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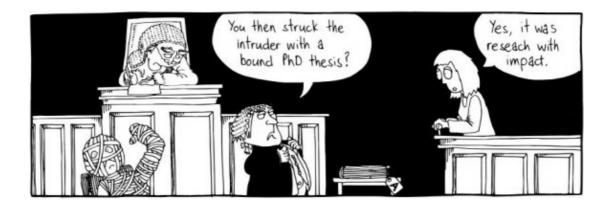
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Exploring and Assessing Social Research Impact:

A case study of a research partnership's impacts on policy and practice

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Abstract

There is increasing emphasis on the outcomes of research in terms of its impact on wider society. However in the social sciences the ways in which research is taken up and used, discussed, shared and applied in different policy, practice and wider settings is complex. This thesis set out to investigate the ways in which social research was used by various non-academic actors, and to explore what impact it had in order to develop methods for understanding and assessing impact. The research investigated what research impact is, how it occurs, and how it might be assessed.

The research was in two phases: firstly, a case study of a research partnership between a research centre and a voluntary organisation; and, secondly, the development and seeking feedback on a framework to assess impact. The case study employed two main approaches: forward-tracking - from research to policy and/or practice - and backward tracking - from policy back to research. Both phases were conducted through a practitioner-researcher approach, bringing experience of working with the projects involved into the heart of the research model.

The study found many ways the research from the partnership had been used in different sectors by different actors. Impacts from the research were harder to identify. In cases where there were clear impacts, the actors involved had adapted research to fit the context for research use in order to create impact. Research users continued to draw on the research for many years after publication, creating further impact as new policy or practice agendas arose. The framework developed to assess impact used contribution analysis, developing the idea that social research might contribute to change in complex systems but cannot cause them alone. The framework used a 'pathways to impact' model to develop a theory-based approach to assessing impact and to create categories for data collection.

The ways in which research might impact on policy and practice are many and cannot be easily predicted. Concepts from complexity theory, particularly a focus on relationships, an understanding of context and the concept of emergence have been useful in framing the picture of impact generated from this research. Any assessment of impact from social research needs to acknowledge that many actors are involved in the process of research being taken up and used, and impact cannot be achieved from the supply side alone. Partnership research, between an academic and voluntary sector organisation, facilitated the use and impact of the research in many ways.

The thesis reconceptualises ideas about how research impacts on society, suggesting the concept of 'contribution' is more accurate and useful than attribution. It also adds to the body of empirical work on the processes of impact, and in particular of the role of research partnerships in increasing impact. It suggests that process-based approaches to assessing impact that acknowledge complexity may be fruitful in developing impact assessment methodology.

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Declaration of originality

I, Sarah Morton, declare that the work presented in this PhD thesis is my own and that it has not been submitted for any other degree or professional qualification.

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Chapter One: Introduction

1.1 Investigating research impact

When embarking on this PhD project in 2007 there had been increased emphasis on the findings of academic research being made more accessible and relevant to potential user communities. This had been driven partly by the New Labour government's approach to evidence-based policy-making and a renewed interest in the public outcomes of government spending (The Cabinet Office 1999). Reflected in this changing agenda was a shift in emphasis of universities' missions towards their role in contributing to society through the usefulness of their research (Boaz et al. 2008a). This ESRC-funded PhD project investigated ways in which the impact of academic research on policy-making might be assessed and built on my personal interest in this area. This short introductory Chapter sets out the current interest in the topic of research impact in more detail, along with my personal interest in the topic. It goes on to introduce the broad research questions for this PhD project, gives an overview of the Chapters of the thesis, and offers some definitions which will be used in this work.

From 2001 to 2006 the ESRC funded an Evidence Network focusing on how social research might be better utilised, including several published papers on increasing research impact (Walter et al. 2003). The agenda in universities, partly spurred on by an increasing interest in research use by higher education and research funding councils (Economic and Social Research Council 2005), as well as the development of an evidence-based policy and practice agenda by government (The Cabinet Office 1999), led to the development of a body of activities referred to as 'knowledge transfer' and 'knowledge exchange'. The accompanying expectation was for academics to communicate their research to a range of audiences; develop relationships with potential research users; and develop other approaches to increasing research use (Boaz et al. 2008). Taking an active role in communicating messages from research has become a more commonplace academic activity,

although one which was not initially recognised or rewarded through the main university accountability process (Commission on Social Sciences 2003).

During the period of this PhD project there has been increasing emphasis on the 'impact agenda' in the UK. The research councils issued a joint statement about the importance of impact stressing that they wanted to fund "excellence with impact" (Research Councils UK 2011). The research councils increased their emphasis on user engagement through the funding process, requiring the development of user engagement plans alongside research proposals which are assessed as part of funding decisions. (e.g. Economic and Social Research Council). The ESRC also commissioned a series of studies of the non-academic impact of research they had funded (Meagher et al. 2008; ESRC 2009). In 2010 the Higher Education Funding Council announced that the next audit of universities' activities, the Research Excellence Framework (REF), would include a measure of impact that would account for 20 per cent of the overall rating of research (Attwood 2010; Higher Education Funding Council 2011).

The idea that research impact is important has certainly become more commonplace over the three years of this PhD project, although this change is not without its critics (Attwood 2010). However, while good practice in research dissemination and effective ways of increasing research impact have been developed and documented (Walter et al. 2005), there continues to be a lack of robust approaches for social science researchers to measure or assess the impact of their research on policy or practice. Whilst increased funding is made available for the social scientist to engage in a range of knowledge transfer activities reporting is based on descriptive approaches, as any 'measure' of impact is hard to make. Measures of impact currently used by Scottish Universities as required by the Scottish Funding Council do not count, and consequently do not resource, impacts other than income generation. The new requirements of the REF are for descriptive case studies of research impact. How these are to be backed by evidence is a matter of ongoing discussion, with the guidance asking simply for "appropriate sources of information external to the HEI to corroborate these claims" (REF 2011:29), suggesting reports, documents and individual research users as the main such sources.

For the past 10 years I have been working in the area of knowledge exchange in various roles at the Centre for Research on Families and Relationships (CRFR) based at the University of Edinburgh. My role was conceptualised as a boundary spanner (a term used to describe roles that aim to cut across boundaries, in this case the academic/non-academic divide), promoting and supporting a range of relationships and activities that would develop CRFR as a focal point for work on families and relationships for non-academic research users. I have been involved in developing a range of approaches to increasing research impact, including collaborative approaches, innovative research communication, and supporting researchers in their knowledge exchange work. I have developed new approaches to knowledge exchange through partnership with voluntary sector agencies and acted as advisor to some UK-wide ESRC-funded research programmes.

This PhD project then addressed some of the issues that have arisen out of my own work, my engagement with the literature and some of the activities of the Evidence Network, and discussions with policy-makers and academic colleagues. Whilst the focus of my work has been on communicating research and engaging in relationships with non-academics so as to increase utilisation, the issue of how the effectiveness of these activities might be measured has become more and more pressing. In particular, the need to resource the time and energy spent in activities aimed at increasing research impact led to the need for some kinds of measures or a better understanding of how impact assessment might be approached. My perspective provides a link between the day-to-day experience of working to increase the impact of specific research projects with the wider context of the research-utilisation agenda, although also required special attention to reflexivity as outlined later in this thesis. Through this work I hope to contribute to the development of thinking around this subject area by providing new evidence of the process of research impact, and through the development of methodologies and models for assessing impact.

This work is based on the assumption that using research to inform policy is desirable, and that it is a legitimate activity for academics to engage in policy development and debate. It is also linked to the public agendas of evidence for policy and practice, and the rise of the notion that public money spent on social

research creates a need for ensuring the outcomes of that research have resonance beyond the academy (Solesbury 2001). The proposition is not that the role of universities should be exclusively focussed on policy and practice, nor that everyone engaged in research should also be a policy expert. Boaz et al (2008) recognise that there are many academics engaged in policy focussed work. This work takes as its starting point that there are continuing difficulties in developing workable mechanisms for applying research and measuring its use.

Whether it can be claimed that using research improves policy-making or practice is more difficult and the subject of discussion in Chapter Two. However, following Nutley et al (2007) it is reasonable to proceed on the assumption that "certain ways of developing new knowledge may be better than others, and that research-based ways of knowing are worthy of particular attention"(p3). This PhD project seeks to understand better the processes of research impact on policy and practice and in doing so revisit these assumptions.

