate in the research when approached.

Researchers and users may prefer structured interviews to written surveys. Our experience also suggests that such interviews would provide more useful information for evaluation. Our on-line survey required significantly more of most participants' time than predicted.

Acknowledgments

Introduction

This report explores the wider impacts of social science research: how research affects policy, practitioner behaviour and public opinion. It does this by examining the Economic and Social Research Council's (ESRC) Future of Work (FoW) research programme. The ESRC is the UK's largest research funder and training agency addressing economic and social concerns. As such it aims to provide high quality research on issues of importance to business, the public sector and government.

The FoW programme set out to bring together leading UK researchers, across a wide range of disciplines, in order to investigate the future prospects for paid and unpaid work. The programme was shaped by a consultation exercise involving 140 policy makers, academics and practitioners, carried out by Professor Peter Nolan in 1997. The first phase of the programme started in October 1998, followed by a second phase in January 2001. The total funding of the programme amounted to £4 million and attracted 221 applications for the first phase, of which 19 were supported. A further eight projects were supported in the second phase. The aims of the programme are shown in Box 1.

> - To create the evidence base that would then ground theories of work
>
> - To enhance public understanding of the critical developments most likely to impact on people's working lives
>
> - To deepen accounts of the future of work by systematic mapping of past and present shifts and continuities
>
> - To foster interdisciplinary and comparative perspectives
>
> - To use innovative methods to engage with research users
>
> - To act as a focus for debate within and between the academic, practitioner and policy-making communities

Box 1. Aims of the FoW programme

Peter Nolan, Montague Burton Chair of Industrial Relations at Leeds, went on to direct the programme. He encouraged interaction between the research groups, promoted dissemination of programme findings and raised the programme's profile. The Director was assisted by a programme advisory committee of senior representatives from government, the Trades Union Congress (TUC), business and academia. The advisory group attended meetings, participated in site visits to meet researchers, and provided access to policy networks. The written dissemination activities were led by Robert Taylor, a

former journalist at the *Financial Times*, who was appointed as the programme's Media Fellow. He wrote a series of seven booklets, aimed at policy makers, that described FoW research and set it in context. The output of the programme has been substantial: its outputs so far include 11 books, 69 book chapters, over 100 refereed articles and over 400 media mentions.

This study explores the wider impacts of the programme in more detail. Over the past decade there has been an increasing culture of accountability affecting government spending. This climate has led ESRC to investigate the most effective ways to evaluate social science research, and to demonstrate the wider impact of its research on society. This report builds on experience of evaluating research in the health services and biomedical settings and seeks to apply it to social science.

In this work we take the Payback Framework, originally developed by the Health Economics Research Group (HERG) at Brunel University, and test its applicability to social science. The Payback Framework was initially developed to examine the payback of health services research (Buxton et al., 1994; Buxton and Hanney, 1994; Buxton and Hanney, 1996). It was further developed in an earlier ESRC analysis of non-academic impact from research (Cave and Hanney, 1996) and subsequently extended to examine basic and clinical biomedical research (Wooding et al., 2005; Wooding et al., 2004). This study tested whether the Framework could be applied to examine the payback of social science research. To do this we briefly reviewed the literature on social science evaluation and the common models for examining the impact of evidence on policy, and concluded that they could be aligned with the Payback Framework. We then used the Payback Framework to examine the research projects in the FoW programme. We used the Payback Framework to structure a programme-wide questionnaire and a series of four case studies. Finally, we used these three streams of evidence to summarise the wider impacts of the FoW study and to see what can be learnt from the programme. We also used the evidence to develop a refined Payback Framework and consider its applicability for evaluating the wider impacts of social science research.

Methodology and project structure

This project set out to examine the wider impacts of the FoW programme and to test the applicability of the Payback Framework to social science.

It used a number of data collection methods (shown schematically in Figure 1). First we conducted a brief review of the literature concerning the ways in which social science affects policy and how the impacts of social science can be assessed. To develop our understanding of the FoW programme we reviewed documents from the ESRC and interviewed key individuals. We then surveyed all the Principal Investigators (PIs) who held grants from the FoW programme to investigate the wider impacts of their grants, and asked them to nominate a user of their research for follow up via a telephone interview. To examine the pathways to impact in more detail we carried out four case studies of FoW PIs. The data collected throughout the study were then analysed in a one-day workshop. More detail on each of these stages is provided in the sections that follow.
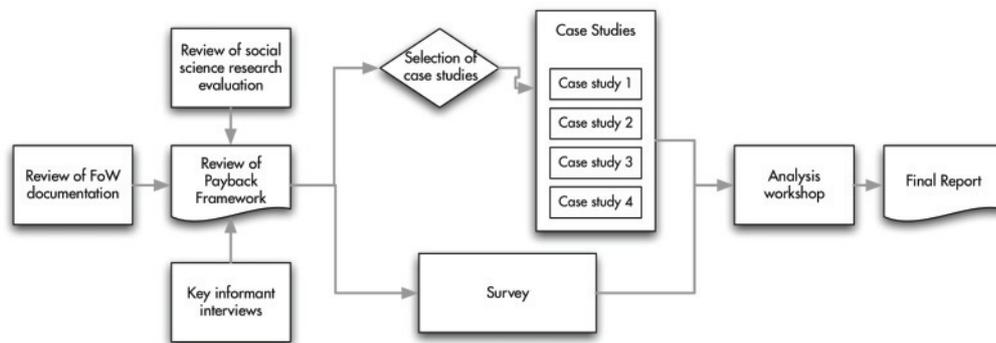
Figure 1. Project schematic

2.1   The analytical framework

The analytical framework for the study was based on the Payback Framework. The Payback Framework consists of two elements: a logic model representation of the complete research process (for the purposes of research evaluation), and a series of categories to classify the individual paybacks from research.

The logic model and categories of the Payback Framework that served as the starting point for this study are presented below in Figure 2 and Box 2 respectively. The logic model provides a framework for analysing the 'story' of a research idea from initial inception

(Stage 0) through the research process (Stage 2) into dissemination (Interface B) and on towards its impact on people and society (Stage 6). The model is meant as a research tool to facilitate cross-case analysis. It does this by providing a common structure for each case study thereby ensuring cognate information for each study is recorded in the same place. The model is not meant to imply that the research process itself is linear. If necessary, individual pieces of information can be recorded in more than one place in the Framework to ensure they are picked up in the relevant cross-case comparisons.
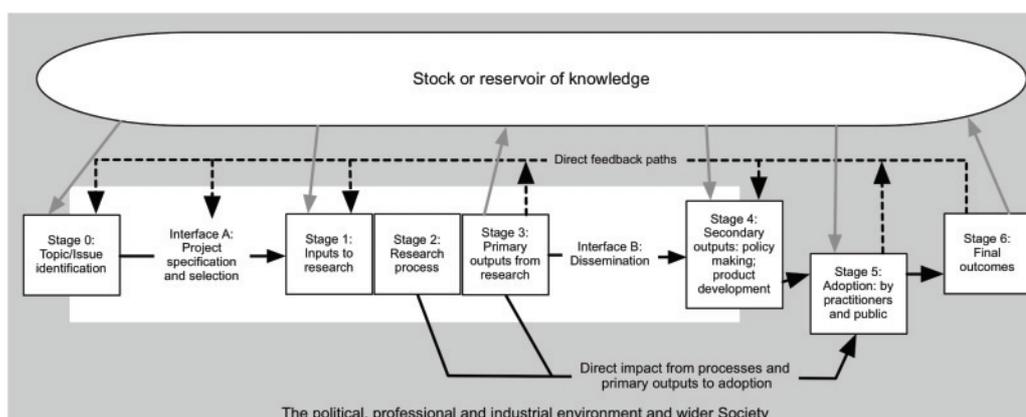
Figure 2. The version of the Payback Framework used as a starting point for the study[1]

> **Knowledge production**
> Journal articles; conference presentations; books; book chapters; research reports
>
> **Research targeting and capacity building**
> Better targeting of future research; development of research skills, personnel and overall research capacity; staff development and educational benefits
>
> **Informing policy and product development**
> Improved information bases for political and executive decisions; development of pharmaceutical products and therapeutic techniques
>
> **Health and health sector benefits**
> Improved health; cost reduction in delivery of existing services; qualitative improvements in the process of delivery; improved equity in service delivery
>
> **Broader economic benefits**
> Wider economic benefits from commercial exploitation of innovations arising from R&D; economic benefits from a healthy workforce and reduction in working days lost

Box 2. The payback categories of the Payback Framework used as a starting point for the study (Source: Hanney et al., 2004)

The categories of the Payback Framework are considered in the Discussion section of this report where the applicability of the model to social science research is discussed.

---

[1] Source: Hanney et al., 2004

2.2   Initial tasks

2.2.1   Brief review of social science impacts literature

A brief review of the literature, presented in Volume II, examines frameworks of evaluation previously used to examine the impact of social science research as well as models of research impact. The review was intended to identify lessons from the literature that would inform the current study, but was not intended to be comprehensive.

2.2.2   Review of FoW documentation

At the outset of the project we also reviewed the ESRC records covering the FoW programme. This informed our interview protocol for the key informant interviews and provided the basis of our overview of the FoW programme, which was used as background information throughout the study. This overview is presented in Volume II.

2.2.3   Key informant interviews

To gain a deeper understanding of the overall context and impact of the FoW programme we carried out interviews with six key informants. Suitable key informants were identified by ESRC and by the Director of the FoW programme:

- o   Professor Peter Nolan (FoW Programme Director)

- o   John Hougham (Chair of Advisory Board)

- o   Professor Toby Wall (Member of panel that appointed the Programme Director and Member of Advisory Panel)

- o   Bill Callaghan (Member of Research Priorities Board and Chair of Commissioning Panel)

- o   Professor William Brown (PI on two grants, one in each phase of the programme)

- o   Robert Taylor (Programme Media Fellow).

These interviews were written up and examined for themes relating to the wider impact of social science and the FoW programme. These themes were then clustered and used to inform the refinement of the Payback Framework. We also carried out a second follow-up interview with Peter Nolan late in the project to examine various issues that had been raised in the survey and case study phases of the project.

2.2.4   Output of initial tasks

The findings of the initial tasks suggested that the logic model aspect of the Payback Framework was generally appropriate for the social sciences. However, the categories needed some generalisation; our initial revision of these categories was presented in our interim report to the ESRC and are shown in Box 3.

> **Knowledge production**
> Journal articles; conference presentations; books + chapters; research reports
>
> **Research targeting and capacity building**
> Sparking new research proposals; providing research training; supporting career advancement
>
> **Informing policy and product development**
> Raising the profile/awareness of existing research among policy/practitioners makers; dispelling/resisting myths; providing policy options; prioritising areas; designing management assessment tools; developing benchmarking protocols
>
> **Employment sector benefits**
> Improved working conditions; higher participation in workforce; more effective regulation
>
> **Societal and broader economic benefits**
> Lower stress among workers; improved public health; improved mental health through decreased unemployment; greater productivity; improved equity

Box 3: Draft Payback Categories for the Social Sciences afer initial tasks.

2.3   Payback survey

To examine the range and types of payback produced across the FoW programme we invited all the PIs to complete an online survey. The survey concentrated on the wider impacts of the projects, but also asked some questions about the initiation of the research. The survey questions were based on those used in previous payback studies and modified in light of the key informant interviews and literature review[2].

PIs were invited to participate in the survey using personalised emails which contained a direct hyperlink to their questionnaire. PIs who had grants in both phases of the FoW programme received two emails linking to two separate surveys. The survey was implemented using MMIC web questionnaire software.[3] Data were downloaded from MMIC and analysed using SPSS version 14 and Microsoft Excel version 2000.[4]

The questionnaire was originally drafted on paper. The paper draft was reviewed by the ESRC and by both of the project's quality assurance reviewers. After incorporating their comments it was converted into a web questionnaire and again reviewed by the ESRC. We also asked a RAND researcher from outside the project team to test the questionnaire by talking us through their thoughts as they filled it in. This helped us to identify misunderstandings and confusing questions.

---

[2] Payback questionnaires first used in Buxton et al., 2000 and subsequently refined for payback analysis of the NHS Research Implementation Methods Programme and the Dutch and UK Health Technology Assessment Programmes.

[3] MMIC™ (Multimode Interviewing Capability) is a comprehensive information system under development by RAND, building on work by CentERdata in The Netherlands. For more details see: http://www.rand.org/labor/roybalfd/mmic.html

[4] SPSS: http://www.spss.com, Microsoft Excel 2000: http://office.microsoft.com/en-us/FX010858001033.aspx

The questionnaire was designed to take 30–40 minutes and MMIC software allowed PIs to partially complete the questionnaire and subsequently return directly to where they had left off. It also allowed them to return to any previously answered question and amend their response. To make it easier for PIs to fill in the questionnaire we culled lists of each PI's publications and media coverage from the records of the FoW programme and loaded them into the relevant questionnaire. The PIs were then asked to correct and amend as necessary, rather than entering this information from scratch.

The survey went live on the 25th May and on the same day emails were sent out inviting the PIs to complete it. We then sent three waves of personalised reminder emails to those PIs that had not yet responded.

2.4   Interim report

An interim report describing the work to date and outlining the remaining activities was provided to the ESRC on 2nd June. The interim report contained drafts of the literature review and overview of the FoW.

2.5   Case studies

We carried out four case studies to explore the wider impacts of the selected projects in more detail. To explore the case studies we started with information from their survey response, but supplemented these by reviewing the ESRC files on the grants, including the grant applications; interviewing the PI and other researchers; reading the publications attributed to the grant; and talking to policy makers suggested by the PI. Case studies enabled us to explore how the policy and practice impacts had occurred and also examine if the Payback Framework was a suitable structure for tracing such impact. The case studies were selected in the following way:

o   Purposive selection of high impact case studies to ensure there was impact to be traced. Using this criterion there was consensus in the key informant interviews about the most suitable case studies.

o   Selection of case studies to mirror the variety of projects carried out in the programme. We considered the following criteria: discipline of study, research methods, programme theme, size of grant and team size.

o   Selection of case studies from both phases of the programme.

Two case study PIs had received grants in both phases of the programme and in these case studies both grants were considered, increasing the number of grants covered to six. We discovered that the PI of case study C was also involved in a grant in the second phase of FoW, but in this case the second grant had a different PI. However, for both of these grants, the PIs considered that they jointly led both projects, although they were not recorded as joint PIs in ESRC's records. In this case, for resource reasons, we focused on the first of these grants, and considered the second grant in less detail. In summary we initially selected four grants, expanded this selection to encompass six grants and also

looked briefly at a seventh. All of the PIs approached agreed to participate as case studies. Summary information on the selected case studies is presented in Table 1.