Context

Taking a practitioner-research approach means that the focus of the PhD research has been on the research centre where I work. CRFR is an interesting site for this study because it was established in 2000 with some specific aims to increase the usefulness of research for policy-makers and practitioners. It aimed to offer networking opportunities between academics and research users and to open up the discussion of research agendas, as well as making research findings more accessible. To achieve this the staffing structure included administrative support and expertise in working and communicating with potential research users. The original knowledge exchange post was a Research Liaison Officer which I took up in 2001. This developed to be a Research Liaison Manager (2005), and now a Co-Director with responsibility for Knowledge Exchange and a team of staff able to deliver design, web development, events management, information skills and specific KE projects. CRFR has been acclaimed as successful in reaching out to non-academics in a number of ways, including: an ongoing relationship with the Scottish government (and previously Scottish Executive) to deliver research services, and knowledge exchange activities

that have been described as 'outstanding' by the ESRC and policy analysts (Centre for Research on Families and Relationships (CRFR) 2011). CRFR has a reputation as model of good practice in knowledge exchange. It could be argued that this reputation is partly built on the fact that few if any other research centres have the kind of dedicated resources for knowledge exchange that CRFR have developed. However, these facts and this experience make the organisation an interesting and appropriate site for this study.

Research Questions

This PhD project investigates three main questions which aim to provide a framework for a study of research impact:

- 1. What is research impact?
- 2. How does research impact occur?
- 3. How can research impact be assessed?

This tripartite approach aims to focus on the processes of research impact and is developed through a series of sub-questions set out in Chapter Four. It focuses first on understanding research impact in order to develop ideas about how impact can be assessed as illustrated through the outline of the PhD below.

1.2 Overview of Thesis

This thesis is presented in four parts. Part I sets out the concepts and methods for the thesis, firstly through two Chapters looking at concepts and literature. Chapter Two examines some of the existing work on understanding research impact, and develops a working definition of research impact which is investigated through the empirical part of the thesis. Chapter Three looks at the literature on assessing research impact and identifies key challenges and issues for a study of this kind. Chapter Four then sets out the research design and methods for this project which has two main parts: a case study of a research partnership between CRFR and a voluntary agency, ChildLine Scotland (CLS), allowing for an investigation of how impact occurs;

followed by the development of a framework to assess impact allowing for the investigation of how impact might be assessed.

Part II focuses on the task of understanding research impact through two Chapters and explores data from the case study of the CRFR/CLS research partnership. Chapter Five is the first empirically based Chapter and focuses on developing an understanding of what research impact is. This Chapter presents the case study and explores impacts from the CRFR/CLS research and what research impact means for different actors and in different settings. Chapter Six then drills down in more depth into three examples of impact from the research, to enable further investigation of how impact occurs. This closer look at what leads to research impact allows for the development of process-based approaches to understanding how research impact happens in contrasting settings.

Part III of the thesis turns then to the question of assessing impact through two Chapters. The first, Chapter Seven, presents a framework to assess research impact utilising contribution analysis which builds on the findings from the thesis. This aims to develop ideas about how impact might be assessed in robust ways. The second, Chapter Eight, takes a closer look at the methods employed to uncover impact in this PhD project and assesses the methodological challenges of assessing impact, with the aim of considering the wider applicability of the thesis findings on appropriate and efficient methods for impact assessment.

The final section of the thesis is a concluding Chapter, discussing key findings and their implications for research. It ends with a discussion of the policy and practice implications of the thesis: for knowledge exchange practice and for the practice of assessing research impact in the social sciences.

1.3 Definitions

Research

There are many kinds of research which might be used in policy or practice. The focus of this project is on social research produced by a University, produced in partnership with a voluntary organisation and funded by external bodies, the ESRC

and the Scottish Government. Other kinds of research in the social sciences that might be relevant to policy, not least research produced by those outside universities seeking to influence the policy agenda, will be visible in this work but are not the focus of this study.

Research use and impact

In the literature review section I outline ways in which the idea of research use has been conceptualised and build on these to develop an understanding of research impact. The focus of this work is on ways that research is used beyond the academy and so excludes use of research in teaching and in influencing academic agendas, academic capacity building and other university-based outcomes. The basic approach here is to acknowledge that research can be used in many ways and that these range from straightforward linear uses of research findings to complex and subtle uses. The approach to research use will be broad to allow as many uses as possible to be included in the approach to research impact, following Nutley et al (2007):

"the use of research is ultimately a fluid and dynamic process rather than a single event. Different types of research use will interact and build on one another sometimes in relatively predictable and linear fashion but also in more complex, unpredictable ad iterative ways" (p58)

An open definition of research use will be the starting point of this work in order to capture this complexity, building on participants' own definitions of research use.

Research impact implies that research use has led to some kind of change and again the interest here is in change beyond the academy. In Chapter Two the sort of changes that might be considered within a definition of research impact are elaborated on but as a starting point Boaz et al's (2008) definition of research impact as "an interest in change that lies beyond the research process and its primary outputs" (p10) will be used.

Research production mode

This term is used to refer to different ways in which research might be originated and carried out. Research might be funded by government, either commissioned to meet a particular immediate or long-term policy need, or as a result of a funding request. Research can be funded by external agencies, either the large research funding councils like the ESRC, by trust funds or private companies. Research has different orientations to policy-makers or practitioners depending if it is conducted completely independently from potential users or if they are involved as informants, endorsers, commissioners or co-researchers (Martin 2010) [see Table 2.3 for more elaboration of these positions]. These different production modes reflect different orientations of research towards policy or practice communities and towards potential audiences and users. In selecting case studies and discussing the way research has been utilised in this study these different modes are taken into account.

Research users

In this project the term research users is used to describe any actor who might have an interest in the research process or research findings and whose main role is not as a producer of research. This normally refers to actors in policy and practice settings but can also include members of the public and other academics. This includes policy-makers or practitioners who are involved in research as partners.

Knowledge Transfer or Knowledge Exchange?

There have been a variety of terms used to describe the processes and activities by which academic research gets used by policy-makers, practitioners and others traditionally in social science the language referred to research projects being 'disseminated'. The term 'knowledge transfer' has been widely adopted, including by the ESRC in 2005 (Economic and Social Research Council 2005) and many universities, but it has been criticised in its social science application as suggesting a one-way process of knowledge from universities being sent out to others which does not reflect the realities of the research-policy-practice relationship (Boaz et al. 2008; Davies et al. 2008). More recently the term knowledge exchange has been adopted

by many organisations including the Scottish Funding Council (SFC), (2007), to better reflect this process. CRFR have also adopted the term 'knowledge exchange' and it will be used in this thesis to include any activities that aim to engage research users or increase the uptake of research.

Project component terms

There are some complications in discussing a PhD research project that investigates a research partnership with the aim of investigating research impact. In order to minimise confusion the following definitions of different elements of the project are offered:

PhD Project The research undertaken by the author for this thesis.

CRFR/CLS Research The research partnership between CRFR and CLS

which is the setting for the case study conducted as

part of this PhD project.

Projects 1 and 2 There are two main separate research projects within

the CRFR/CLS research partnership and they are the

subjects of two sub-cases within the overall case study:

Project 1: 'significant others' and Project 2: 'sexual

health'.

Engagement Activities Elements of the CRFR/CLS projects including user

engagement activities.

Part I Concepts and Methods

Chapter Two: Concepts and Literature on research use

The growing interest in the role of social research in influencing the actions of those involved in developing and delivering social policy has to some extent been mirrored by a growing literature seeking to better understand the ways that research informs decision making in social settings. The literature, both empirical and theoretical, relevant to the issues of research utilisation, is challenging for several reasons. Its historical scope, from the enlightenment onwards (Hammersley 1995; Byrne 1998) combined with its cross-disciplinary nature (with relevant material in social policy, education, evaluation, business, public management, politics, health policy and other social sciences) makes it large and lacking in clear boundaries. The focused research utilisation literature is relatively light on empirical work compared to theoretical offerings (Boaz et al. 2009). A systematic review of impact studies found 52 empirical papers amongst 146 papers, with most of the remainder being reflective or descriptive pieces.

For this project an understanding of the nature of research impact, the processes through which this occurs, and how it might be assessed created the need to draw from across these bodies of literature. This task was not easy given the relatively unbounded nature of the field. In addition it is difficult to conduct sensible database searches due to the general nature of the relevant terms (e.g. research, impact, assessment, knowledge). The literature review strategy had two main components that aimed to make the task manageable and robust: one relating to the research utilisation literature, the other to the social policy and sociological literature. For the research utilisation literature core texts and authors (e.g. Nutley et al 2007, the journal Evidence and Policy, Hanney et al 2003), and three relevant reviews (Boaz et al 2009; Mitton et al 2007, & Ward et al 2009) were built on, using the references cited in these to explore the topic. In addition, a decision was taken to focus on empirical rather than purely theoretical pieces within this literature, partly to exclude the

numerous reflective articles written about this agenda, but also in order to provide a robust basis for taking the thesis forward. As a social policy student, the focus was on research utilisation in social policy settings and did not include a review of the organisational studies literature. However, in 2011 a new publication by Williams (2011) alerted me to ways in which the concept of 'absorptive capacity' could be helpful in understanding the processes of impact and this has been included.

The Masters course completed as part of this PhD provided the opportunity to take courses in both sociological theory and social policy which informed the literature review strategy in these areas. The former was especially useful for someone whose undergraduate degree had been completed twenty years previously. It provided an introduction to core texts on complexity theory as well as the opportunity to write an exploratory essay on this approach and how it might fit into a thesis on research impact. The social policy course was also a great opportunity to explore this literature. However, I was in the main disappointed in much of what the social policy literature had to offer, as it did not chime with my own experience of working in social policy settings. My thesis proposal included a review of this literature, but following advice from the panel, the review has subsequently focussed more closely on the social policy literature that acknowledges complexity, rather than a review of the social policy literature more generally. This fits with the conceptual approach of the thesis as explained in section 2.2.

In order to better understand research impact, and to differentiate between use and impact, the literature is considered across this and the following Chapter, with this Chapter focussing on understanding research use and Chapter Three on assessing research impact. The first section of this Chapter considers definitions of research utilisation and their usefulness in different settings and contexts. To develop concepts and theories about the process of research use and impact the core research use literature, along with some of the relevant literature about research use in policy and practice, is discussed in section two. Finally section three draws across the concepts presented in this Chapter to focus on the emerging issues for this PhD project.

2.1. Defining research impact

The introduction to this thesis set out the increasing emphasis by government that research should have wide relevance and how this is currently being played out in both universities and policy and practice settings. The RCUK (Research Councils UK 2011) which brings together all of the research funders defines impact in the following way:

"Our research achieves impact – the demonstrable contribution to society and the economy made by knowledge and skilled people." (RCUK website)

This definition focuses on the idea of the contribution of research to society and economy but gives very little more in terms of how we might operationalise such a concept. The guidance issued to universities about assessing impact defines it as:

"Impact includes, but is not limited to, an effect on, change or benefit to:

- The activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding
- Of an audience, beneficiary, community, constituency, organisation or individuals
- In any geographic location whether locally, regionally, nationally or internationally." (Higher Education Funding Council 2011:p47)

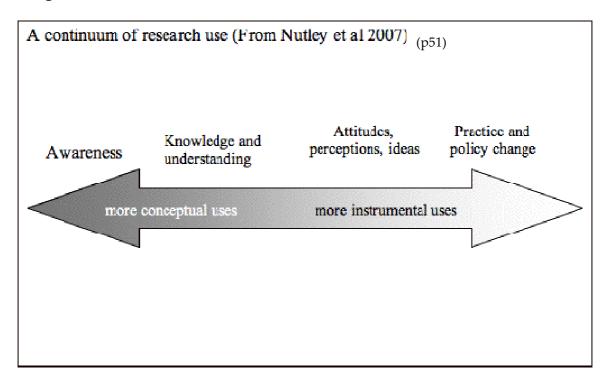
At the very least research impact implies the practical application of research to a policy, practice or social problem. However the idea of research impact may look very different from the perspective of different players including funding bodies, academics, policy-makers or practitioners.

A common way to start to unpick a definition of research impact has been to differentiate between conceptual and instrumental uses of research (Nutley et al. 2007) or between applied and conceptual kinds of research (Byrne 1998). Instrumental uses are when research is directly applied to help solve a policy or practice problem, whereas conceptual use implies longer-term changes in thinking about the nature of an issue or how it is framed.

Nutley and colleagues' (2007) spectrum of research use has been helpful in developing a more nuanced understanding of research use and impact. A policy or practice change at the instrumental end of this continuum may be closest to the

RCUK definition of research impact but the other uses, changes in awareness, knowledge and understanding and behaviour, may also lead to impact or be a prerequisite of impact.

Diagram 2.1 A Continuum of Research Use



Definitions of research impact therefore might vary according to perspective or purpose. In some settings the utilisation of research in shifting awareness of an issue may be defined as research impact, in others only a change in policy or practice would be considered as impact. The current main university and research funders emphasise a definition which highlights societal change (Economic and Social Research Council; Research Councils UK 2011) but perhaps a government analyst would suggest inclusion of research in a review of evidence could count as impact, or a practitioner might emphasise a change in knowledge or understanding. An academic might consider any kind of use of their research as impact, indeed until recently within academic circles impact referred solely to academic impact – that is the use of their research by other academics citing it.

All of the ideas about research impact above refer to positive impact: the useful and helpful utilisation of research but research might also have unanticipated or dysfunctional consequences which could be defined as negative impact. Concerns

about the use of research in ways the creators of it did not intend (Emmel and Clark 2008) or overtly political or tactical uses often worry academics (Attwood 2010). Most impact studies have at their core a concept of positive impact (e.g.Hanney et al. 2003)) but it is important to acknowledge that uses of research may have many outcomes. Indeed Rein suggests that the role of social research might not be to create positive impact but to challenge dominant discourses, champion voices outside the policy process, or criticise the direction of a policy agenda (Rein 1976).

For the purpose of this study a wide interpretation of research uptake, use and impact has been used in order to capture the many ways in which research might be used, and the links between this utilisation and change. This builds on work by Nutley and colleagues which argued:

"Studies of research use should look wider than instrumental impacts with identifiable policy/practice changes to embrace conceptual uses that challenge existing thinking. Indeed we believe that as much social good may come indirectly from the processes of research use...as may come more directly from identifiable changes in policy direction or practice shifts." (Nutley et al. 2007:319)

For this reason, the phrase 'research uptake, use and impact' is used to describe the processes of research utilisation and their link to impact which is open to any kind of use on the instrumental/conceptual spectrum. The term 'uptake' refers to the successful engagement of potential research users with research and is a commonly used measure of impact (Scottish Funding Council 2006). This means that research users have engaged with research: they have read a briefing; attended a conference or seminar; were research partners; were involved in advising and shaping the research project in some way; or engaged in some other kind of activity which means they know the research exists. This is obviously a prerequisite of any kind of research use which means doing something with the research along the conceptual or instrumental spectrum. Again use is a prerequisite of that research creating any kind of change. The term 'research uptake, use and impact' then sets out a processorientated definition of research utilisation and implies a pathway of engagement, activity and change, that creates impact. The pathway is not necessarily a linear one, where research findings are disseminated, engaged with, used and then impact occurs (although this will be the case sometimes). Being engaged with research

production also creates uses and impacts, and the ways in which research is taken up, used and has impact may be circular, recurring and influence each other.

So a process-focussed understanding of research utilisation can help unlock definitions of impact: how these are conceptualised is discussed in the next section.

2.2. Conceptualising research use processes

Models of the research-use processes can be drawn from a variety of fields depending on whether the focus is research use in policy or in practice and which field of study. One of the biggest bodies of research on using research in practice is within health, where the ideas of evidence-based practice are long-standing, and much attention has been given to how to promote standards and achieve change (e.g.Dufault 2004; Squires et al. 2011). Some of these ideas have been taken up by those concerned with the relationship between research and health policy (e.g.Lavis et al. 2002; Best and Holmes 2010). However, there is often a distinction between discussions of research use in policy and in practice (Nutley et al. 2007), and although this distinction is sometimes artificial there are some important differences between the contexts for research use in policy and practice that bear further examination.

As discussed earlier, there is a growing literature about research use across disciplines. In this section a consideration of the ways in which thinking about research utilisation in policy and in practice is developed using a concept of three-generations of research to action thinking (Best and Holmes 2010). Whilst Best and colleagues use their three-generation concept to discuss research-use in health policy, here it has been used as an organising scheme to also discuss parallel shifts in thinking about policy and practice.

Research-utilisation developments: three generations

Linear models of research use

Many early ideas about how research could be used in policy and practice had at their core linear ideas that research could have a direct and uncomplicated influence on the policy or practice settings to which it was relevant. In policy terms this was characterised by a policy-cycles approach conceptualised as a rational process, characterised in stages (deLeon 1999): "agenda setting; policy formulation and legitimation, implementation and evaluation" (Sabatier 1999). The end stage, evaluation, then leads back into new agenda setting and the process is seen as a cycle. Research can be seen as an aid to rational policy-making with a role at each stage (Nutley et al 2007). In the agenda setting stage research helps clarify issues and researchers might influence what kinds of knowledge are seen as relevant. In the policy formulation or decision making stage research can help to clarify the consequences of alternative courses of action, and provide legitimation for proposals. At the implementation stage research may be used to develop implementation strategies, and to help monitor and understand the way implementation occurs in different contexts (Dickinson 2011). Perhaps one of the main ways research has been used is in the evaluation and feedback aspects of the policy-making cycle. Similar ideas in practice settings suggest that there is a straightforward link from research being published to practice through a linear knowledge transfer model, where practitioners are seen as rational users of relevant factual research which they utilise in an uncritical and unquestioning way (Tyden 1993). Huberman (1994) set this out as a model, including a feedback loop from practice settings back to research, arguing that this feedback helps to ensure the continued relevance of research. Within both of these approaches is an assumed divide between the community of policy-makers or practitioners on one side and the research-producers on the other (Caplan 1977; Cousins and Simon 1996). The success of the rational linear approach to research use then depends on effective translation between these two communities, with the focus being on the products of translation. The assumption is that as long as the translation is good the research can be relevant to many settings (Best and Holmes 2010).