In the two case studies investigating two grants we also explored whether it was possible to separate the impacts of the two grants and individually attribute the wider impacts to one or other of the grants.

Case Study	Title of grant	Discipline	Methods	Theme	Grant size	Team size	Phase
A	Employment choices for mothers of pre-school children: a psychological perspective	Psychology	Questionnaires	Work–life balance	£85k	2	1 & 2
	Paid and unpaid work in early parenthood: psychological causes and consequences				£110k	2	
B	Pay, working time and performance in small enterprises	Sociology	Case studies, interviews	Organisational change and performance	£151k	4	1
C	"Workplace change" (pseudonym)	Management and Business Studies	Interviews, case studies, surveys	Spanned themes	£-----	4	1
D	The future of collectivism in the regulation of employment relationship and pay in Britain	Management and Business Studies	Case studies	Industrial relations	£120k	5	1 & 2
	The basis and characteristics of mutually beneficial employee–trade union relationships				£95k	2	

Table 1. Information on case study grants

Brief summaries of the case studies are presented in the Results section of this report, and the full case studies can be found in Volume II. The case study narratives are presented in the structure of the Payback Framework to facilitate cross-case analysis. A number of data sources were used in the preparation of the case studies and these are summarised in Box 4.

The initial key informants' interviews

The grant application

The peer review comments on the grant

The Programme Director's final report

Papers and other publications attributed to the grants

Data from the survey

Face-to-face interviews with the PIs

Telephone interviews with other researchers who were associated with the grant

Telephone interviews with policy and practitioner users

Review of relevant policy documents

Box 4. Data sources used for case study research

2.6   Analysis workshop

The data from the project were analysed and synthesised in a one-day workshop, which was attended by the project team and the ESRC project manager. In the first part of the day the survey data and case studies were presented and discussed. Throughout the day emerging findings were captured on a wall-sized white board on repositionable notes. These notes were classified into whether they related to the wider impacts of the FoW programme or the evaluation of the social science using the Payback Framework. In the second part of the workshop the findings were reviewed and additional data attached to them. Finally the findings were prioritised to provide a structure for the Discussion section of the report.

Results

3.1   Key findings from the literature review and key informant interviews

The models of impact in social science evaluation literature (Nutley and Webb, 2000; Neilson 2001; Hanney et al*., 2003) seem largely compatible with the Payback Framework, consequently little modification was required to incorporate the findings in the literature into our refinements of the Payback Framework described in the Discussion section of this report.

Issues of timing, 'additionality' and 'attribution' affect all research evaluations (Davies et al., 2005; Hanney et al., 2000) and were raised by a number of the key informants. With respect to timing, this evaluation could not assess the final impact of the FoW programme over the very long term; however, the interviewees suggested that the programme had already had significant impacts. Indeed, previous impact assessments recommend shorter timescales than that used for this project (Buxton et al., 1999). The issue of 'additionality' revolves around the question of what would have happened without the programme – would the same impacts have been achieved? We addressed 'additionality' in the case studies by asking PIs to consider the counterfactual, i.e. how much of what has happened would have happened without the programme. Detailed 'attribution', the apportioning of impact to a particular piece of research, was seen as particularly difficult by PIs; a finding in line with the literature on the realities of evidence-based policy and the role of research alongside other influences on policy makers (Kogan and Henkel, 1983; Davies, 2004).

Much of the literature on the impact of social science research reflects the view of Carol Weiss, that the policy process is usually gradual, involving 'knowledge creep and decision accretion'(Weiss, 1980). This suggests that many inputs may flow concurrently into each policy change, making detailed attribution more difficult. Complicating this issue further, there was general consensus from the interviewees that progress in policy areas such as employment was politicised and contested, and consequently might not even have a clear long-term direction. This suggests that several models of the policy process identified in the literature (cf. Lindblom, 1959; Weiss, 1982; Kingdon, 1984; Rhodes and Marsh, 1992; Black, 2001) may be appropriate to understanding evidence-based policy making, as put forward by Pawson (2006).

The Payback Framework has previously been applied in areas where vested interests and politics were important; for example the field of health services research (Buxton et al., 1994; Buxton et al., 1996). However, in the area of employment issues, ideology may be

more important than in previous applications of the Framework. Interviewees suggested that the lack of directional incremental advance was illustrated by the numerous reversals in employment policy over the last 20 years. They felt that some of these shifts had been evidence driven; some not. Because of these non evidence-based shifts, it was suggested that the impacts of research may be more transient, and that rather than being overtaken by new understanding, the impacts of some research might be 'washed away'. This means that holding the tide against misunderstandings, or discrediting myths that later return, may be important paybacks. This issue affects the timing of evaluations. The standard concern with evaluation is that it is carried out too soon. However, there are occasions when early evaluation has been recommended, such as the previous ESRC assessment of non-academic impacts for hot topics (Molas-Gallart et al., 1999). The views of our interviewees also suggest that in some circumstances evaluations in social science may miss impacts by being conducted too late.

Our interviewees agreed that the ideological and politicised nature of employment policy meant that the impact of research may be heavily dependent on the way that opinion and policy are moving at the time of the research. This suggestion is in line with much of the literature about research effects on policy (Molas-Gallart et al., 1999), although there are infrequent occasions when research findings can change the climate of opinion and the direction of policy. Some interviewees noted that it was extremely hard to influence policy if accepted opinion was in a direction counter to that suggested by the research; however, the use of research to fine-tune policy was a much easier proposition. The Payback Framework acknowledges the role of the 'the political, professional and industrial environment and wider society', but the interviews revealed that it might be a particularly important factor in this study. This is something we endeavoured to investigate in more detail in our survey of FoW PIs. Overall there was a feeling that the sphere of employment was heavily influenced by 'fashion and myth' and that this might be because management practices are heavily context dependent and hence difficult to generalise.

The literature suggests that the collaborative working is particularly important in transferring knowledge from the community of researchers to the community of policy makers (Caplan, 1979). Our research (interviews, survey and case studies) suggested that the use of knowledge brokers (in the case of the FoW programme, the Media Fellow) and exchange of people between research and policy making organisations can greatly increase the successful uptake of research for policy. This is directly in line with the literature on models of the policy process (Kogan and Henkel, 1983; Lomas, 2000; Lindquist, 2001; Kogan et al., 2006). Researchers themselves can also play the role of knowledge broker (Wooding et al., 2005).

In addition, interviewees suggested a number of factors to take into account in the examination of the research and its impacts. These included:

o   The importance of the reputation of the host institution as a factor in gaining access to research populations (as an 'Input to research')

o   The role of the PI in maintaining the interest of the research team due to the less hierarchical nature of social science in comparison to biomedical science (as a factor in the 'Research process').

3.2   **Summary of results from survey**

In our online survey investigating PIs understanding of their research impacts, we received completed responses to the survey for 22 of the 27 projects, a response rate of just over 80%. Unfortunately, we cannot calculate the average time it took PIs to complete the questionnaire as the survey allowed them to fill in their questionnaire in more than one sitting. However, the data we have show that our 30–40 minute estimate was too low. Of the 22 PIs, only six filled in the survey in less than 40 minutes, with only nine taking less than an hour.

The results of the survey are presented in detail in Volume II of this report; key findings are described in the following sections. First we look at the characteristics of the PIs and their projects, we then summarise the outputs and impacts of the projects before looking for relationships between the characteristics and project impacts. Finally we summarise the issues arising from interviews with research users identified by surveyed PIs.

The duration and the timing of the 27 grants in the programme are shown in Figure 3. The projects received funding of between £36k and £345k. Projects were a mixture of continuing previous work, applying new techniques to a current research area, applying current techniques to a new area or a mixture of the three. Only one project was a new research area for the PI. Projects produced a number of publications, presentations and media outputs. These were submitted to the ESRC and were identified as part of the questionnaire – along with the opportunity to add further examples.

Overall, the survey suggested that the FoW programme projects had impacts on several areas of policy (see Box 5). However, only one PI in the survey was able to cite specific policies that had been affected by their research (identifying white papers and government documents that cite their research).

Union/employer relations
Working conditions and pay
Equal opportunities
Changing working habits and workplaces
Employment structures and families

Box 5. Examples of policy themes affected by FoW projects

Professor Paul K Edwards
Professor Jonathan Michie
Professor H N Rainbird
Professor D.M. Houston
Professor K. Schurer
Professor W A Brown
Professor Nickie Charles
Professor M J Rose
Professor A M Dale
Professor A L Booth
Professor A Felstead
Peter Bain
Dr C Hakim
Professor Irene Bruegel
Dr Michael White and Professor Steven Hill
Professor P Moss
Professor M P Marchington
Professor Susan Himmelweit
Professor E J Heery
Professor D.M. Houston; Ms G. Marks
Professor Harriet Bradley
Professor William Brown
Professor Theo Nichols
Professor Clare Ungerson
Dr. Martin Upchurch
Professor Stephen Hill and Dr Michael White
Professor Alan Felstead

1-Jan-98   1-Jan-99   1-Jan-00   31-Dec-00   31-Dec-01   31-Dec-02   31-Dec-03

Figure 3. Project duration and timing in the FoW programme

Figure 4 shows the publications, presentations and media outputs from each project. Starred projects are those that were initially selected as case studies prior to compiling this information. Reassuringly, they include those with the largest number of publications, presentations and media outputs. Very few additions were made to the lists of publications (23 additional papers in total), presentations (17 additional) and media outputs (5 additional) sent to PIs.
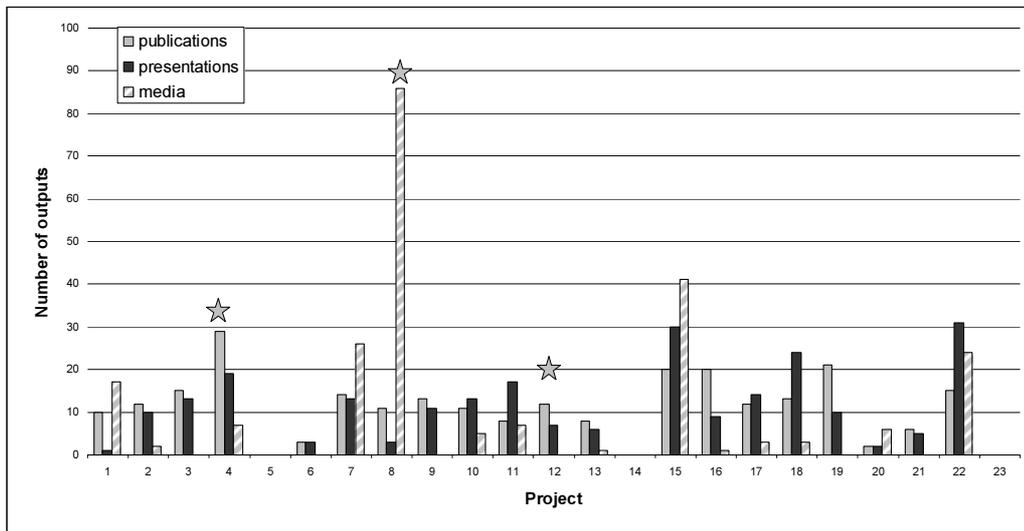
Figure 4. Publications, presentations and media outputs

Most projects were primarily in the fields of sociology or management and business studies (Figure 5). There were a variety of secondary disciplines (including economics, and computing and statistics). All of the following figures that represent the answer to a single question in the survey have the survey question in parentheses in the figure legend.
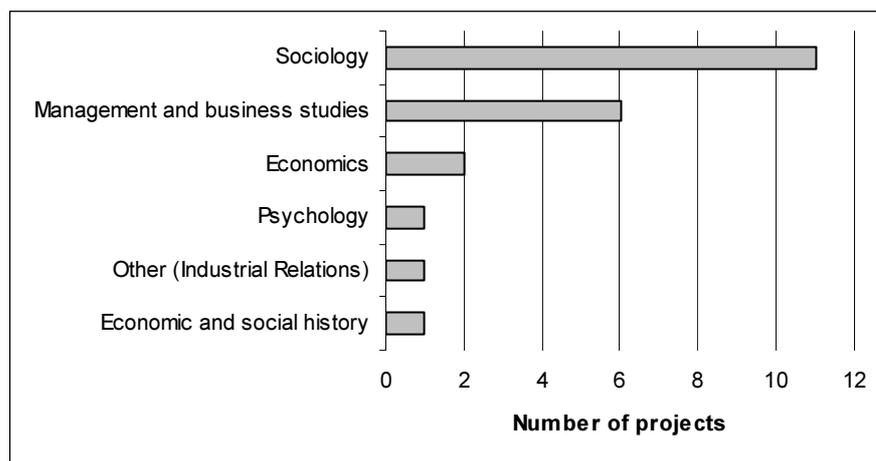
Figure 5. Primary disciplines for the FoW projects (Could you please identify one primary and any contributory research disciplines for your research?)

Researchers used a range of methods in the projects (Figure 6) and often used more than one method per project.
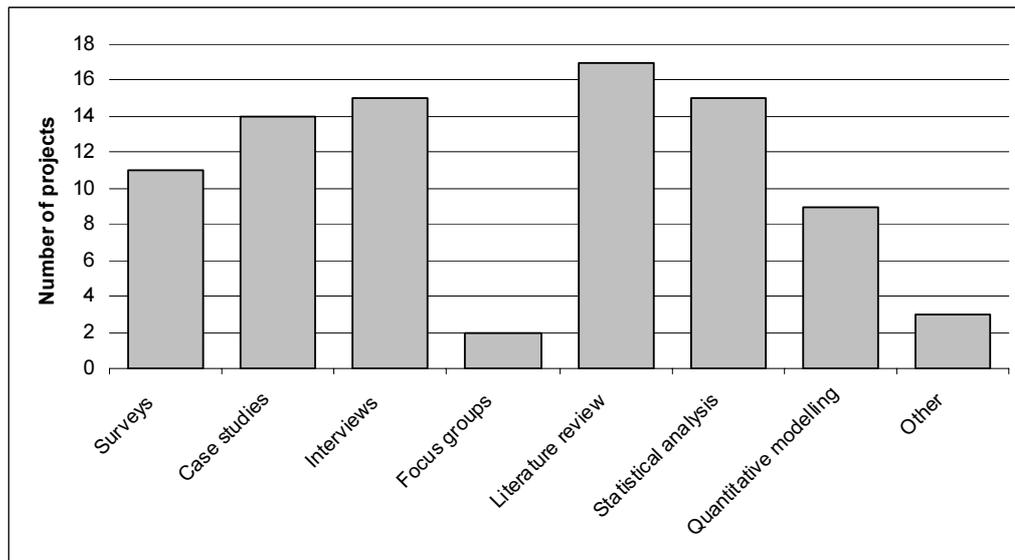
Figure 6. Range of methods used in the FoW programme (What techniques and methods are used in your research project?)