Best and Holmes (2010) and colleagues characterise these linear ideas about knowledge transfer as the first generation of thinking about knowledge to action. They suggest that these ideas were dominant in the 1990s although elements, particularly the notion of two communities, still exist today (Martin 2010). Linear

approaches have however been criticised as too simplistic and ignoring the human interaction which characterises both policy and practice settings (Crew and Young 2002).

The main criticism of the stages model is that it bears little relationship to the reality of policy-making which is much more complex and messy than the model allows, with many more actors and influences having a bearing on the way it occurs. Alternative models allow for multiple policy cycles, involving numerous proposals at different stages at the same time, with multiple actors:

"There are normally hundreds of actors from interest groups and from government agencies and legislatures at different levels of government, researchers, and journalists involved in one or more aspects of the process. Each of these actors (either individual or corporate) has potentially different values/interests, perceptions of the situation and policy preferences." (Sabatier 1999:p3)

If this is the case then research also has a less clear role in policy-making and a different approach is needed in order to understand research impact. Weiss (1979) developed a typology of research utilisation that has been widely used and continues to provide a basis for thinking on this subject today (Nutley et al. 2007). She identifies six models of research use in policy:

- 1) Problem solving: research used to provide evidence to solve policy problems.
- 2) Knowledge-Driven: research (often science) drives new technological developments (e.g. contraceptive pill).
- 3) Interactive: interactive, non-linear model with many actors communicating with each other.
- 4) Political: research used to lobby for political viewpoints.
- 5) Tactical: research used to delay action, avoid taking responsibility, deflect criticism, maintain prestige or rally academic support.
- 6) Enlightenment: research changes conceptualisation of a problem through slow percolation of ideas in policy and society.

This more nuanced understanding of research use emphasises the importance of the interaction between people and ideas. The first two categories above resemble linear

ideas about research use, with the interactive model developing more relationship-based understandings. Weiss's acknowledgement of the role of politics has been important in challenging simplistic ideas about the rational application of research within a rational policy process, acknowledging both the political and tactical uses of research. The enlightenment model, where research alongside other wider changes in ideas in society influences policy change, is one of the most challenging in relation to understanding research impact, due to both its long-term nature and research having an influence alongside many other factors including public opinion.

In practice settings too the simplistic idea that practitioners would pick up research findings and implement them were challenged by ideas about the interaction between practitioners, research, and the context in which practice took place. This meant understanding individual learning models (Walter et al. 2004; Williams and Glasby 2010) but also the other influences on practitioners including how new knowledge interacts with what they already know (Daley 2001), the organisational constraints and enablers of change (Williams 2011), and the influence of peers and the social setting (Walter et al. 2004). In addition the role of managers has been highlighted in relation to research uptake in terms of organisational approaches (Rosen 2000) and management information needs (Haas 1992).

Both in policy and practice the role of interaction clearly affected the ways in which research might be used and led to the development of relationship based ideas around the research utilisation.

Relationship approaches

Hass (1992), Kingdon (1995) and Sabatier and Jenkins-Smith (1993) have developed different network approaches to conceptualising the policy process. One approach to the role of networks in policy-making identifies 'epistemic communities' which channel information, including research, into policy-making: "As demands for …information arise, networks or communities of specialists capable of producing and providing the information emerge and proliferate" (Haas 1992:p4). This approach emphasises identification of the ways in which new ideas and information are taken into account by policy-makers.

Sabatier and Jenkins-Smith developed a network approach (the Advocacy Coalition Framework) which argues mainly for the kind of enlightenment use of research described by Weiss and therefore the need to study policy systems over long time-frames (Nutley et al. 2007). The way research is used is linked to the idea of coalitions coming together on policy issues. These coalitions share sets of beliefs: values, which are unlikely to change; policy beliefs about what direction policy should take; and a narrower set of beliefs about the nature of the problem, its causes, seriousness, variations in locality and potential policy solutions. Sabatier and colleagues suggest that research might be used politically or tactically by these coalitions to achieve policy goals but that the final set of beliefs is most open to change through learning, including learning from research.

Network-based approaches to understanding policy are reflected in the researchutilisation literature. Nutley at al suggest that interactive models:

"reject the notion that research offers neutral 'facts' that can simply be applied, and instead see research as a socially mediated process. Research is not merely adopted: it is adapted, blended with other forms of knowledge, and integrated with the contexts of its use." (Nutley et al. 2007:p119)

So to return to the concept of three generations of knowledge to action, Best and colleagues see interactive and network approaches as a second generation of thinking about knowledge to action: relationship models. Here the products of translation from the first generation still matter – research must be communicated in a useful way - but these products are embedded in relationships between research producers and many research users. The two-communities idea is also challenged: research is utilised within networks with many actors. Research may be taken up by different actors within the policy networks, for example, the press, think-tanks, voluntary organisations, etc., and used to influence policy (Best and Holmes 2010). Rather than two-communities divided by their mutual misunderstanding, it is more helpful to think of many communities in overlapping networks where research may or may not be used. Relationship-based models of the research utilisation process have been dominant in the early 21st century. In the UK research funders emphasised opportunities to network and activities such as people exchange (for

example, Scottish government fellowships for academics or ESRC-funded placement fellows (Economic and Social Research Council 2012)).

The concept of communities of practice was developed where practitioners can create networks for reflection and learning in order to develop new understandings (Wenger 1998) and reflects a relationship-based approach to research-utilisation in practice.

"CoPs are groups of people who may not normally work together, but who are acting and learning together in order collectively to achieve a common task while acquiring and negotiating appropriate knowledge." (Gabbay and le May 2004:p285).

The concept of communities of practice comes from the knowledge management movement. Acquiring appropriate knowledge might include looking at existing research, developing new research, or other non-research based forms of knowledge (Wenger 1998).

A common way of conceptualising the research-utilisation process which emphasises relationships involves the consideration of the supply of research, demand for research, and the mediation between these (Nutley et al. 2010). Lomas's model of research utilisation has producers 'pushing' knowledge out on one hand and people who want to use research creating demand or 'pull'. The links and exchanges between these two groups are important to consider and need to be strengthened to improve the ways that research might be utilised (Lomas 2000). This emphasis on the linkages and exchanges between groups also acknowledges the importance of: context and institutional setting; values, ideologies and beliefs; and research interacting with other forms of evidence.

These approaches start to develop more nuanced understandings of research utilisation than linear models, including in this ideas about the need for learning in specific contexts before research can be linked to change. However, further developments have encouraged thinking beyond networks and relationships, by putting more emphasis on the setting in which these networks and relationships take place (Best and Holmes 2010; Byrne 2011; Williams 2011).

More complex understandings

Best and Holmes (2010) argue that relationship-based approaches to understanding research use are also limited. They suggest we need to move to conceptualising research use within complex adaptive systems. Relationships and networks matter within these systems but without drawing on the ideas of systems it is difficult to understand fully the context for research use and the enablers and barriers to change.

What is a complex systems approach?

Many of those utilising complexity in social science use the concept to address the nature of systems and their changes (Walby 2007) (also Cilliers 2005; Sawyer 2005; Urry 2005; Sanderson 2006). Whilst not the only approach to complexity (see Stacey et al. 2000 and others) this thinking emphasises understanding social (and natural) phenomenon as systems. However these systems differ from early sociological understandings of social systems (such as Parsons 2001)) as they are dynamic, self-reproducing and self-organising. They are commonly termed complex dynamical systems (Sawyer 2005) or complex adaptive systems (Keshavarz et al. 2010) and this second term will be used here.

Cillers (2005) starting point is an understanding of complex systems as consisting of many components, which may be simple, but they interact in dynamics ways, and their behaviour results from the interaction between the parts rather than from any inherent characteristics of the components themselves. This process of many interactions leads to the structures of the system, and this process is called emergence. Relationships therefore are the key component of the system.

An important feature of the nature of interactions and emergence is the way that feedback loops drive the dynamism of the system. Feedback loops are an idea familiar to social policy analysis and discussed in more detail in this chapter. Positive and negative feedback has different effects on the development of the systems and its dynamism, driving change.