The majority of PIs said they included policy makers in the original design of the study (Figure 7). PIs did not generally take into account reviewers' comments on their proposal (only 2 of 22 did).
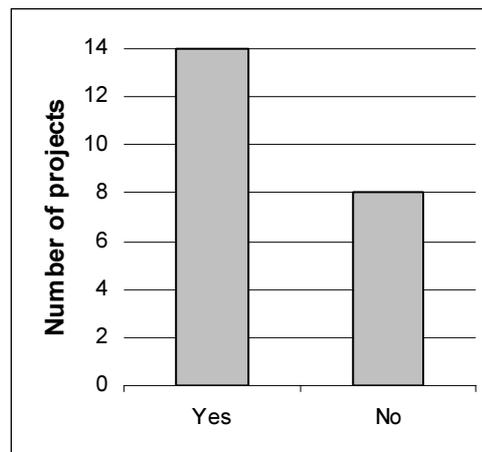

Figure 7. Policy makers involved in the original design of the research (Were policy makers or other potential users involved in the original design of the project?)

PIs did not generally receive extra funding for projects from other sources, with only 4 of the 22 receiving additional funds (from the Work Foundation, Chartered Institute of Personnel Development and their university). Nine of the projects did receive support in kind, varying from identifying case studies to assisting with dissemination costs. Most PIs expected their projects to produce academic outputs, some expecting policy and practice outputs too (Figure 8).
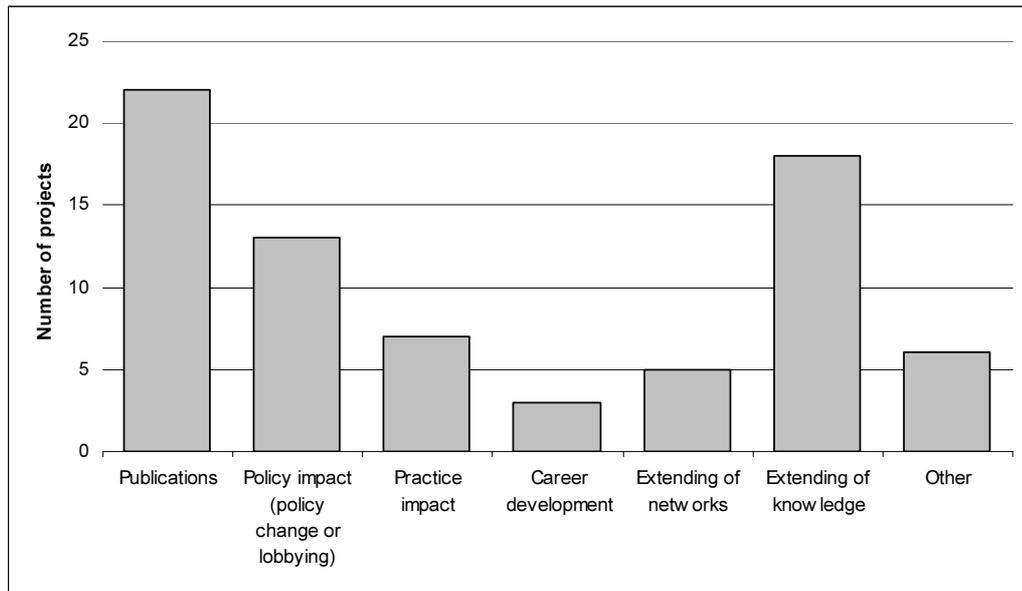
Figure 8. Expected outputs from research - each grant can have more than one output (What did you expect the main outputs and outcomes of the project to be?)

12 projects resulted in career development for team members, in terms of promotions/qualifications. Individual projects had up to six qualifications attributable to them. The attribution of these to the FoW programme was varied between promotions/qualifications (Figure 9).
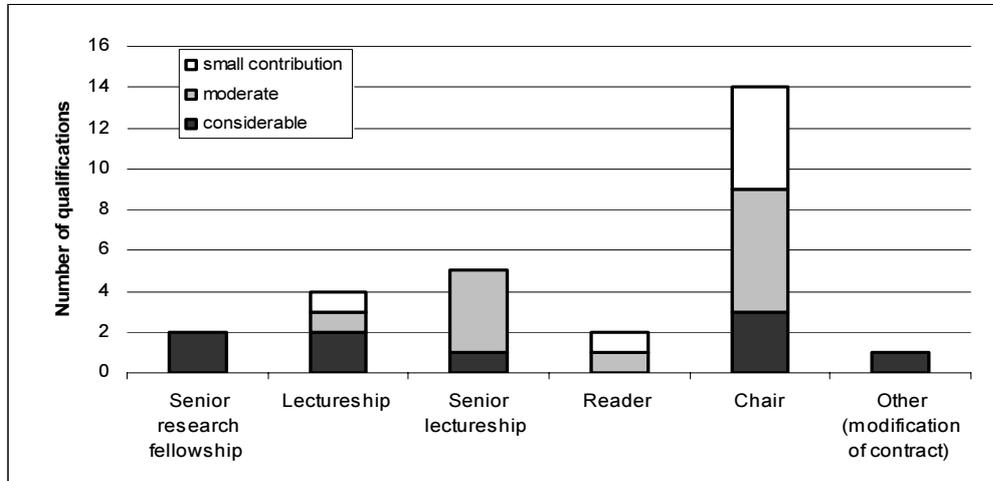
Figure 9. Promotions/qualifications arising from the FoW projects (Has the grant contributed to qualifications or promotions for members of the research team?)

Secondments to government were also an output of six of the projects (nine secondments). These were either moderately or considerably attributable to the FoW project (Figure 10).
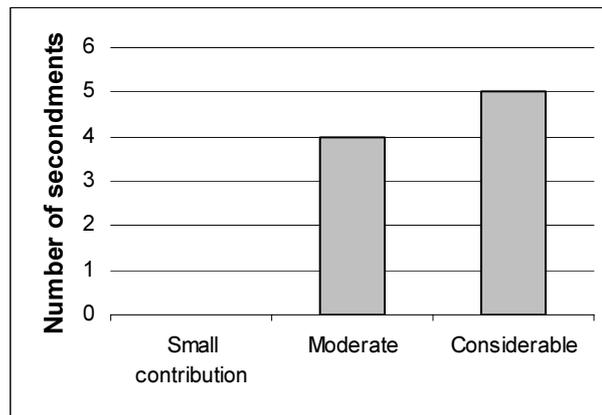
Figure 10. Attribution of secondments to government to the FoW programme (Contribution of FoW grant to any secondment or transfer to government?)

Most PIs thought that their FoW project had incrementally advanced their research field, with six stating it was responsible for changing their field direction (Figure 11).
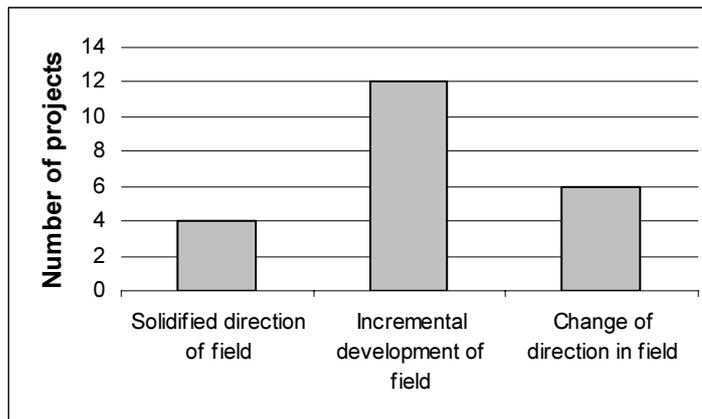
Figure 11. Impact on research field (How has the project affected the understanding in the field of study?)

FoW teams secured funding from various sources (e.g. ESRC, government) for follow-on research. Figure 12 shows the amount of funding from each source. The number of projects funded by each source follows the same distribution; no particular funder is giving larger grants than any other.
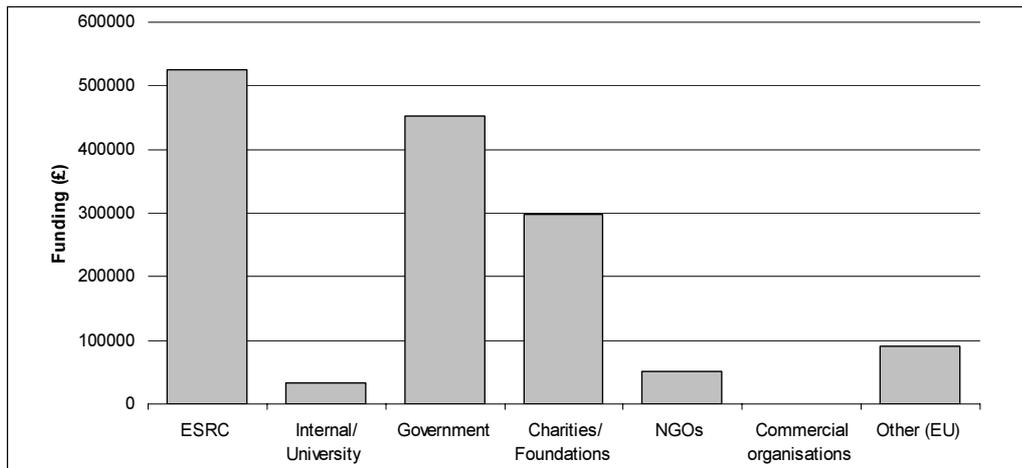
Figure 12. Funding for research following on from FoW (Have the project findings, methodology or theoretical developments helped generate subsequent research by members of the team?)

The FoW research also influenced other researchers, with seven PIs able to identify other research groups who were influenced. In general, the attribution to FoW of others' research varied from small to considerable.

The perceived impact of research on policy was across a range of organisations (Figure 13), mostly in the UK. Eighteen PIs could identify organisations whose policies they had affected.
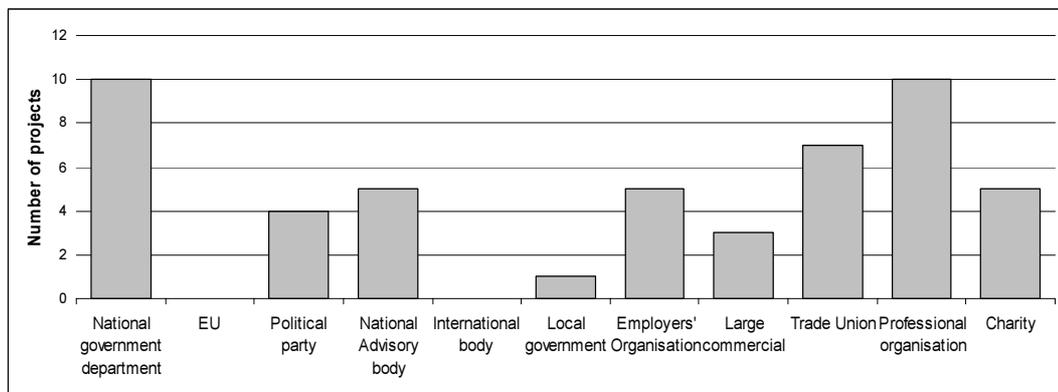
Figure 13. Impact of FoW research on policy making and agenda setting by organisations (Are you aware of your research being used to inform policy making, advocacy or agenda setting by any of the following organisations?)

Most research recommended that policy should move in a certain direction (19 projects) and, according to some respondents, did not always reflect the current policy direction at that time (Figure 14).
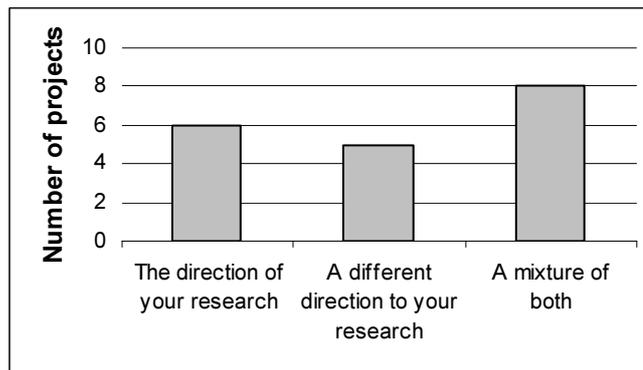
Figure 14. The direction of policy in relation to the research (What was the direction that policy and/or practice was moving in?)

When asked to, PIs were less able to identify specific policies that had been affected by their research. Only 14 PIs could name specific policies (Figure 15).
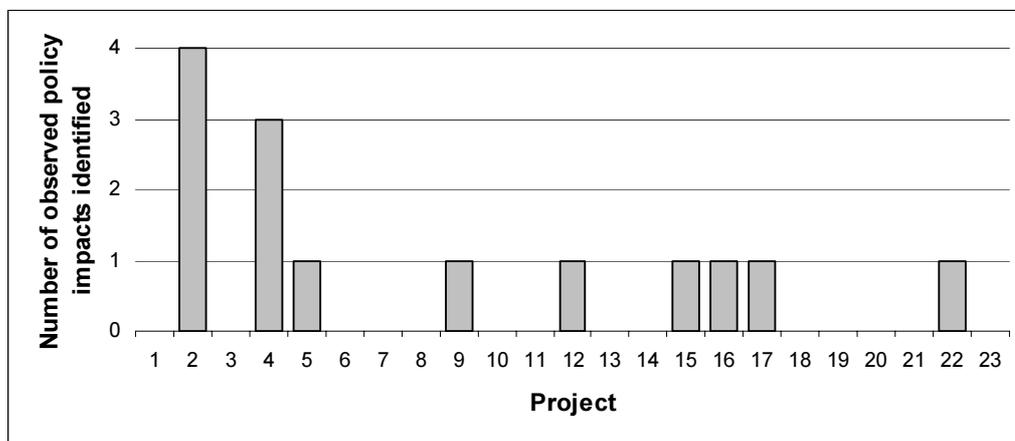
Figure 15. Number of policy impacts per grant (Could you please provide more details about the most significant policy impacts of the project?)

When asked, most PIs thought their research changed policy in an incremental way. We asked PIs to place their policy impacts on a scale from 1 to 5, where 1 was an instrumental impact and 5 was a general impact. We also asked PIs to attribute their impact on the policy to the FoW project (either small, moderate or considerable contribution of the FoW to their impact).

Figure 16 shows the two results for the 12 policies which had influence levels and attributions.
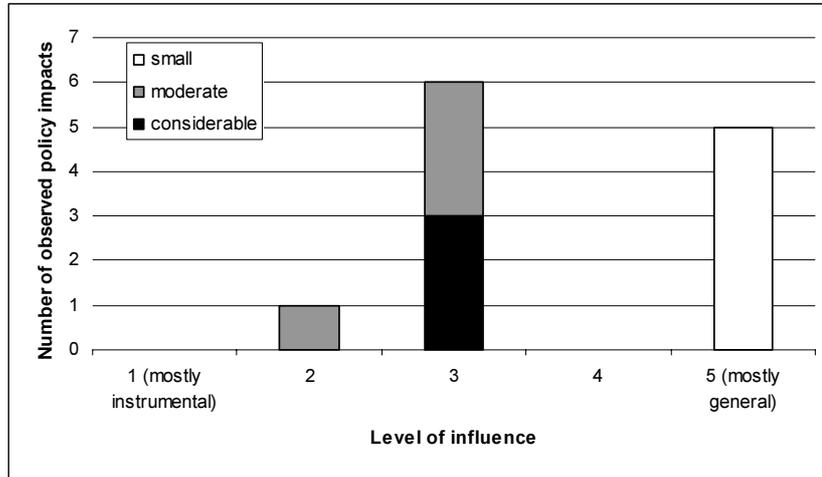
Figure 16. Level of influence of FoW research and the amount FoW contributed to that influence (For each policy instance, what was the level of influence on a Scale 1-5, where 1 is "mostly instrumental" and 5 is "mostly general"? How large was your FoW research contribution to this influence?)

Only nine researchers identified future policy impacts, and these were on very general issues. Most thought that their research would have a general impact on future policies rather than an instrumental one. Research was disseminated to policy makers through a variety of channels (Figure 17). Researchers often mentioned more than one dissemination channel for each instance of policy impact they cited.
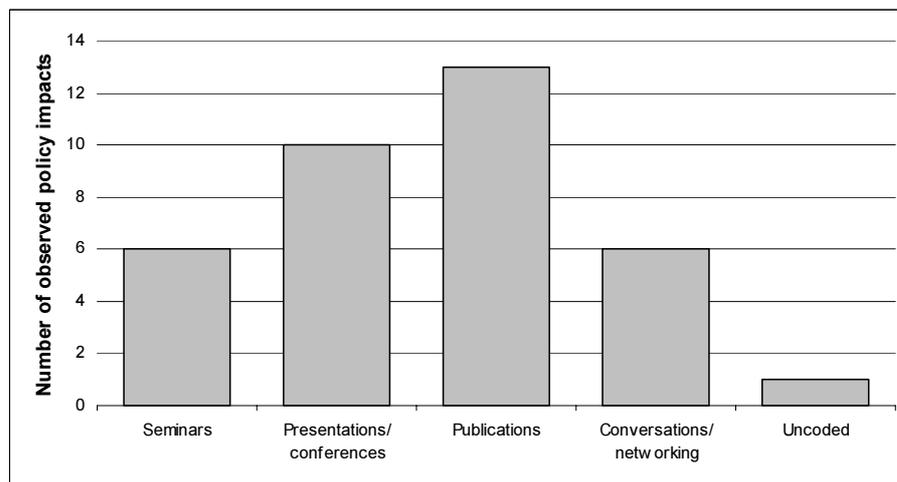
Figure 17. Methods used to disseminate to policy makers (How was research disseminated in these cases of policy impact?)

Interestingly, in terms of the most important way to disseminate to policy makers, more PIs suggested academic publications than any other single route (Figure 18). No PI considered the FoW publications to be the most important way to disseminate; despite the views of policy makers suggesting that the Robert Taylor series on the FoW projects was the most important way to learn about projects.
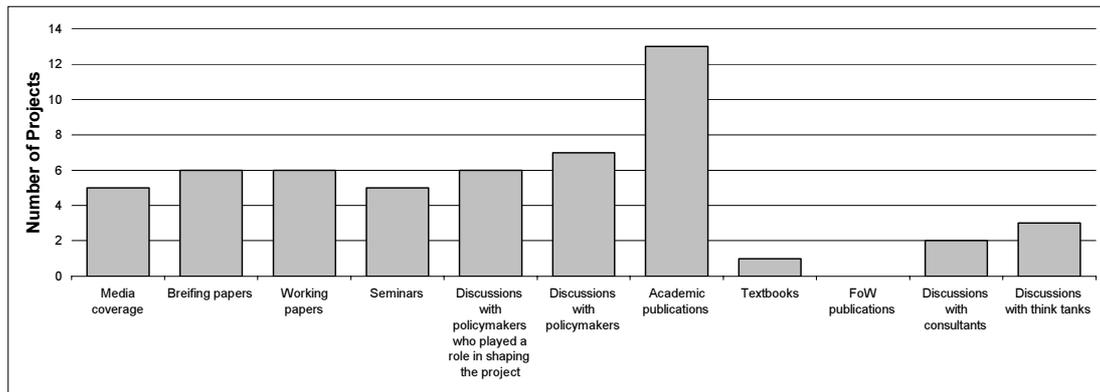
Figure 18. Most important method of dissemination to policy makers [according to PIs] (On a scale from 1 to 5, with 1 being not at all important and 5 being vital, could you please indicate how important each of the following channels is in facilitating the policy influence of your research?)

The practice impacts of projects were harder for PIs to identify (only five PIs listed seven total impacts). PIs thought that practice impacts mainly produced incremental changes (4), but some changed practice direction (2) and one confirmed practice. Future practice impacts were also problematic for PIs, with only seven identified and the perceived impact of them spread between confirming practice (2), incremental change (2) and changing practice direction (3). PIs considered presentations to practitioners as the most important dissemination method, with organisations worked with as the second most important route (Figure 19).
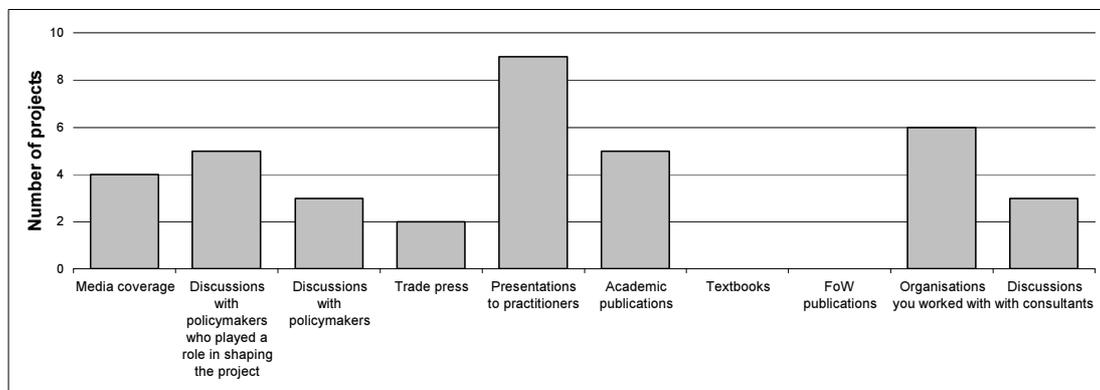
Figure 19. Most important dissemination routes to practitioners [according to PIs] (How important were the following channels of dissemination in facilitating the practice influence of your research on a scale of 1-5, with 1 being not at all important and 5 being vital?)

Some PIs felt their research had been used to inform HR policies of organisations, although around half did not know if this was the case (Figure 20).
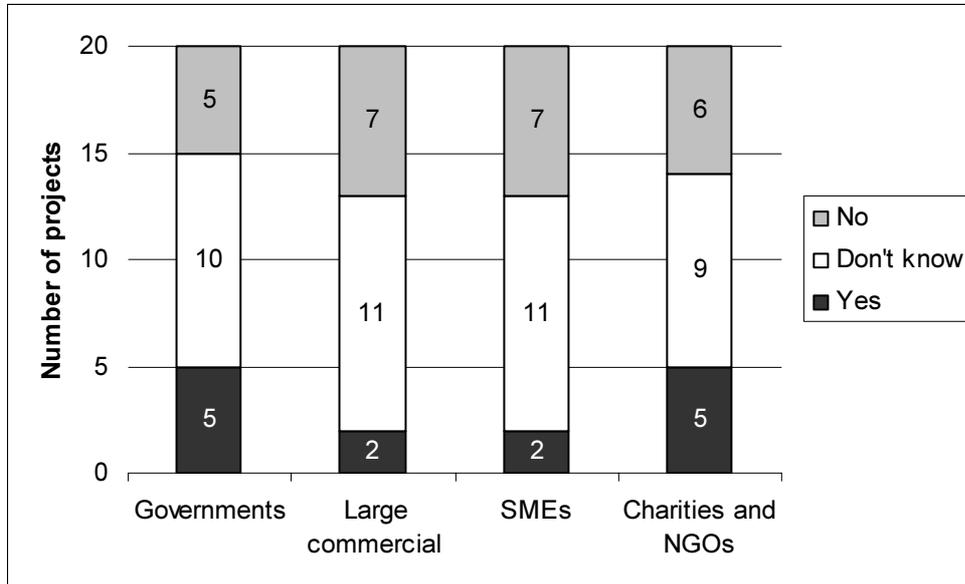
Figure 20. Did FoW projects affect the HR policies of organisations? (Are you aware of your research being used to inform HR policies of any of the following employers?)

We asked about the impact of being part of FoW. Of the 22 PIs, 17 thought that the FoW programme had helped them form networks, mostly with researchers, policy makers and practitioners (Figure 21).
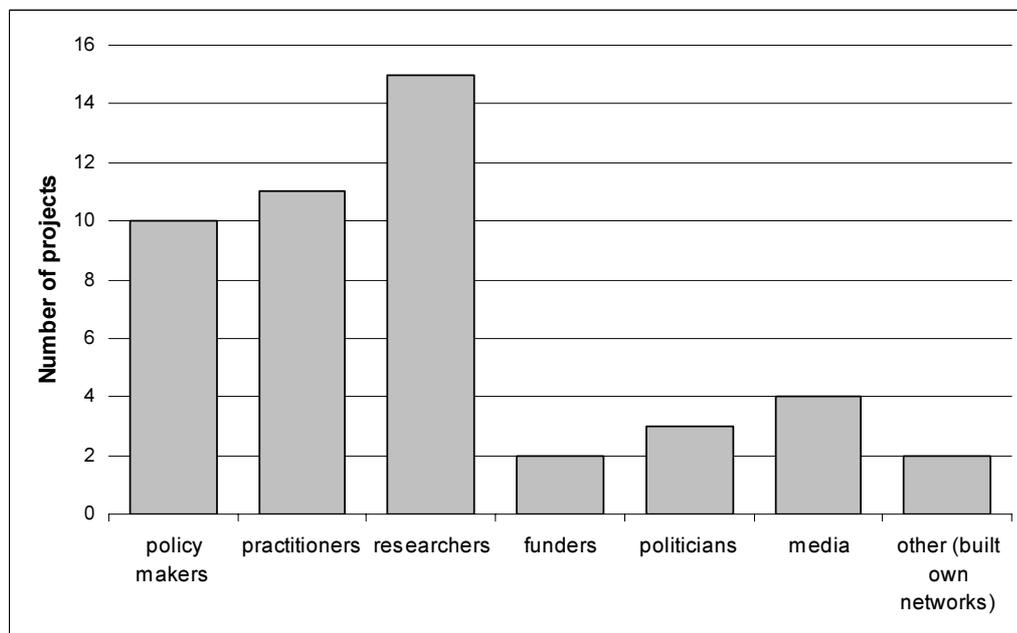
Figure 21. Networks formed with different groups (Which of the following groups did the project help you or your researchers form or develop networks with?)

Most PIs considered their research to have been more successful in a number of dimensions due to being part of the FoW programme; none considered it less successful (Figure 22).
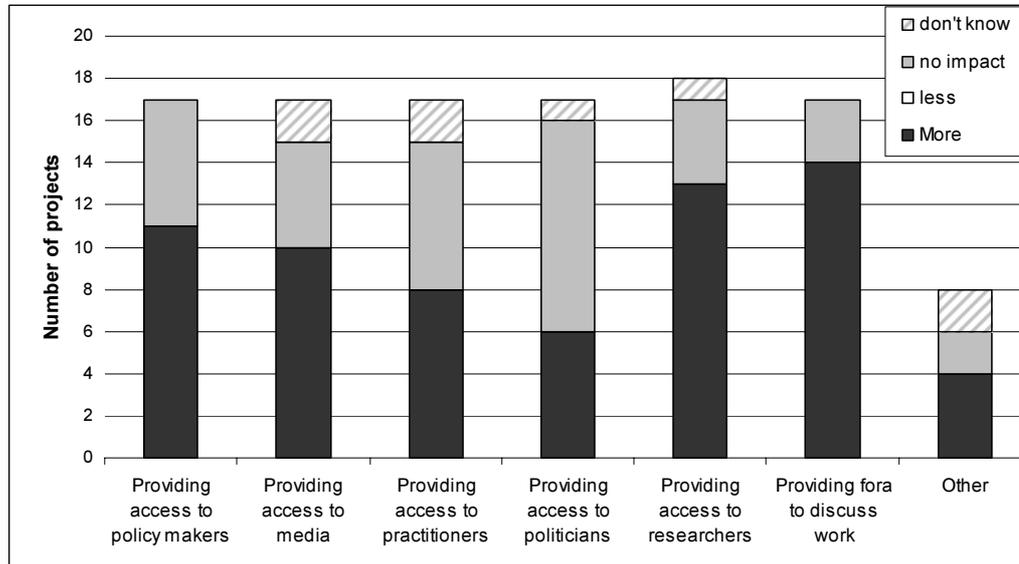
Figure 22. Impact of FoW on the success of project (Was your project more or less successful than it would otherwise have been had it not been part of the FoW programme because of any of the following areas?)