The idea of time is important, with systems having a 'memory', creating path dependency as well as the ability to react and change quickly in response to a

changing environment based on previous experience. Path dependency, a familiar idea in social policy (Lindblom 1959), means that decisions taken earlier will carry on being played out within the system for a long time, and will affect the potential for change.

The nature of complex systems as emergent means that complex phenomena are non-reductable. We cannot then identify each part and the effect it has on the whole as the interaction between them is essential to the development and sustaining of the complex system. Traditional research methods rely on this process of reduction to study society. This has important ramifications for the nature of social enquiry, and for understanding of the research utilisation process. It requires holistic approaches to understanding change such as case study approaches, action research or embedded researcher models.

The concept of emergence, and the subsequent understandings of the relationships between the nature of individual action and social structure are at the heart of much of the ontological debate about the place and usefulness of complexity theory in social science (Archer 1995; Sawyer 2005). Understanding interactions between individuals, and the relationship between these interactions and the nature of social systems and processes also creates methodological challenges (Haggis 2010).

Walby (2009) suggests that complexity theory is helpful in that it offers a new way of looking at change, especially in a global world, allowing freedom from the idea of linear causality and better ways of understanding diversity. Castellani and Hafferty suggest that the overarching nature of the theory helps social scientists by giving a framework for approaching the structure and dynamics of social systems, along with a better vocabulary for modelling social systems (Castellani and Hafferty 2009).

Many complexity approaches deal with the entanglement of complex systems utilising computer-based approaches able to deal with large amounts of complex data. These include mapping social networks (e.g.Hawe et al. 2009), mapping complex systems (Bar-Yam 2002) or mapping concepts that are key to knowledge in systems (Trochim and Cabrera 2005; Leischow et al. 2008). Some of these approaches build on existing sociological analyses and seek to reframe with a complexity lens

(e.g social network analysis). The work in this PhD project does not seek to utilise any of these more computer-based analytical approaches but follows Walby (2009) in the utilisation of key complexity concepts and applies these to develop a better understanding of the processes of research uptake, use and impact.

A common starting point for understanding complexity theory approaches is to clarify the difference between simple, complicated, complex and chaotic social phenomenon (e.g. Snowden and Boone 2007; Hawe et al. 2009; Patton 2011). The argument is that we live in an increasingly complex world driven by the forces of globalisation, increasing communication driven by technological development, and interlinked local and global issues and problems (Urry 2005). An often used tool for unpicking the difference between simple, complicated and complex issues is Glouberman and Zimmerman's approach:

Table 2.1 Simple, complicated and complex systems

Simple	Complicated	Complex
Following a recipe	Sending a rocket to the moon	Raising a child
Tested so it can be followed	Formulae are critical	Limited application of
No particular expertise	High level of expertise from	formulae
needed	variety of fields needed	Raising one child doesn't
Standard products will be	Sending one increases future	guarantee success with
produced	chance of success	others
Certain of the results	Fairly high certainty about	Expertise can help but it is
	outcome	relationships that are key
		Each child is different
		Some uncertainty about the
		outcome but not an
		impossible task

(Glouberman and Zimmerman 2002:vi)

Snowdon and Boone (2007) develop a similar typology called the Cynefin Framework which has been widely used, receiving an award in 2007 (Academy of Management 2011), and appearing in Citations of Excellence top 50 papers in 2011 (Emerald Group Publishing Limited 2011) and has with the additional category of chaos:

Simple, in which the relationship between cause and effect is obvious,
 repeatable and predictable. Best practice and standard operating procedures
 can be used.

- Complicated, in which the relationship between cause and effect requires
 analysis or some other form of investigation and is separated over time and
 space. Scenario planning and traditional systems analysis are approaches
 used in these settings.
- Complex, in which the relationship between cause and effect can only be
 perceived in retrospect and does not repeat. The system is a complex,
 adaptive one where pattern management is appropriate.
- Chaotic, in which we cannot perceive a relationship between cause and effect and we try to stabilise the situation, e.g. crisis management.

(Based on Snowden and Boone 2007)

The suggestion is that we move from the metaphor of social phenomenon as machines to the metaphor of an organic system. However, some argue that the idea of complexity is just a lack of understanding of the complicatedness of the world around us (McLennan 2006). If we carry on studying we will eventually be able to understand the nature of the kind of issues that are currently seen as complex. Indeed McLennan suggests that the idea of the world becoming increasingly complex is partly a function of our lack of distance from it: it is always easier to understand events in retrospect than while they are occurring. Whilst both of the criticisms may be valid, the ways complexity aids understanding of social phenomena deserves further exploration.

Those advocating the use of complexity approaches often are interested in addressing some of the social problems and global issues which have not been solved by the modernist approaches advocated since the Second World War (Bar-Yam 1997; Sanderson 2006). The idea of 'wicked' problems requiring different solutions to those traditionally proposed by command and control type government is built on an understanding that the problems are more complex than originally perceived, and need more complex approaches to managing and understanding them (Conklin 2005). This requires a move away from mechanistic based understandings to more organic ones.

A complexity-based approach to understanding the processes of research uptake, use and impact offers some leverage on the issues of the messiness and unpredictability of research use, and suggests a context dependent model, emphasising relationships which chimes with much of the research use literature. It builds on some of the existing complexity-based work in relation to policy-making.

Complexity, policy, practice and research-use

There are models of the policy process that acknowledge complexity and take a systems approach. Research might have a role in any of the three streams in Kingdon's (1995) multiple streams framework, which builds on work using a metaphor of policy-making as a 'garbage can', messy and disorganised (Cohen et al. 1972). Many players, both inside and outside government, are involved in policy-making and Kingdon suggests that there are three streams: a problem stream where information about a problem is generated; a policy stream with ideas about solutions; and a politics stream where elected officials operate. These are operating separately until there is a window of opportunity when the streams can be linked and change can occur. Research is utilised mostly in the policy stream. When the streams meet at a policy window, policy entrepreneurs play an important role and may be using research findings to support their position. These could be politicians, civil servants or pressure group leaders who have issues they hope to raise on public agenda but are waiting for a coalescence of public concern and political interest in order to do so (Gillan 2008).

Baumgartner and Jones' (2009) punctuated equilibrium model is a systems approach drawing on complexity theory and looking specifically at the nature of policymaking. This model suggests that political systems go through periods of stability punctuated by periods of volatile change. Much of the time policy changes slowly and incrementally as suggested by Lindblom (1959) but that at certain times "waves of enthusiasm" create change as political actors become engaged with a new policy idea. They argue that we need to understand the nature of change over time to get a clear picture of the policy process.

This approach seeks to explain the pace and nature of policy change through understanding policy systems and sub-systems and the way that they move through these periods of stability and instability over time. This approach provides some useful insights into ideas about the role of feedback and change, in the context of networks. Research can be seen as one type of feedback in the system.

A key idea about how periods of stability and change occur is the effect of feedback on the system and it is here that ideas about research as one kind of feedback emerge. Baumgartner and Jones suggest that negative feedback creates little change as it is diminished over time. If feedback challenges an existing policy agenda it will create a small disturbance but this will decrease as it is incorporated into the system. However, positive feedback creates amplification and builds into larger changes. They suggest this occurs through the development of new political movements, ideas diffusing quickly through the system, and leaders getting behind new popular ideas.

It is worth saying that there are some clear differences between the study of research use and impact, and this approach which focuses on studying and understanding policy change and agenda setting. Research use may occur in different kinds of policy systems whether or not the result is fast or slow change. Research might have an impact in a system based on incremental change or on one going through more radical and fast-paced change. However, the approach offers some useful insights into the ways in which feedback might operate in policy systems, and some development of the role of both positive and negative feedback which are useful in the understanding of research use in policy. Applying this approach to the understanding of research use, the concepts could explain ways in which research which challenges long-standing policy direction is less likely to be used or take longer to result in change, whereas research supporting a new idea or new direction can be used to amplify and give momentum to it. Baumgartner and Jones link their ideas to those of Kingdon's three streams approach (Kingdon 1995). They suggest that often agenda-setting is part of the processes which produces stability in policy – change occurs incrementally in many policy agendas where agenda-setting is very much part of the system – only ideas within the current ways of thinking of that policy community will reach the agenda. In these cases Kingdon's work is less

useful. However, Baumgartner and Jones think that Kingdon's approach can help explain more rapid change: here the three streams approach can help to identify some of the factors converging to create more rapid change.

The punctuated equilibrium approach also considers the role of policy communities and networks in agenda setting. Baumgartner and Jones suggest that there are two kinds of policy communities, those revolving around entrenched debates, and those which will change on an issue to issue basis and are less prone to conflict. They suggest that issues reach the agenda in the absence of conflict through the mobilisation of enthusiasm. Areas where there are high levels of conflict are less likely to be subject to radical change as the debate is often entrenched and scrutinised by the public and the press. Any move in the development of policy will be met with reaction from both sides of the debate creating less room for change. In areas where there is less conflict or less mobilised and organised opposition, new ideas can become popular quickly. There is less reaction to a new policy direction and media and social commentators may get behind a new idea.