The majority of PIs also considered that being part of the FoW programme considerably affected the wider utilisation of their research (Figure 23).
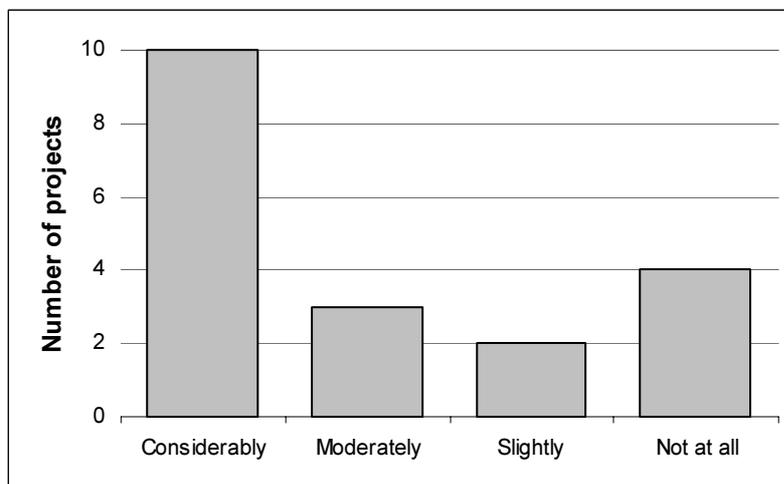
Figure 23. The effect of the FoW on wider utilisation of the research (To what extent was the utilisation/wider impact of your research affected by your association with the FoW programme?)

We examined the correlation between characteristics of the grants and the total number of outputs and outcomes (observed policy impacts, future expected policy impacts, observed practice impacts, future expected practice impacts, and career advancement). We examined: the range of inputs, size, level of co-funding, number of disciplines, relative direction of policy and involvement of policy makers in initial design. The effect of most characteristics was not significant on either combined outputs or individual outputs.

However, the time since the grant had finished to the present was negatively correlated with the combined and individual impacts. As Figure 24 shows, in terms of total impacts (observed, expected and career impacts), time since the end of the grant was negatively correlated with the number of impacts (Pearson correlation = -0.736; significant at the 0.01 level, 2-tailed).
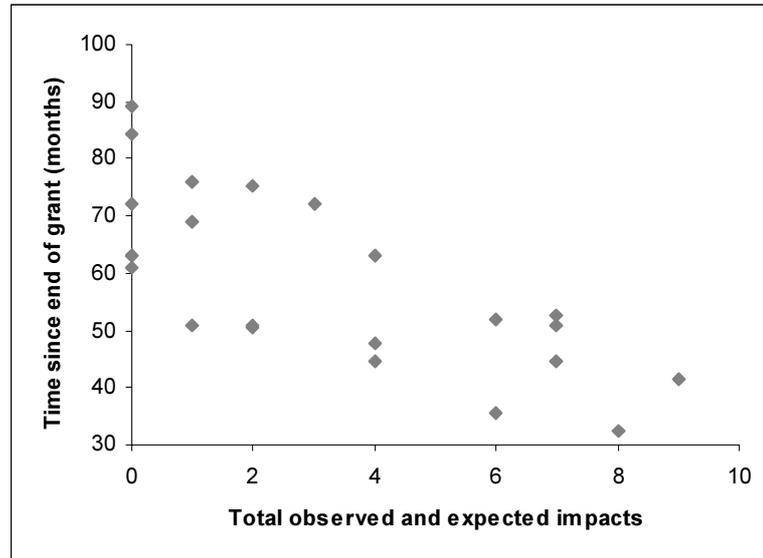
Figure 24. Total observed and expected impacts per project and time since end of grant

It is possible that this result is due to PIs on more recent projects expecting more outcomes to occur in the future. However, as Figure 25 shows, when comparing time since grant with only observed impacts (observed policy impacts, observed practice impacts and careers) there is still a significant negative correlation (Pearson correlation = -0.720; significant at the 0.01 level, 2-tailed).
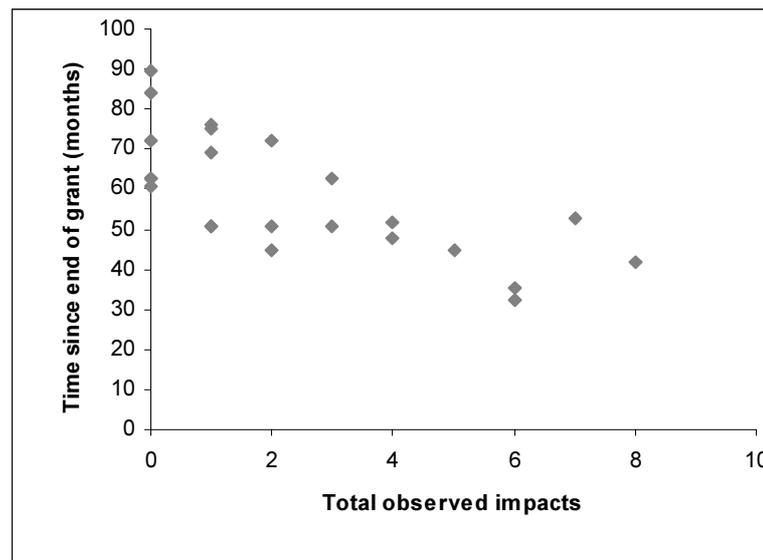
Figure 25. Total observed impacts and time since end of grant

The inclusion of policy makers appears to be an interesting issue in creating policy impacts, as those projects with policy maker input had 14 impacts mentioned whereas those without only had 7. However, the difference in policy outputs per project is not significant (Chi square test) (Figure 26).
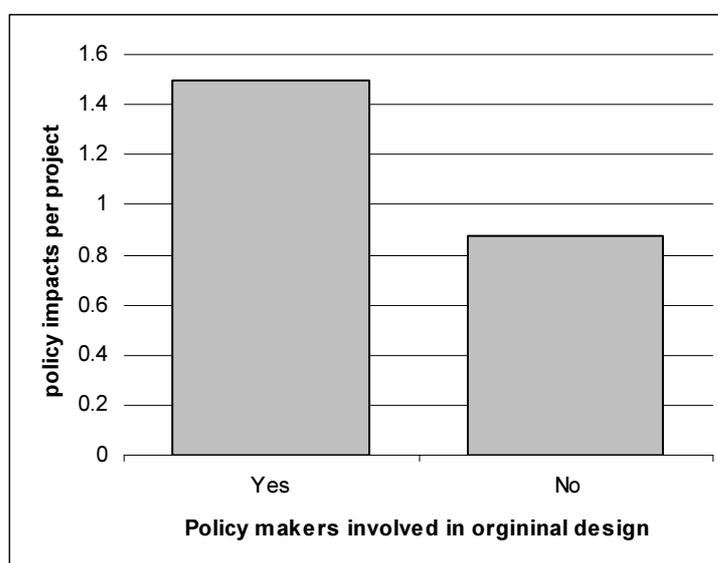
Figure 26. Total policy outputs (realised and future) per project, shown by policy maker involvement in the project

3.3   User interviews

In the survey we asked PIs to nominate users of their research. We then carried out telephone interviews with the nominated users. Because the case study PIs also filled in the survey, two of these users were interviewed both as users from the survey and as users for case studies. Users came from government, trade unions, professional organisations and special interest groups (such as equality organisations). The user interviews suggested that the projects had produced both policy and practice impacts, but that these were hard to trace to individual pieces of work. Most research from the FoW programme added to the general understanding of work issues, rather than informing specific policies, and users were unable to identify specific policies that had been affected by single projects. The policy areas in which users felt there had been an impact of the research arising from the FoW programme included: equality in the workplace; understanding of union/employer relationships; and understanding of the context of work and employment in the UK. The fact that research influences understanding and not just specific policies means that research can have an impact on policy making at any stage of the process. There was a policy role for the FoW research in discrediting 'myths' about work, which were widespread prior to the programme. Policy makers found it hard to remember specifics of research conducted during the FoW programme, but often knew a researcher's work more generally. Policy makers felt they had been informed about the research specifically through Robert Taylor's work (which is still used by some) and through personal consultation with researchers (networking), although it was thought that there was not enough dialogue between the two groups (researchers and policy makers). By knowing researchers, both policy makers and practitioners could get research from the most

appropriate source for their needs when they arose. Policy makers felt generally that research took too long to be published, as it reflected the understanding of a moment in time. Therefore, if published results take a long time to enter the public domain, then they are no longer as relevant to policy as at the time of the research. The FoW programme was known by many policy makers, but practitioners were generally only aware of the research relevant to their practice. Both policy and practice interviewees expressed a desire for research to inform their work, but stressed the need for it to be timely and addressing the questions they wanted answered.

3.4   Case study summaries

We carried out four case studies to investigate in more detail the process of research and the translation of that research into wider impacts. As noted previously these case studies covered six grants, and touched upon a seventh, with grants from both phases of the programme included. Summaries of the case studies are presented in the following four sections. The full case studies are included in Volume II of the report. The case studies are presented within the framework of the Payback Model.

3.5   Case study A

Introduction to research project

By the end of the 1990s approximately half of mothers were returning to work. However, these women generally returned to more poorly paid or less influential positions than they had previously occupied, indicating that motherhood continued to have a significant impact on women's work and careers (Joshi 1997). This was an important area for research because although there was a belief that women were making their own choices about whether and how to return to work, the factors influencing these choices and the constraints that might be affecting women's decisions, were not well understood.

The PI received two grants from FoW. The two research projects looked at the psychological factors influencing women's decisions to return to work after childbirth. The research took place in the context of rising numbers of women combining work with early parenthood; the second award was designed to extend the first project. The first grant ran from 1998–2000; the second from 2000–2003. The research team for both grants consisted of the PI, one researcher and one secretary.

Stage 0: topic/issue identification

Phase I built on previous research by the researchers and two studies by other academics on a similar topic. The project was designed without specific reference to policy issues, and was not influenced by research users. Largely coincidentally, policy makers at the time of the research were becoming interested in work–life balance issues generally, including women returning to work and ongoing gender segregation and the gender pay gap. The PI said the interdisciplinarity of the FoW programme was significant and formative for her thinking on the issues once the research was in progress.

Interface A: project specification and selection

The PI said that the first project for the FoW grant was designed without significant input from the programme participants, policy makers, practitioners or reviewers. The second project, however, was more informed by the findings of the first study and the policy debate at the time. The reviewers for both grants were generally positive. According to the PI, comments by reviewers did not lead to significant alterations to either grant's research design; however, some minor changes were made.

Stage 1: inputs to research

The first ESRC FoW grant was £84,880. There was no additional funding, but the PI obtained corporate sponsorship to the value of £10,000 (vouchers for nappies), for participants in the first two questionnaires. This support was lost before completion of the third questionnaires, when the PI redirected funds to purchase high street vouchers as incentives. The second grant was £108,560. There was no additional funding for this project, but corporate sponsorship (£10 vouchers) amounted to £25,000. The university allowed the PI to adapt her timetable for the research. The PI and researcher had previously worked together, making the research process smoother. At the time of the research the PI was a lecturer at the University of Kent.

Stage 2: research process

Phase I was a survey of 412 women and three follow-up interviews of a sub-sample of 54. Phase II surveyed three samples. The first of these was the original sample from Phase I (348 women). The second consisted of 477 valid responses from couples at Time 1 (pregnancy), 397 at Time 2 (six months post-partum) and 355 at Time 3 (child's first birthday). The third sample was a random survey of UNISON members (820 women who worked full-time).

Stage 3: primary outputs from research

Outputs (published and forthcoming) from the grant application for both grants included a book, three refereed journal articles, and four chapters in edited volumes. The main benefit to future research from the Phase I grant was that it specified questions for the second grant. The PI was seconded to the position of Research and Strategy Advisor to the DTI in 2003. The PI was seconded to the Women and Equality Unit within the DTI in the position of Research and Strategy Advisor in 2003. The Women and Equality Unit's role is to support the Ministers for Women in fulfilling their responsibility for "promoting and realising the benefits of diversity in the economy and more widely (www.womenandequalityunit.gov.uk/about/index.htm, last accessed October 2006)." From that position she was able to shape a wider research agenda that was related to her own initial FoW work by commissioning research from at least three other research groups. In terms of researcher benefit, during the course of the grants the PI was promoted from Lecturer to Senior Lecturer and then subsequently to Professor. She was cautious about attributing these specific promotions to the grants. The PI did directly attribute secondment into government to the research. The researcher who worked with the PI went on to a further academic position. The administrative assistant was promoted several times during the project, eventually obtaining a position as a senior administrator.

Interface B: dissemination

The PI disseminated findings via the academic routes mentioned above and also through four non-refereed papers, and over 30 seminars, presentations and workshops for a range of policy and academic audiences. Seminars to policy makers were particularly important and the networks of the FoW programme and its Director were key in facilitating these. A seminar given in Whitehall shortly after the first project was completed (Houston, 2000) was considered the most important. In this seminar the PI talked about the findings from the first phase of her research indicating that women wanted to participate in the workplace after childbirth and that there were many complex factors influencing their choices and ability to do so. The PI considered media coverage (national newspapers, local newspapers, magazines, and radio and television) to have been a vital part of the dissemination of her research. The PI suggested that the research would probably have had greater academic impact if she had spent more time publishing as opposed to engaging personally in other forms of dissemination.

Stage 4: secondary outputs

It is difficult to trace the policy outputs directly linked to the FoW project grants. However, the PI entered a position influential to policy outputs during the period of the awards. Interviews emphasised that the PI and research contributed to the policy debates and many policy documents in incremental and diffuse ways, but that this was largely attributable to her personal style and skill at reaching a policy audience. As mentioned above, the seminar given at Whitehall was particularly influential with policy makers. Findings from the research were relevant and useful to policies ranging from paid paternity leave, maternity leave, reducing the gendered pay gap, changes in childcare and even education policies. The PI mentioned several specific policy documents to which she had contributed or on which she had been consulted, to which her research findings were disseminated, or on which she worked during her secondment to the DTI. These covered a range of aspects of women's position in the workforce, women's changing position in society, equal pay, gender segregation and ways of making the workplace more family friendly. They are listed in Box 6.

Government White Paper on Work and Families (2003)
Work and Families Bill (2003)
Key Indicators of Women's Position in Britain (2005)
Key Indicators of Women's Position in Britain (2003)
Shaping a Fairer Future Women and Work Commission Report (2006)
Government Green Paper: Work and Parents: Competitiveness and Choice
Various EOC documents on work and families from 2001–2006 (10 of which cite her)

Box 6. Specific policies influenced by the PI and FoW research

Stage 5: adoption

The PI suggested that a large consulting organisation had taken up the implications of what the PI termed "the planning finding" from her research. A lack of planning around women's return from maternity leave can be problematic for employers and for women choosing to return to work. The PI suggested that women's return from maternity leave

and employers' ability to plan their staffing would be facilitated by a more systematic dialogue between women and employers about this issue. It is difficult to know if specific practices were changed, however, since this is largely organisational policy.

Stage 6: final outcomes
It is not easy to attribute broader socio-economic changes to the projects specifically, since they come about as the result of many interacting forces. However, the PI and users noted potential benefits could include: better life satisfaction for parents combining work and parenthood, and reducing gender segregation and the gendered pay gap.

General observations
While the PI thought the project would probably have gone ahead without the FoW funding, she was unequivocal about the significance of the FoW programme in positively shaping the trajectory of the findings and her own career. The PI did not think that the Robert Taylor series enhanced the dissemination or impact of her work, and stated that this had not been necessary as she had played such a pivotal role herself in accessing the relevant 'policy and practice' audience. The PI's position in government allowed an important transfer of ideas between policy makers and researchers, benefiting both groups. The PI's research and expertise significantly improved policy makers' understanding of the constraints on women's ability to combine work and parenthood. This greater understanding contributed to discussions around policy changes that might facilitate the retention of women in positions congruent with their skill levels, as well as ways of improving the family friendliness of the workplace. Further, the PI's increased understanding of policy issues and questions relevant to her field of research helped focus both her own analysis of research findings and the research she went on to commission from other academic groups. Both researchers and users made suggestions for the way research could influence policy more easily. These included funding researchers to disseminate more widely, making it easier for researchers to second to government, and facilitating dialogue between researchers and policy makers prior to research design, allowing policy-relevant research to be performed.

3.6   Case study B

Introduction to research project
This research project investigated the management structures in place for pay and working relationships in small firms in the UK. Small firms employ a large portion of the workforce, yet little was known about how they organise their working relationships, as most research had looked at large firms. The PI aimed to understand the effect of the new National Minimum Wage (NMW) on small firms. The project ran from October 1998 until September 2000. At the time of the FoW project, the PI was Director of the Industrial Relations Research Unit (IRRU) at the University of Warwick Business School (WBS) working on the impact of regulation on businesses. He was a well respected researcher already. Aside from the PI, there were three other researchers working on the project (one senior researcher and two junior researchers).

Stage 0: topic/issue identification
The introduction of the NMW in April 1999 provided a natural experiment to understand how small firms were setting up payment structures. The PI had previously studied the introduction of the NMW. The PI saw this as an opportunity to start collaborating with the senior researcher, an expert in the small business and ethnic minority business field with contacts in the small business community. Although the project did not explicitly consult with either policy makers or practitioners in the issue identification stage, the PI and researchers were aware, through their personal networks with the DTI and TUC, of concerns about the introduction of the NMW.

Interface A: project specification and selection
All five of the reviewers recommended that the project be funded, two recommending strongly that the project be funded. One reviewer cited the Low Pay Commission's (LPC) lack of a research stream as making this project particularly important. Although the reviewers made a number of suggestions, the PI stated that the comments did not affect the way that the project was set up or performed.

Stage 1: inputs to research
The project received £151,362 over 24 months from the FoW programme. The project did not receive funding from any other sources, and did not receive 'support in kind'. The WBS's reputation, along with the senior researcher's networks with small firms, helped provide access to small firms to participate in the research. Policy makers and practitioners were included on the steering committee set up by the research team. The steering committee was used as a sounding board for ideas, such as on the wording of questions for the interviews with small business managers. Expertise gained in previous studies by the PI fed into this project.

Stage 2: research process
The research used qualitative surveys[5] with around 25 firms in each of the three employment sectors examined, and five case studies. Qualitative surveys were deemed more appropriate than conventional surveys since the response rate to surveys in small businesses is known to be low. The project worked particularly well since the research group all knew the requirements of the methodology.

Stage 3: primary outputs from research
The project produced 12 peer-reviewed papers in a variety of journals. According to the PI, the two papers with the highest impact were Arrowsmith et al., 2003, a paper for academics looking at the impact of the National Minimum Wage on small firms, and Edwards et al., 2002, a paper for policy makers looking at the role for local business networks with relation to employment regulations. Other researchers have suggested that the balance of methodologies used in the project is the most appropriate way to research the small firm sector. There have been follow-up studies by the PI and researchers in the area of small business research, with collaboration between the PI and senior researcher proving fruitful.

---

[5] Face-to-face interviews with an owner manager and then with an employee using a semi-structured protocol

It is difficult to attribute the success of individual researchers on the FoW grant. Nevertheless, the PI suggested that his career path has been influenced by the FoW funding, and that the direction of his research has been shaped by the FoW research. The senior researcher has achieved considerable success in the years following the FoW project, receiving an OBE and Professional Excellence Award in the Lloyds TSB Asian Jewel Awards 2005. The two junior researchers on the project both now have lectureships.

Interface B: dissemination

The project produced one book chapter, one ESRC FoW bulletin, one report for the DTI looking at employment legislation impact on small businesses, and seven presentations to a variety of policy and academic audiences on the issue of small businesses and regulation. Wider dissemination through the media was not an ambition of the project according to the PI.

Stage 4: secondary outputs

The research was not looking to inform a specific policy; it aimed to show the 'lie of the land'. Although the impact on policy was not a direct and instrumental one, it led to a better understanding for policy makers[6] to frame future research questions. A direct impact on future research by policy makers was the visit to The Coventry Clothing Centre (a case study in the FoW project) in a review by the LPC. This visit was used to aide the LPC's understanding of different ways to help small firms implement legislative requirements. The University of Manitoba (Canada) quoted the research in recommendations to provincial government about the minimum wage.

Stage 5: adoption

It is not possible to identify any specific practice differences attributable to this project. The work was fed back to study organisations, but its reception is unknown. Anecdotal impacts exist, such as an employer suggesting that without being involved in the research he would not have thought about changing his pay structure in light of the NMW.

Stage 6: final outcomes

Since the research has had a diffuse effect on policy by showing the 'lie of the land' in the field of small firm response to legislative shock, it is very difficult to attribute a policy response to the research. Trying to attribute social benefits to the research is almost impossible and broader economic benefits are difficult to gauge.

General observations

Without the FoW programme, the PI thought the project would not have gone ahead in the form it did. The FoW programme allowed the research team to rehearse their presentations for conferences. The Robert Taylor series of FoW reports helped the policy impact of the project by placing the research in a wider context and linking it to other FoW research. Policy makers in government felt that this made the research work understandable and more easily interpreted.

---

[6] At the Low Pay Commission and the DTI (Employment Relations Directorate)

3.7   **Case study C**

This case study has been anonymised at the request of the researchers.

Introduction to research project

The study, refered to here as 'Workplace Change', was funded under the first phase of the FoW programme, and addressed both the empirical and conceptual issues of employment by uncovering facts about employment and then applying them to conceptual issues such as portfolio careers. The project was one of the largest and longest duration projects, and was conducted collaboratively by a team from two different institutions. The project comprised two parts: a smaller-scale 'intensive study' of employers (case studies); and a large-scale survey of employees and the self-employed (designed to allow comparisons with previous studies). The same research team carried out a closely related project in Phase II. This project complemented the survey of employees with a survey for employers. Even though in some respects it is hard to isolate the impacts of these two projects, the emphasis of the case study is on the first phase project. The two PIs were well respected researchers in their field at the time of the research, but had not collaborated before.

Stage 0: topic/issue identification

Initially there were two separate proposals for the first phase of the FoW programme: from the two institutions. Due to the limited resources and the similarity of the two proposals the ESRC asked for the two proposals to be merged. This produced a joint team, which was the first collaboration between the two groups. The proposal idea stemmed from a belief in the value of systematic comparison over time to assess changes, and a strong interest in testing new ideas about changes in employment and society. The timing of the project was fortuitous, with unemployment clearly on a downward trend by the time the fieldwork started.

Interface A: project specification and selection

No information can be reported.

Stage 1: inputs to research

The project received major funding from the FoW programme. Increased costs were offset at a later stage in the project by additional funding from an external organisation and internal sources within the participating institutions. The project had an advisory group with representatives from business; the public sector; the media; and employers and union bodies. Three members provided access to their organisations for case studies.

Stage 2: research process

Complications in tendering for a survey contractor, and subsequent problems with the subcontractor's fieldwork caused delays. However, the fieldwork was completed successfully. Furthermore, some academic outputs were delayed because of the effort put into supporting the dissemination channels (ESRC Media Fellow, external sponsor's dissemination, direct media enquiries). The researchers thought cooperation with the advisory group was very fruitful and helped to take into account the current trends when identifying questions for the survey.

Stage 3: primary outputs from research

The main outcome from the Phase II project, a management book aimed at a practitioner and policy audience, has already been published. This book, based on the outcomes of the FoW projects, covers the likely pressures on organisations in the 21st century such as surveillance in the workplace or family friendly working policies. The research team is continuing to work on material linked to the Phase I project. Outputs expected in the near future are: a book and a chapter in a book. The project team has published four peer-reviewed articles, a discussion paper and four non peer-reviewed articles (three from phase I and one from phase II). The first project provided input to the design of the Phase II questionnaire, and established a stronger link between the two research teams – continued in Phase II. Project data have been deposited in the ESRC data archive and exploitation can be expected to increase with rising awareness about its existence. So far two external researcher teams have used the data set in publications and researchers at 23 UK higher education institutions have registered to use it along with researchers from eight institutions outside the UK.

Interface B: dissemination

The work of the FoW's Media Fellow was seen as very effective given his resources, but researchers felt that sometimes his requests for support disturbed their scientific work. The project received the highest media coverage within the FoW projects (including around 20 articles in national newspapers as well as features in television programmes). The research team were not aware why the project should be so media-friendly. The research team gave at least 16 presentations, to both academics and non-academics. Short fact sheets were also sent out to businesses that had participated in the project.

Stage 4: secondary outputs

The quality and objectivity of the projects was highly praised by those users interviewed. They felt that although the results may not have been groundbreaking, they provided high quality, independent evidence to reaffirm or challenge concepts. Early results on job satisfaction were used in the publications of the external sponsor. Specific impacts include the fact that project findings on work-related stress, specifically that workers perceived drop in job satisfaction causing increased work-related stress, this strongly influenced the work of a government agency and one PI was invited to participate in a central government task force. The ongoing relevance of the work is also confirmed by the fact that the management book is cited in a recent publication of the external sponsor. According to one researcher, one organisation changed its policy because of the results of the researcher.

Stage 5: adoption

No actual changes in practice could be attributed to the project at this time. Nevertheless, the project team reported findings back to case study organisations and the advisory group, which might have impacted on employment practices. One user interviewed felt the research provided a broad overview and was not directly applicable to individual organisations. Another user suggested the most effective way for this type of work to impact on practitioners is likely to be via consultants. The researchers felt that the second study could have catered to practitioners, but there is no evidence of this happening.

Stage 6: final outcomes
No final outcomes could be traced and attributed to the grant at this time.

General observations
As earlier attempts to get funding for a similar research project had failed, the outcomes can be directly attributed to the ESRC funding. Several users have suggested that the project findings had an impact on their future work or have reinforced their policy line, and emphasised the importance of the high quality and objectivity of the work. There might be further long-term impacts of the project once the academic community take up outputs of the research (e.g. data set, upcoming book).

3.8   Case study D

Introduction to research project
The PI received two FoW awards, one in each phase of the programme. The Phase I project investigated what was happening to UK trade unions at time of the 1999 Employment Relations Act (ERA). The Phase II project investigated the nature of partnership deals between employers and unions. The Phase I project ran from the January 1999 until December 2000; the Phase II project ran from January 2001 until December 2002. The Phase I research project had four researchers as well as the PI, one of whom was an academic lawyer. The Phase II project had one researcher (who had been in Phase I) as well as the PI. At the time of the research, the PI was a well respected Professor and considered an expert in his field of research.

Stage 0: topic/issue identification
Phase I was timely as it coincided both with the end of a previous project on the employment contract by the research team, and with the introduction of the 1999 ERA. The PI had very strong links to policy makers in the LPC and the DTI through his position on advisory panels in each department, and used his knowledge of their concerns to inform the project without formal consultation. The Phase II project built on the findings of Phase I, and used the input of academics and policy makers received via comments at presentations of Phase I research results.

Interface A: project specification and selection
Reviewers for the Phase I application were very positive about the research being proposed, all believing the project provided a value for money study that would further knowledge in the field. The reviewers for the proposal for the Phase II research were all in favour of funding the project, and any comments made were all focused on ways of adding to the study design. The PI did not make significant changes to the study design of either project as a result of the reviewers' comments.

Stage 1: inputs to research
The Phase I project received £119,571 from the FoW programme, and did not receive any additional funding or support in kind. The project built upon previous studies by the PI and researchers for the DTI. The reputation of the institution was useful in accessing study organisations. Policy makers were not explicitly addressed in the specification of the research. The Phase II project received £95,223 from the FoW programme and no

additional monetary contributions, but it did receive support from ACAS in identifying case studies for the research. The two FoW researchers wrote a comprehensive literature review for the TUC/CBI on union/employer relationships separately to their FoW research. The knowledge accrued from this review acted as an input to this project. The experience of the two researchers was vital in making the Phase II study work, as they had both been involved in Phase I.

Stage 2: research process
Phase I used case studies of 60 firms (characterising a range of attitudes towards trade unions – from hostile to conciliatory), involving interviews with management, trade union officers, and employer or trade association officials. The research also followed up 30 case study organisations used in the preceding DTI study. The Phase II project was a more focused study looking at only nine in-depth case studies.

Stage 3: primary outputs from research
The primary outputs of the Phase I and Phase II projects are hard to separate. Between the two grants the PI and researchers have produced nine journal papers, fourteen (14) book chapters and one book is in progress. The PI and two co-researchers are also currently writing a second book. Brown et al., 2000 summarises the Phase I results and had a particularly large impact by identifying the types of union/employer relationships that existed in the UK. The PI is unaware of research generated by other groups as a result of the FoW projects. The main benefits to future research are more researcher-specific. The academic lawyer on the Phase I project suggested that the FoW research allowed him to be involved in other ESRC projects that might not otherwise have been possible. The researcher who worked on both the Phase I and Phase II projects suggested that all the work she has done since FoW has been because of the two projects, including work for ACAS and further research.

Interface B: dissemination
The project produced 11 non peer-reviewed articles,[7] 2 reports for policy makers, 4 magazine articles, 3 local newspaper articles, 23 presentations to a variety of policy (e.g. ACAS, TUC and DTI) and academic audiences, and the book and book chapters mentioned above. All the outputs covered the characteristics of union/employer partnerships in different levels of detail. The Robert Taylor report featuring this research was seen as particularly helpful, making the research accessible to a wide range of policy makers, who appreciated the contextualising of the research.