One approach which integrates ideas of complexity with ideas of research use is the RAPID framework developed by Crewe and Young (2002) looking at these issues in relation to international development. They suggest that research uptake is a complex interaction between the context, evidence and links within any setting. When considering context, their own experience of different political contexts has informed their approach which acknowledges the role of politics and institutions. Both the credibility and communication of the evidence is important within this context. Looking at networks within these contexts then allows for some analysis of the extent of their links and legitimacy. This framework draws together some of the issues raised through both the policy and research use literature, and echoes some of Best and Holmes (2010) ideas about the importance of communication within relationships within systems. The RAPID framework also suggests methods for assessing the impact of research which are returned to in Chapter Three.

Systems-based ideas have also emerged in relation to understanding and conceptualising practice. Best et al's three generations includes an understanding of

practice when considering systems approaches. For them, researchers should be integrated into systems, and help identify and utilise knowledge from research but also from other sources in the system, like practice-based knowledge. There are some parallels between this and the organisational excellence model, where research utilisation happens within research-minded organisations. Excellence is developed through leadership, management, partnership with intermediaries to facilitate research use, and adaptation of research for ongoing learning (Nutley et al. 2007). In Nutley et al's words, in the organisational excellence model: "Research becomes integrated with other types of local knowledge including routine monitoring data, experiential knowledge and practitioners tacit understandings" (p214). In this model there is a wide definition of the kinds of information that is useful. Ward's review of knowledge exchange models (Ward et al. 2009) also parallels some of this thinking. They conclude that knowledge transfer is not linear but a complex interactive process.

These kinds of approaches to understanding research encourage moving beyond simple understandings of links between research and policy or practice and a focus on networks of researchers and research-users utilising, reinterpreting and integrating knowledge with other knowledge within systems. It links with other ideas in social policy such as policy networks and governance, where the boundaries between the state and other providers or services are less clear (Rhodes 2007). It highlights the links between pressure groups, global developments and organisations, and local policy development and practice (Urry 2005; Walby 2009). Of course, complexity-based approaches are not without critics, some reject the approach altogether (McLennan 2006) with particular dislike of its origins in science (Taylor 2010). There is some debate about whether complex systems approaches are metaphor or theory (Keshavarz et al. 2010). The usefulness of the approach is criticised by those who suggest that if social phenomena are so complex and non-reductible then we cannot study and understand them (McLennan 2006; Haggis 2010).

Nevertheless, a complex systems approach may help in understanding research impact in several ways and has informed the work in this thesis by emphasising the

importance of context, highlighting the role of relationships, and introducing the concept of emergence.

The issues of conext and relationships are intertwined, with research uptake, use and impact occurring in specific contexts with specific configurations of actors motivated by different factors. It acknowledges that research users are not passive recipients of knowledge, but that research is used through complex interactions between specific actors in specific contexts. It suggests that a focus on processes will be important in developing understanding of how impact occurs. My own practice had led me to believe that relationships were important, but complexity theory highlighted the role of these relationships within a systems perspective which acknowledged their core importance in shaping systems dynamics and the potential for change. It helps to acknowledge that social research alone will not cause change, only through a process of being picked up by actors and networks and embedded within systems will research influence outcomes.

The concept of emergence has been important in understanding the unpredictability of research use in different policy and practice processes and settings. Through complex interactions, and within the constraints and opportunities of complex systems of policy-making (Kingdon 1995; Baumgartner and Jones 2009) research may be taken-up and used, but the way this might occur will be highly context dependent and patterns of research use and impact will emerge in often unpredictable ways over various timeframes. This has been particularly important in understanding the nature of research impact, as set out in Chapter Six

The notion of the research use process as complex has also been picked up on by some of the literature looking at the nature of knowledge exchange as discussed below.

Effectiveness of knowledge exchange activities

There is a body of work looking at what helps to improve the uptake of research and what works in terms of knowledge exchange (Walter et al. 2005). Looking at the success of knowledge exchange activities is one approach to evaluating impact. A clear understanding of the literature on effective approaches to increasing the

uptake, use and impact of research is an important starting point for the development of an approach to assessing that use or impact.

Walter and colleagues (2005) carried out a cross-sector review of evidence in order to summarise key lessons in understanding what helps research uptake. They identified five key mechanisms for knowledge exchange:

- *dissemination*: simple circulation or presentation of research findings to potential users, in diverse and more or less tailored formats;
- *interaction*: developing stronger links and collaborations between the research and policy or practice communities;
- *social influence*: relying on influential others, such as experts and peers, to inform individuals about research and to persuade them of its value;
- *facilitation*: enabling the use of research, through technical, financial, organisational and emotional support;
- *reinforcement*: using rewards and other forms of control to reinforce appropriate behaviour.

(Walter et al. 2005:p341)

Here the ideas categorised as dissemination can be seen as linear approaches, with interactive approaches recognising the importance of relationships while social influence and facilitation ideas start to address some system-wide issues.

Barriers to effective research impact were set out in an earlier paper (Nutley 2003):

Barriers to researchers engaging in research impact activities:

- lack of resources time and money
- lack of skills
- lack of professional credit for disseminating research

Barriers to user's engagement with research:

- lack of time -to read journals, attend presentations or conduct their own research
- low priority
- poor communication of research within organisations
- perceptions of research as irrelevant
- research is not timely or relevant to user's needs
- controversial or challenging finding

- not the most important source of information
- individual resistance to research especially when seen as a threat to practicebased knowledge
- organisational culture doesn't value research

Building on this understanding alongside the work on what enables knowledge exchange, Walter and colleagues devised a set of consistent lessons from this review about developing evidence-based approaches:

Table 2.2 What works to promote evidence-based practice?

Translation: Research must be translated, adapted to the context, open to discussion and targeted.

Ownership: Ownership of research is key: vital to uptake (although implementation through coercion is possible).

Enthusiasm: individual champions help, and personal contact is important.

Contextual analysis: analyse specific barriers to and enablers of change.

Credibility: in the form of credible evidence, endorsement from opinion leaders and high levels of commitment.

Leadership: at management and project levels to provide motivation, authority and promote organisational integration.

Support: financial, technical, organisational and emotional. Dedicated coordinators have been key to some initiatives.

Integration: within organisational systems and practices, involving stakeholders and aligned to local and national policy.

(Adapted from Walter et al. 2005)

There is a lot of commonality between the factors outlined above and Mitton's 2007 review of knowledge transfer and exchange (KTE) studies in health. The review found that only 20% included a practical application of the theory, model or strategy presented and concluded that there was insufficient evidence of effectiveness of any strategies given the current evidence. They identified eight key strategies for KTE and suggest more evaluation work is required to assess their effectiveness:

- Face-to-face exchange (consultation, regular meetings) between decision makers and researchers
- Education sessions for decision makers
- Networks and communities of practice
- Facilitated meetings between decision makers and researchers
- Interactive, multidisciplinary workshops
- Capacity building within health services and health delivery organisations
- Web based information, electronic communications
- Steering committees (to integrate views of local experts into design, conduct, and interpretation of research)

(Mitton et al. 2007:p744)

Most of these are methods rather than strategies, with a mixture of linear and relationship type activities but little sense of addressing issues at a systems level. This probably reflects the time period over which the papers were published, from 1997 to 2005, given the timeframes suggested for the three generations in Best et al's model outlined earlier. Only three of the studies in the review have defined any outcome measures. Mitton's review also offers a summary of the barriers and facilitators to knowledge exchange:

Table 2.3 Main KTE Barriers and Facilitators

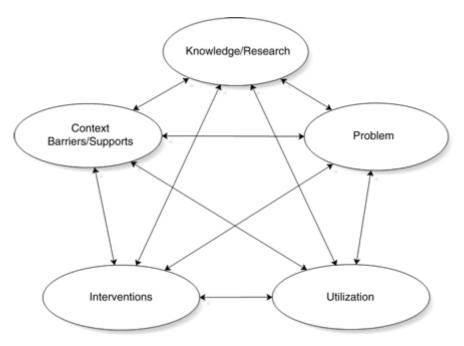
Barriers	Facilitators
Individual	Individual
Lack of experience	Collaborative approaches
Mistrust	Valuing research
Negative attitude to change	Networks
	Trust
	Clear roles and responsibilities
Organisational	Organisational
Unsupportive culture	Support and training
Competing interests	Resources
Lack of incentives	Authority to implement change
Staff turnover	Readiness for change
	Collaboration on research
Communication	Communication
Wrong messenger	Face to face
Information overload	Involvement of users in research cycle
Inaccessible language	Clear translations and policy
No obvious policy or practice implications	recommendations
	Tailored to audience
	Relevant research
	Knowledge brokers
	Championed by opinion leaders
Time and Timing	Time and Timing
Research/policy time-frame differences	Time to make decisions
Limited time for decision making	Includes short-term objectives

(Adapted from Mitton et al. 2007)

There is considerable overlap between the work by Mitton (2007) and earlier work by Walter (2003). These reviews of effectiveness re-emphasise earlier discussion about the importance of translation (from linear models); interaction in the form of face to face discussion and networking (relationship models); and an understanding of the context for research use and the factors in that context, like organisational culture, decision making timeframes and policy constraints, which might enable research use or inhibit it (systems approaches). This clear analysis of barriers and enablers of research use offers pointers to potential units or areas of assessment for research impact, and helps frame any approach to assessing impact.