Stage 4: secondary outputs
The Phase I project was more policy oriented, and had an impact on the DTI, TUC and other policy makers. Knowledge of the project filtered through the TUC and DTI from members of the FoW steering groups in each organisation; this was not structured. Policy makers at the DTI suggested that the research was very important, but its role was to show the situation in the UK, rather than to inform specific policies. Specific impacts include: one member of the study team writing guidance notes for the DTI on the 1999 ERA statutory recognition procedure; the PI becoming Chair of the TUC Partnership Institute

---

[7] Mainly ESRC working papers, although two were papers submitted to trade journals

Advisory Committee; the researchers being consulted by the DTI as part of its review of the Employment Relations Act 1999; and the research being cited in a House of Lords appeal judgement about unfair dismissal (Johnson vs. Unisys).

Stage 5: adoption
The Phase II project was more practice oriented than Phase I. During the process of the research, the researcher influenced the re-negotiation of a partnership deal between a union and a major UK employer. This came about through feeding back research findings to the employer. There may have been practice changes as a result of feedback to organisations in Phase I, but the researchers do not know if this is the case.

Stage 6: final outcomes
Trying to discover the socio-economic benefits of the two projects is difficult. The interaction with the major employer during the Phase II project could have a considerable knock-on effect on quality of life for a large group of people. The other potential impact comes from the legal implications of the Johnson vs. Unisys appeal judgement about damages from unfair dismissal changing working conditions. It is difficult to know if these happened because of the FoW research. The broader economic benefits of the projects are impossible to assess.

General observations
The FoW programme was particularly useful for the junior researcher on the first project since it allowed her to access a network of researchers in the UK. It was also useful for the PI as it allowed him to meet researchers in different disciplines. Overall the PI thought the FoW had a very positive impact on the project, making it better than had it not been part of the programme.

3.9 Concluding comments

This chapter has summarised the information collected from the literature review and key informant interviews and how they were used to refine the Payback Framework for application to the FoW programme.

It then reviewed the data collected about all grants through the on-line survey of principal investigators and the more in depth narratives from the case study research. Table 2 on the following page summarises the outputs from all of the case studies grouped into the revised Payback Framework impact categories. The next chapter draws out the themes that emerged from these streams of data and presents the findings of this project.

Table 2. Summary of case study impacts

	Case study A	Case study B	Case study C	Case study D
Knowledge	o Three peer-reviewed papers (more forthcoming) o Three further academic papers commissioned by the PI within government o 4 book chapters, 1 book o 25 presentations to academic audiences	o 12 peer-reviewed papers o Book chapter for *Managing labour in small firms* o Six presentations to academic audiences	o Three peer-reviewed papers o One management book of Phase II o Upcoming academic book o A forthcoming book chapter o Over 16 presentations to academic and non-academic audiences	o Nine peer-reviewed papers o 14 book chapters o One upcoming book by the PI and two of the researchers o 17 presentations to academic audiences
Impacts on future research	o Ongoing dialogue with other researchers in FoW o Ongoing debate about agency/constraint in women's employment decisions o Interdisciplinary contribution to PI's academic research o Constructive academic-policy crossover affecting policy; policy needs feedback into PI's research of findings	o Research method recognised by DTI as the most appropriate for studying small firms o Successful ongoing collaboration between PI and senior researcher o Follow-up research for the LPC, DTI, Work Foundation and ESRC o Researcher career advancement and achievements (e.g. OBE) o Informed research on the minimum wage in Manitoba, Canada	o Formed new collaboration between research groups o Foundation for grant in Phase II o Dataset available in ESRC archive. Researchers at 23 UK universities and eight abroad have registered to use the data. Data has already been used for additional work by team and two other researchers.	o Further research by the PI and others on the grant would not have occurred without FoW o Career progression of academic lawyer on team o Creation of new researcher networks for the PI and research team members
Impacts on policy	o Impacts on: White Paper on Work and Families (2003); Work and Families Bill (2003); Key Indicators of Women's Position in Britain (2003, 2005); Women and Work Commission Report (2006); Green Paper on Work and Parents; Various EOC documents on work and families, 2001–2006 (10 cite PI) o Five non peer-reviewed articles and numerous presentations to policy makers	o Report to LPC providing evidence on the NMW. o Informed policy makers at the DTI and LPC about the situation in small firms o One case study organisation was investigated in a LPC review o Helped the ERD at DTI to understand the situation with small firms in the UK o Graduate course content is now different o One non peer-reviewed article and a presentation to policy makers	o Informed a governmental agency's work on work-related stress and work-life balance o External sponsoring organisation used early survey results in own publication o Reinforced the policy line at professional body o Research of a regulatory agency drew on the project o One organisation changed its policy on junior staff workloads, behaviour of managers, and the structure of the career ladder o Four non peer reviewed articles and one discussion paper o Numerous presentations to policy makers (including a central governmental policy unit) o One PI invited to join central governmental task force developing a corporate social responsibility framework	o Installation of the PI as Chair of the TUC Partnership Institute Advisory Committee o Referenced in House of Lords Judgement o Input into an employer–union deal with a major UK employer o Movement of the junior researcher into ACAS o ACAS taking on board the results of Phase II o DTI, Work Foundation and TUC claimed the work had shown the 'lie of the land' o Two researchers submitted evidence to DTI review of the Employment Relations Act 1999 o Reports to the ILO and Labour Relations Commissions Review o Twelve non peer-reviewed articles, six presentations to policy makers
Impacts on practice	o The 'planning finding' taken up by various corporate practitioners to negotiate decisions around maternity leave and return to work o Contribution to discussions on introduction of paid paternity leave	o Informed small firm owners/managers of the likely impacts of the NMW, but difficult to know if they changed behaviour due to that information.	o Impossible to attribute impact on practice feedback of results provided to practitioners (Phase I: informal briefing of case study organisation, briefing of project Advisory Group members), o Production of a book aimed at practitioners	o Research was fed back to study organisations as part of the clearance process, but there are no known practice impacts from this o The way a major UK employer conducted itself in the negotiations of a new partnership deal
Wider social and economic impacts	o Influence of six articles in local and eleven articles in national newspapers, numerous magazine articles o Four radio interviews o One BBC TV appearance o Reduction of gender segregation and pay gap if flexible working available for women returners	o Impossible to attribute any socio-economic benefits to the project.	o Increased awareness of workplace issues and equality through extensive media coverage (use of findings by FoW media fellow; around 20 articles in national as well as about 15 in magazines and features on TV) o Impossible to attribute any socio-economic benefits directly to the project	o Influence of three pieces in local newspapers about the Phase I research. o Three items in magazines (trade press) o Impossible to attribute any socio-economic benefits to the project.

Discussion

This chapter considers the themes that emerge from combining and analysing the data from the different strands of the project. We first consider what we can conclude about the wider impacts of the FoW programme and then consider the lessons learnt about evaluating the wider impacts of social science.

4.1 Impact of the FoW programme

4.1.1 The FoW programme has had significant wider impacts on policy and practice

All the strands of our research suggest that the FoW programme has had significant wider impacts, both at the programme level and at the level of individual projects. Evidence from the survey suggested 50 policy impacts on organisations including international NGOs, national government, labour and employer organisations and political parties.

There is also evidence from the case studies that these impacts can be tied specifically to the FoW initiative and would not have occurred without it. Both in terms of the FoW providing funding that would not otherwise have been available, and through the support from the FoW programme amplifying the wider impacts of research. Examples of the first aspect were one PI from case study C saying he had been seeking funding for such work for some years, but had not been able to obtain it and the PI of case study D saying the existence of the programme had allowed a project of larger and more ambitious scope. The second aspect is illustrated by case study A where the PI said the programme had decisively increased the policy impact of her work

The variety of impacts found mirrors our previous work exploring the wider impacts of health research, but again it has been possible to more clearly identify impacts on policy than on practice.

4.1.2 What impact has the FoW programme had?

Many of the impacts of the FoW programme were of a general nature. This was partly because much of the research carried out described the 'lie of the land' in the sphere of employment. Our survey and case studies suggested that because of its general nature the research tended to inform broader policy debates and influence the atmosphere in which policy was made. Two examples of such impact are provided by case study A and C. In case study A, the research reinvigorated debates, and the PI's secondment into the DTI gave her a position from which she was able to commission more targeted research. In case study C, the research provided evidence that was used, not necessarily with complete

success, to dispel myths about trends in the world of work. However, on occasion even such general research findings could have very specific impacts, as when case study D was cited as evidence of current employment practise in a House of Lords ruling on dismissal compensation.

Another valuable role of some the research was in confirming policy positions. Although the FoW evidence was in line with the previously available research, it was seen as especially valuable because of its high quality and independence in a field that was prone to politically motivated research.

Impacts on practice were harder to identify. Impacts on organisations with which the researchers worked could not be identified, either because the contact employees had moved on, or because the employers' identity was protected by anonymity agreements with the FoW researchers. Case study PIs and users commented that practitioners wanted findings that could be directly applied and tailored for their specific needs – a result relevant to a large media company may not be relevant to a small media company. This suggests that impacts on practice from the research results were reduced by the general nature of the research noted above.

There was considerable media coverage of the FoW research, with FoW records including 94 articles in national newspapers, 173 local newspaper stories and 178 other media appearances. However, this media coverage had a downside. Two of the case study PIs suggested that responding to this media interest had been a significant distraction from their research work and noted that ESRC did not provide extra resources to support their work with the media.

4.1.3   Why has the FoW programme had an impact?

Our data suggest there are four key reasons why the FoW programme had so many wider impacts: its timing; its networks between researchers and policy makers; the quality of the research; and the Media Fellow. The FoW programme was very timely. The Labour government elected in 1997 was in the process of making wide-ranging changes to employment legislation, including the introduction of a National Minimum Wage. Interviewees also described how the new government was in a research receptive phase, a situation described in the literature as conducive to policy impact.

The programme increased the impact of the individual projects by extending the policy networks of many of the researchers. The extensive networks of the Programme Director played a key part in this. The importance of personal networks between researchers and policy makers was highlighted in the user interviews and case studies. Our survey data suggest that the nearly half of the PIs felt the FoW programme helped them meet more policy makers and journalists. Case study D suggests that senior researchers can pass on their networks to young researchers by introductions and when younger researchers stand in for their senior colleagues. Case study A suggests that the FoW programme may have extended this model by helping less connected researchers link into the extensive networks of the Director and the advisory committee.

Our previous work on wider impacts in the field of health and biomedical research suggests that the personal drive of investigators is one of the most important factors leading to wider impacts (Wooding, et al., 2004). The evidence provided by the case studies in this

study is in line with this hypothesis. Previous work for the ESRC has also explored this issue tracing of post-research activities by PIs as one of three possible approaches to assessing impact (Molas-Gallart et al., 1999).

A number of research users made the point that the high quality and independent nature of the FoW research was important in increasing its impact. This suggestion is supported by the literature which includes studies such as Weiss and Bucuvalas (1980) that suggest that quality of research is a key factor in achieving impact.

The FoW Media Fellow played a large role in disseminating the findings of many projects, not only to the media but also to policy makers. His background as both a journalist and previously a researcher gained him respect from many of the PIs and our interviews suggest that Programme Director also played a key role in facilitating the work of the Media Fellow. Our interviews suggest he had the confidence to drive dissemination on a timescale that was more suitable for policy makers than researchers, and that this was not always appreciated by the researchers themselves.

Surprisingly, our survey suggests that more PIs view academic publications as the most important dissemination channel for policy impact than any other single channel, and that none of them saw the Media Fellow's FoW publication series as the most valuable. This was in stark contrast to the policy makers we interviewed who indicated that they found the Media Fellow's series one of the most important dissemination channels for policy makers. The case study results were different from the survey, where PIs identified that important impacts did result from channels other than academic publications. One rationale for considering academic publications important is the notion that research has most impact after it is taken up and replicated by others.

4.1.4 What affects the impact of projects

We examined whether any characteristics of the grants correlated with the total number of outputs and outcomes (policy impacts, future policy impacts, practice impacts, future practice impacts, and career advancement). We examined: the range of inputs, size, level of co-funding, number of disciplines, relative direction of policy and involvement of policy makers in initial design. Only one correlation was significant: the time since the grant had finished to the present was negatively correlated with the combined and individual impacts. There are a number of possible explanations for this finding including: that researchers' recall of impacts rapidly fades; that the more recent projects were more policy relevant; that the FoW programme developed an increasing reputation and expanding networks; or that the policy climate has become more receptive to research. Unfortunately, there is no way for us to distinguish between these theories.

There were strong suggestions from the case studies that the largest policy impacts occurred via secondment. Encouragingly there were also indications that it is possible to move back from government and policy back into research.

4.2   Applying the Payback Model to wider impacts of social science

4.2.1   The Payback Framework can be applied to social science

Our project suggests that, with minor modification, the Payback Framework can be applied to evaluate the wider impacts of social science. In our initial interviews we asked for comments on the Payback Framework and we then structured both our survey and case study data collection using the Framework. The logic model element of the Payback Framework, used to capture the research narrative, could be effectively applied without modification. However, unsurprisingly given their health background, the payback categories required some generalisation to fully capture the impacts of social science research.

4.2.2   Generalisation of categories

The main changes required to the payback categories were a rephrasing from 'benefits' to 'impacts' and a generalisation away from the health field. The new categories and their definitions are presented in Table 3. In the health field there is a generally accepted understanding of what counts as an improvement, and there are systems for measuring these, such as Quality Adjusted Life Years (QALYs). Although applying these measures can be difficult.

In contrast with the health field, in the employment sector and wider society, there is less consensus on how to assess whether a change is a net improvement, for example, some changes may benefit the employee at the expense of the employer. For this reason we have moved away from descriptions based on 'benefits' to one based on 'impacts'.

Table 3. Revised payback categories for social science

Category	Definition
Knowledge	Explicit and codified knowledge Papers, books and book chapters can be used as a proxy
Impacts on future research	Generation of new research questions; development of new methods and/or datasets; capacity building; career development
Impacts on policy	Effects of research on policy at many levels, for example: national policy; the policy of professional bodies; the policies of departments of organisations Includes effects on the ability, and propensity, of policy makers to use research
Impacts on practice	Effects on individual behaviour, which may or may not be in line with the policies of the organisation, or group to which the individual belongs
Wider social and economic impacts	Social or economic effects that change society, including impacts on public opinion. Media coverage can be used as proxy for impact on public opinion.

In modifying the health-related categories we chose to generalise them rather than to alter their specificity to relate to employment. We did so because this project was exploring the

applicability of the Payback Framework to the social sciences in general, using the employment sector as a test case. This raises the issue of whether it may be useful to classify impacts by whether they fall within the same sector as the research: health in our initial work, employment in this work. In this project we wished to explore wider impacts in as general a sense as possible, so we chose not to make sector distinctions.

There are also particular types of outputs that we have not encountered, or that have greater importance in social sciences than in biomedical sciences. There were suggestions from the case studies and background interviews that the status of a researcher or their institution was important in gaining access to research subjects, consequently existing status may be important as an input to the research process and increased status gained through research might be of benefit to future research. Outputs that have greater significance in social science include books and input to teaching – if either of these were to be pursued as an indicator of impact some method of quantifying their importance would need to be considered.

4.2.3   General points about assessing impacts of social science

Clarity regarding future evaluations

A number of survey respondents, and some case study PIs, suggested that ESRC should be clearer about future evaluations at the start of a grant. The PIs felt this would have enabled them to keep records of the activities that ESRC was likely to be interested in. It might also have allowed mechanisms to examine the effects of the research on research subjects to be put in place. As it was, investigation of the effects that the research projects had on the research subjects (often their primary route to impact on practitioners) was prevented by guarantees of anonymity from the FoW researchers to their research subjects. The literature contains previous suggestions that researchers be warned of the likelihood of impact evaluation (Buxton et al., 1999).

Aligning rewards

Suggestions that the sector needed to more effectively reward wider impacts and broad dissemination were made at all the stages of our data gathering. There was a feeling that ESRC's desire for wider impacts was not always reflected in its funding priorities; it did not, for example, provide extra funding to projects that had to support major media interest. There was also a concern that the value of non-academic outputs might not be appreciated by other assessment mechanisms in the sector – such as the RAE. These points reflect comments strongly made in the literature.

Sensitivity

A number of the impacts attributed to FoW research were considered too sensitive to openly publish. Both researchers and users felt such sensitivities, and these were not restricted to the least significant impacts of the research. Researchers sensitivities centred on how others might view their work. Policy makers' concerns were more political, with sensitivities centring on how evidence undermined existing policies, was used to reverse policies, or that had allowed mistakes to be avoided. If this is a wider phenomenon in social science, arising from the contested political environment into which the evidence feeds, it will complicate evaluation of wider impact.

Attribution

Linking research to policy impacts was complicated by the general nature of research; the lack of formal mechanisms for synthesising research findings in social science; and the opacity of policy making. As has been noted, much of the research in the FoW programme described the 'lie of the land' in the employment area, for example, surveying employment practices. Because of this, PIs in both the survey and case studies suggested it fed into the general debate on policy, rather than informing specific policy decisions. This often made mapping the detailed impacts of the work impractical.

In the biomedical sciences influences can often be traced through written codification and synthesis mechanisms, for example, citation in systematic reviews. Social science has very few of these mechanisms, although they are starting to appear – examples include the review of the effects of work-related stress by the HSE (Rick et al., 2002).

It is unclear how aware the researchers are of their users. In the survey researchers were willing to suggest, and provide details, for only two people who might have used their research. However, the case study PIs could generally provide more, or more accurate, user details during their interviews, even if they had not provided them in the survey. This suggests that researchers may not immediately be able to suggest users, but can after prompting. This is in line with issues identified previously (Molas-Gallart et al., 1999). Tracing impact is further complicated by the opacity of policy makers' use of research. In comparison policy in the health area is often codified in clinical guidelines that reference the research on which they rely. Researchers in both the survey and the case studies reported briefing many policy makers, but having little idea what effect these briefings had or how their evidence was incorporated into policy. Users were also unable to be specific about the policy impacts of a particular piece of research. This suggests that clearly evaluating the wider impacts of social science will also require greater transparency from policy makers.

When PIs could identify a policy or practice impact they could assign an attribution rating to it – to suggest whether the FoW research had a small, moderate or considerable contribution on the outcome. Individual researchers used a range of these attribution ratings, suggesting they could quantify at least the relative importance of their research on different outcomes. The case studies also suggested that the impacts of projects with closely related subject matter can sometimes be separated if the findings of the two projects appeal to different audiences.

The literature varies on whether it is sensible to assess the wider impacts of individual projects, or whether context overwhelms an individual project's contributions. The Payback Framework provides a structure for investigating these issues. This evaluation suggests that, in some cases, the impact of individual projects can be identified, although it highlights the importance of looking for impacts at the programme level.

Timing of evaluation

Different impacts take differing times to materialise, so the timing of evaluation is always a compromise – longer timescales allow more time for impacts to develop, but also allow longer for memories to fade. We were criticised by PIs both for evaluating too early and for evaluating too late. A further complication with the cases examined in this project is that

changes produced by the research may be 'washed away' leaving little trace; changes in practice may be overturned and discredited myths may return. Projects that affect general thinking may take years to have an effect, as findings may need to be built on and replicated, and it is here that high quality academic publications may be important in facilitating this process. In contrast, direct effects through participation may be much more immediate. If the long-term outcomes are to be investigated, short-term outcomes need to be recorded so they are accessible to later evaluation. If early impacts are recorded then longer-term evaluation holds the potential to explore whether early impacts have been ephemeral or long lasting.

Debates such as these have featured previously in the literature and no easy answers have been found. The option offering the fewest problems, and proposed in two previous studies, was for the impacts to be assessed two years after the completion of the project (Buxton et al., 1999; Molas-Gallart et al., 1999). If longer term impacts are to be explored an alternative might be to provide mechanisms to capture short-term impacts, or carry out an initial evaluation, and then carry out longer-term evaluations 5-10 years after the research is completed.

Methods

The case studies provided valuable insights into the process of translating research into wider impacts. Comparing case study interviews with the survey, PIs provided more information in interviews, and interviews also provided the opportunity to clarify questions, prompt for more detail and follow up interesting comments. The interviews were also seen as less irritating by the PIs, although they took a comparable amount of their time; in contrast they took far more time for the project researchers. It is possible that this comparison is biased as the case study PIs were selected as those who had carried out successful projects and were likely to have impacts to talk about. Nevertheless it suggests that some hybrid of case studies and surveying – such as carrying out a semi-structured telephone interview – may be a better method of data collection than use of a survey. Such a hybrid method was recommended by the previous ESRC-funded study (Molas-Gallart, 1999) and proposed as one option for this study. In this study we used the hybrid technique to explore the opinions of users – due to previous experience with low response rates to surveys – and it proved very effective, achieving a response rate of around 80%.

4.3   Further research

Getting beyond zero order approximation

Developing a method to summarise wider impacts in a quantitative fashion might help explore the most effective mechanisms of promoting wider impact, or to uncover the project characteristics most likely to produce such impacts. In this project, when examining correlating characteristics we simply counted impacts – a zero order assumption that values all impacts equally. This is likely to be unrealistic. In our previous work we have experimented with using consensus scoring techniques to produce a numerical rating for the impact achieved in each payback category. This allows more defensible comparison of projects with different characteristics. Such schemes raise many issues about who should

score and how different types of impact should be compared; however, they also allow large numbers of cases to be compared providing the prospect of more robust findings.

Understanding how usable research evidence can best be produced

We have shown we can trace research evidence to the door of the policy makers – either at seminars or through reports. To understand the ways in which research evidence is used in policy making, in the areas ESRC research seeks to influence, it may be necessary to carry out research on this process. What would be required is research into the whole process from agenda setting, research production, the organisation of transmission and receptor capacities, and finally research use. A few such studies and analyses have been conducted in relation to research funded directly by government departments (Kogan et al., 2006; NAO, 2003). As noted in the literature, the role that should be played by research council-funded research raises even more questions that could usefully be the subject of detailed long-term research.

4.4 Concluding comments

Our evaluation has shown that the FoW programme had significant policy and practice impacts, with 50 reported policy impacts. These were mostly of a general nature, informing the thinking and debate in the area of employment. Areas affected included maternity benefits and family friendly work policies; the effects of the NMW small businesses; discussions of the reality of working conditions and career development; and the thinking on union-employer partnerships. Specific impacts included nine secondments of researchers into policy environments, including into the Women and Equality unit of the DTI; the chairmanship of a TUC institute; the drafting of guidance notes for the DTI; input into the Work and Families Bill (2003); and citation in a House of Lords judgement on pay and conditions.

The study showed that with suitable modification the Payback Framework can be effectively applied to evaluate social science. The logic model element of the Payback Framework was directly applicable to social science. In contrast the classification of research impacts needed to be generalised to encompass the range of impacts from social science. The generalised impact categories are designed to be applicable across social science, but to confirm this they should be tested in an alternative subject area.

REFERENCES

Reference list

Arrowsmith, J., M. Gilman, P. Edwards and M. Ram, 2003, 'The impact of the National Minimum Wage in small firms', *British Journal of Industrial Relations,* Vol. 41, No. 3, pp. 435–456.

Black, N., 2001, 'Evidence based policy: proceed with care', *British Medical Journal,* 323, pp.275–279.

Brown, W., S. Deakin, D. Nash and S. Oxenbridge, 2000, 'The employment contract: from collective procedures to individual rights', *British Journal of Industrial Relations,* Vol. 38, No. 4, pp. 611–629.

Buxton M., S. Hanney, T. Packwood, S. Roberts, P. Youll, 2000, 'Assessing the benefits from Department of Health and National Health Service research and development', *Public Money and Management*, Vol. 20, No. 4, pp. 29–34.

Buxton M., Croxson B., Hanney S., 1999, 'Assessing the Payback from Health R&D: From *ad hoc* Studies to Regular Monitoring', HERG Research Report No 27, Brunel University

Buxton, M., R. Elliot, S. Hanney, M. Henkel, J. Keen, M. Sculpher and P. Youll, 1994, 'Assessing the payback from Department of Health research and development: preliminary report, volume 2, eight case studies', *HERG Research Report No. 19,* Uxbridge: HERG, Brunel University.

Buxton, M. and S. Hanney, 1994, 'Assessing payback from Department of Health research and development: second report, volume 1, the main report', *HERG Research Report No. 19,* Uxbridge: HERG, Brunel University.

Buxton, M. and S. Hanney, 1996, 'How can payback from health services research be assessed?', *Journal of Health Service Research and Policy,* Vol. 1, pp. 35–43.

Caplan, N., 1979, 'The two-communities theory and knowledge utilisation', *American Behavioral Scientist*, Vol. 22, No. 3, pp. 459–470.

Cave, M. and S. Hanney, 1996, *Assessment of Research Impact on Non-Academic Audiences*, report to the ESRC, Uxbridge: Faculty of Social Sciences.

Davies, P., 19 February 2004, 'Is evidence-based government possible?' Jerry Lee Lecture 2004, 4th Campbell Collaboration Colloquium, Washington DC.

Davies, H., et al., 2005, 'Approaches to assessing the non-academic impact of social science research', ESRC report, available at http://www.st-andrews.ac.uk/~ruru/Non-Academic%20Impact%20Symposium%20Final%20Report.pdf

Edwards, P., M. Gilman, M. Ram and J. Arrowsmith, 2002, 'Public policy, the performance of firms and the "missing middle": the case of employment regulations, and a role for local business networks', *Policy Studies,* Vol. 23, No. 1, pp. 5–20.

Hanney, S., T. Packwood, M. Buxton, 2000, 'Evaluating the benefits from health research and development centres: a categorisation, a model, and examples of application', *Evaluation: The International Journal of Theory, Research and Practice,* Vol. 6, pp. 137–60.

Hanney, S.*, et al.*, 2003, 'The utilisation of health research in policy-making: concepts, examples and methods of assessment', *Health Research Policy and Systems*, Vol 1, p.2.

Houston, D., 2000, *Families and Work: Report for the Women's Unit,* London: The Cabinet Office.

Joshi, H., 1997, 'Combining employment and childrearing, the story of British women's lives', In A. Offner, (Ed.) In Pursuit of the Quality of Life. OUP.

Kingdon, J., 1984, *Agendas, Alternatives, and Public Policy*, Boston: Little Brown & Co.

Kogan M. and M. Henkel, 1983, *Government and Research: The Rothschild Experiment in a Government Department.* London: Heinemann

Kogan M., M. Henkel and S. Hanney, 2006, *Government and Research: 30 Years of Evolution*, 2nd edn, Dordrecht: Springer.

Lindblom, C., 1959, 'The science of "muddling through "', *Public Administration Review*, Vol. 19, No. 2, pp. 79–88.

Lindquist, E., 2001, *Discerning policy influence: framework for a strategic evaluation of IDRC-supported research*, Ottawa: IDRC Evaluation Unit.

Lomas, J., 2000, 'Using "linkage and exchange" to move research into policy at a Canadian Foundation', *Health Affairs,* Vol. 19, pp. 236–240.

Molas-Gallart, J., et al. [please supply details of rest of authors], 1999, *Assessing Research Impact on Non-Academic Audiences*, confidential report to the ESRC, SPRU, University of Sussex.

National Audit Office, 2003, *Getting the Evidence: Using Research in Policy Making*, London: The Stationery Office.

Neilson, S., 2001, *IDRC-Supported Research and its Influence on Public Policy*, available at http://www.idrc.ca/uploads/user-S/10359912050LitReviewPres_Jan18.pdf

Nutley, S. and J. Webb, 2000, 'Evidence and the policy process', in H. T. O. Davies, S. M. Nutley and P. Smith, What Works? Evidence-Based Policy & Practice in Public Services. Bristol: Policy Press, 13-41

Pawson, R., 2006, *Evidence-based Policy: A Realist Perspective*, London: Sage.

Rick, J., L. Thomson, R. B. Briner, S. O'Regan and K. Daniels, 'Review of existing supporting scientific knowledge to underpin standards of good practice for key work-related stressors: phase 1', *Research Report 24*, London: Health and Safety Executive, 2002.

Rhodes, R. and D. Marsh, 1992, 'New directions in the study of policy networks', *European Journal of Political Research*, Vol. 21, pp. 181–205.

Weiss, C., 1980, 'Knowledge creep and decision accretion', *Knowledge: Creation, Diffusion, Utilisation*, Vol. 1, No. 3, pp. 381–404.

Weiss, C. and M. J. Bucuvalas, 1980, 'Truth tests and utility tests: decision makers' frames of reference for social science research', *American Sociological Review*, Vol. 45, pp. 302–313

Weiss, C., 1982, 'Policy research in the context of diffuse decision making', *The Journal of Higher Education*, Vol. 53, No. 6, pp. 619–639.

Wooding, S., S. Hanney, M. Buxton and J. Grant, 2004, *The Returns from Arthritis Research Volume 1: Approach, Analysis and Recommendations*, Santa Monica, CA: The RAND Corporation.

Wooding, S., S. Hanney, M. Buxton, and J. Grant, 2005, 'Payback arising from research funding: evaluation of the Arthritis Research Campaign', *Rheumatology (Oxford),* Vol. 44, No. 9, pp. 1145–1156.