Ward and colleagues offer a more recent distillation of 63 models and theories into 5 components of the KTE process that are connecting and overlapping, and suggested as a basis for framing empirical studies that could help to develop understanding of the process of knowledge exchange.

Diagram 2.2 Conceptual Framework of the Knowledge Transfer Process (Ward et al. 2009)



This conception of the KTE process chimes with more complex models discussed earlier as it sees knowledge exchange as multi-directional and complex. The framework is offered by the authors as a basis for collecting evidence of the effectiveness of knowledge exchange activities, with the intention that it be refined in order to better understand the relevance of the different components, with a view to creating a practical tool for planning KE interventions. However, without more detail the model is perhaps too general and the multi-directional arrows, whilst suggesting complexity, lack explanatory power. Given that the model is offered as a starting point for the development of further empirical work, and described by the authors as "both analytically and empirically empty" (p163), perhaps both of these criticisms are forgivable. What the model does do is start to consider the

relationships between many parts of a system in which research might be used or knowledge exchange activities might be targeted.

The work outlined above provides a starting point for the consideration of the role of KE activities and strategies in the uptake, use and impact of research, and will be a useful basis for discussion of the processes that lead to impact in the findings presented in subsequent Chapters. Closer integration of researchers and potential users in policy or practice settings emerges in all of the reviews above as one way of improving the use and impact of research. The rest of this section takes a closer look at partnership approaches to research to further explore this theme.

Partnership approaches to research production

There is a body of literature which suggests closer integration of supply and demand for research can be achieved through closer involvement of potential research users, policy-makers, practitioners or local communities, in the production of research. This literature on closer working between academics and research-users, like the wider research-utilisation field, seems to include more reflection than empirical work and calls for more research to understand these approaches (Ross et al. 2003). However, it does explore why working more closely increases research impact, what helps partnership working, and some of the risks and benefits which are important for this PhD project which focuses on exploring a partnership approach to research impact.

There is agreement across the empirical and reflective pieces that bringing researchers and research users into closer relationships to produce research helps to increase the utilisation of that research (Goering et al. 2003; National Audit Office 2003; Armstrong and Alsop 2010). Indeed Walter et al conclude from a systematic review that "A reasonable and robust evidence base supports the use of partnerships as one means of increasing research uptake" (Walter et al. 2003:p58).

Partnerships of this kind are seen to increase knowledge-sharing both ways so that academic partners gain from an increased understanding of practice issues (Denis and Lomas 2003; Golden-Biddle et al. 2003), leading ultimately to the creation of better knowledge (Bartunek et al. 2003). Indeed Jarvis argues that joint research

results in something qualitatively different from what either party could achieve alone (Jarvis 1999). Other reasons for close collaboration include enabling academics to communicate better with others beyond their field, bringing local knowledge into research (Orr and Bennett 2010), or creating a new engaged scholarship with high impact beyond academia (Antonacopoulou 2010). Armstrong and Alsop highlight the more subtle type of impact of co-produced research in changing attitudes and mindsets about engaging in knowledge exchange (Armstrong and Alsop 2010), and Meagher and colleagues (2008) highlight the benefit of enduring connectivity between academics and partners, as a result of collaborating which can deliver future achievements or impacts.

Duijn (2010) and colleagues argue specifically for a co-production model which aims to help address complex public sector projects. Their ideas resonate with Best's third generation model of knowledge to action, in that they suggest both that practitioners take a more reflexive stance and researchers be more action-orientated. They argue that the potential of this closer working is huge:

"Researchers can deliver the analytical competencies that are needed to get a thorough understanding of the problem at hand, whereas practitioners can contribute to the joint reflection by bringing practical knowledge and skills to explore ways for putting the analysis to work in a grounded attempt to keep complex projects on track in their everchanging environments." (Martin 2010:p232)

Variously described as co-production (Duijn et al. 2010; Orr and Bennett 2010), collaboration (Denis and Lomas 2003; Goering et al. 2003; Golden-Biddle et al. 2003; National Audit Office 2003; Armstrong and Alsop 2010; Lunt et al. 2010), or partnership (Walter et al. 2003), reflecting different disciplines rather than tight definitions, there is some lack of clarity about the nature of research partnerships in the literature. For example, Orr and Bennett (2010) in their introduction to a special issue on this topic simply said "This themed issue considers the co-production of research by academic and practitioner communities – in other words what happens when academics and practitioners work together to carry out research" (p199). They used the language of co-production through most of the issue, perhaps reflecting their public management background, with the exception of an article on practitioner research which preferred the term 'collaboration'.

Ross et al (2003) devised a three part typology of the kinds of involvement that coproduction might include, based on an investigation of the experience of health systems managers and health policy-makers' involvement in aspects of research:

- 'formal support'; where decision-makers are not involved carrying out research but endorse and provide legitimacy for it, alongside input on methods development and data management;
- 'responsive audience': where the researcher initiates engagement and facilitates involvement and the decision-maker provides ideas, information and tactical advice; and
- 'integral partner' involvement: where the decision-maker is engaged as a significant partner in the research and helps to shape both the way it is carried out and the outcomes.

However, Denis and Lomas exclude partnerships that are solely for funding or access to research sites from their definition of collaborative research, and expect the involvement of non-researchers in the conduct of research which would exclude two of the categories above (Denis and Lomas 2003). Martin's (2010) five category typology perhaps offers a more nuanced approach, setting out a scale of increased involvement whilst acknowledging issues of both utilisation (increasing with increased involvement) and academic independence (decreasing with increased involvement):

Table 2.4 Modes of Co-production of Research

informant: objects of study or gatekeepers of data sources
recipient: audience for active dissemination of research
endorsers: consulted about priorities and endorse project or programme
commissioners: conceive and initiate studies and select researchers to
gather and analyse data
co-researchers: working alongside researchers at all stages

(adapted from Martin 2010:p214):

In this model informant, recipient and endorser are more akin to usual modes of research rather than co-produced ones, and commissioner is a particular stance of controlling a research project and employing researchers, so also distinct from the conception of joint research outlined here and would be excluded on Denis et al's grounds above. Also this model does not go very far in unpicking the kinds of co-researcher modes which partnerships might engage in.

Practitioner-researcher models of research often stem from social work or other practice-based disciplines and aim to address issues of power (Fuller and Petch 1995; Jarvis 1999; Lunt et al. 2010). Lunt suggests that:

"These broader research approaches attempt to reorder the relations of research production and include action research, collaborative and partnership models, as well as the promotion of practitioner research and reflexive practitioner-based enquiry" (p235).

These models are off the scale within Martin's typology above, where the practitioners themselves carry out research supported by researchers.

Martin's modes of co-production above do highlight a common concern about the problems with close collaboration in terms of pay-off between neutrality and involvement. The concept of the neutral and detached scholar is at odds with much of the literature about increasing the impact of research. It is the antithesis of the engaged scholar model proposed by Best and Holmes (2010), Van de Ven (2006) and

Antonacopoulou (2010), and other literature about action research and practitioner research. O'Hare and colleagues describe walking the "tightrope of co-produced research" (2010:p245) with a tension between the demands for engagement and those of objectivity. Bartunek el al (2003) also highlight the question of whether collaboration creates challenges to producing high quality research and whether close collaboration affects objectivity, although they conclude that this seems to be a concern only for some academics, and that the benefits and rewards of collaboration outweigh the risks.

Other concerns about dealing with political issues, time costs, spaces for collaborative working and how research is interpreted and presented are also often raised:

"The difficulties arise in large part because they are not members of each other's' community of practice. They do not share the same norms regarding scholarship and practice, and they often do not know well how to work with each other in a way that takes these different norms into account. However, steps can be taken to increase the success of this joint work." (Bartunek et al. 2003:65)

Working more closely together then requires the development of trusting relationships, echoing the discussion about relationship models of knowledge to action discussed earlier. The steps that Bartunek and colleagues (2003) refer to include investing time, although the time costs are also highlighted as a challenge in collaboration. Denis and Lomas (2003) suggests we have better solutions for academics in relation to time costs than we do for collaborating non-academic partners.

Benefits beyond the initial impetus to create relevant research are also highlighted as a counter to the challenges described above. Golden-Biddle and colleagues (2003) suggest that the overlap of mutual interests and concerns creates an imperative for partnership which outweighs the pitfalls. Bartunek (2003) and colleagues suggest that richer data and insights can be generated from working with practitioners, creating a more useful research agenda which is both scientifically and practically relevant. This alongside the rewards for academics of funding and publications and increased expertise in research methods for practitioners, adds to the initial aims of increased usefulness of research. Denis emphasises the reciprocal effects of the

processes of knowledge sharing (Denis and Lomas 2003). Macduff and Netting suggest that the meeting of academic and practical skills and knowledge has much to offer in practical and theoretical benefits:

"Practitioners are often able to continue to "practice" while engaging in research; implicit knowledge or habits can be revealed during the research and recorded; and by encouraging discussion between collaborators, there is more fullness of knowledge. Not only is theoretical knowledge revealed, but so, too, is practical reasoning. In addition, the practitioner does not need a full range of skills because the academician has them. Academician and practitioner joint research gains credibility by being more than anecdotal or exclusively theoretical." (2000:p52)

Perhaps unsurprisingly the literature on co-production is on balance more positive than negative about this way of working but what does it add about what makes partnerships successful? Golden-Biddle (2003) and colleagues emphasise mutually beneficial goals and the need to pay attention to the ways partnerships develop and take good care of relationships, with an aim of keeping them equal. Macduff and Netting (2000) suggest that choice is significant, with partnerships leveraged by external funding less likely to be effective. Mutual respect of the distinctive contribution that the scientist and non-scientist bring to the table is also highlighted (Denis and Lomas 2003).

Reflecting discussion elsewhere in this Chapter about research utilisation, Antil and colleagues' (2003) research recognised the role of the context, both political and cultural, as well as the importance of leadership in delivering successful partnerships. Goering and colleagues (2003) echo the importance of context, and emphasise open communication, mutual respect and trust. Interestingly leadership was highlighted as a factor in increasing research utilisation in section 2.2 earlier, and a research-minded organisation would need research minded leaders to create an environment in which learning from research is the norm.

It is clear from this literature that there is much enthusiasm for the potential for partnership working to create channels for impact that do not exist in traditional modes of research production. Whilst concerns exist about independence and politics, the literature sets out some interesting thoughts about the benefits of this way of working. What is lacking is more analysis of the kinds of partnerships that

exist, their range, and a better understanding of the processes that lead to increased impact.

2.4. Concluding thoughts and emerging issues

This Chapter has set out some of the main existing ideas about research use in policy and practice, exploring them within a framework of the development from simple linear ideas towards more complex ones, recognising the role of networks and relationships within those complex understandings. It has looked at the evidence on what helps and hinders the utilisation of research and examined ideas of partnership approaches to research production. This final section looks at how ideas in this Chapter have informed this PhD project.

The conceptual work exploring the nature of research presented here implies a need to understand research use as complex. As the PhD project aimed to explore how research impact occurred, it did not set out with a complexity-informed research methodology, instead it discusses the extent to which complex systems can inform emerging findings about the processes of research utilisation uncovered in this PhD project. In particular, complexity theory stresses the importance of the networks of actors within specific settings and draws attention to the importance of context. Taking this approach implies that the processes of research uptake, and use will lead to unpredictable patterns of impact dependent on these specific contexts and actors. These three concepts from complexity theory: context, relationships and emergence, have informed this PhD project, both through methods, the data analysis and in building a picture of research impact. It is also useful to continue to utilise Best et al's (2010) three generations concept which acknowledges linear and relationship elements within complex systems. These chime with the evidence on KE strategies presented in section 2.2 in terms of the importance of networks and relationships and the need to understand context, and so provide some useful building blocks for analysis of the findings from this PhD study. In particular, approaches to understanding policy-making which acknowledge complexity are picked up later in this PhD when analysing evidence from policy settings. Complexity theory is, however, used with some reservations, including an acknowledgment of the

difficulties taking such an approach implies in terms of practically understanding and assessing a complex process. It has used mainly to inform data analysis in sharpening approaches to networks and context as discussed further in section 4.3 on analytical methods, and as an explanatory tool for understanding the way research impact occurred in this study as discussed in section 6.4.

In this Chapter a nuanced approach to the definition and description of the process of research impact has been developed, setting out **research uptake**, **research use** and **research impact** as distinct but connected processes. This builds on Nutley et al's (2007) ideas that research impact includes changes in awareness of an issue, knowledge and understanding, attitudes perceptions and ideas, as well as policy or practice changes. Distinguishing these elements of the research use process will inform both the methods and analysis of this study.

In addition, allowing for different definitions of impact in different contexts and for different actors seeks to address some of the issues of context that have been raised throughout the literature in this Chapter. The importance of the specific context for research use emerges through a complex systems approach – rather than expecting patterns of research uptake, use and impact to be similar across settings, this project acknowledges the influence of context on research impact (Walter et al. 2005; Mitton et al. 2007) and how this might change over time. The focus will be on investigating the specific contextual factors that led to research impact, and on developing tools for contextual analysis to help frame impact studies, an issue which is further addressed in the discussion of methods for impact assessment in the next Chapter.

The literature raises some interesting ideas about the role of partnership approaches to increasing research impact. Whilst different authors agree that closer working between academics and research users seems to help research impact, there is limited further investigation about why or how this occurs, and some lack of clear definitions of what closer working means. In this thesis the term 'partnership' will be used to reflect the voluntary sector use of the language of closer working and the term used by the players in the project being investigated. This PhD project aims to add to the understanding of partnership approaches to research production through

an exploration of the nature of the partnership approach in this study, and investigation of how partnership is linked to impact.

Whilst the literature is relatively light in empirical work there are some very useful building blocks in terms of understanding what helps and hinders research impact (e.g. Walter et al. 2003; Mitton et al. 2007; Ward et al. 2009). Understanding the enablers and barriers to change set out in the literature will be an important part of building a framework for assessing research impact.

This Chapter has highlighted that there are a large number of models and theories about research utilisation and evidence-based policy and practice. However, there are relatively few empirical offerings in this body of literature. The PhD study presented in this thesis aims to make an offering towards redressing this balance and developing empirically based insights that can help to develop our understanding of how impact occurs. Without any framework for reviewing knowledge exchange or partnership activities there is limited data about the relative efficacy of different approaches. The next Chapter starts to address this through a consideration of the literature on assessing research impact and how this can inform the impact assessment element of this PhD project.

Chapter Three: Approaches to assessing research impact

There is a growing interest in methods to assess the impact of research beyond the academy, particularly fuelled in 2009-2011 by a more explicit interest in this area by funders of research in the UK as outlined in Chapter One. Existing studies and frameworks for assessing research impact help in setting out key challenges and considerations for framing this PhD study. As discussed, research utilisation sits within the messy and complex worlds of policy-making and practice, and this presents challenges for any approach to assessing its effectiveness. The indirect nature of impact, with research being modified or partially used, or influencing the terms of debate over a long period add to these challenges: "the ways in which research affects society are based on complex, iterative, self-reinforcing processes, distributed unequally across research initiatives" (Molas-Galart 2000:p172).

Through an examination of the existing approaches to studies of impact this section investigates methods that have been used for this purpose and discusses methodological challenges and issues, including those of timing, attribution and sampling. It also explores links between approaches to impact assessment and models of research utilisation. Before looking in more detail at such frameworks, it is useful to discuss how research impact assessment might be approached.

In the absence of a coherent body of work on assessing research impact, Nutley et al (2007) set out to explore questions that will help inform impact studies. They emphasise the need to have modest expectations as it is unlikely that such studies will be able to create comprehensive evidence linking research, research use and research impact. They suggest that there is a need to integrate more sophisticated understandings of research use into better studies of research impact, in particular the need to recognise the complexities of research use within any assessment of impact. This implies not only looking for direct policy or practice impacts but being open to exploring other types of impact and to exploring the processes of research uptake, use and impact.

Nutley et al (2007) identify the need to address different stakeholder agendas in developing impact assessments: "their (stakeholder) purposes should inform choices over what and how information in research impact is conceptualised, collected and presented" (p273). Such purposes might include accountability, assessing value for money for the public purse, better understandings of research use and impact, auditing evidence-based policy and practice, or more recently as part of measures to determine the public funding for universities (Donovan 2008). There is a need to be clear about which of these is being assessed and whether the level of focus is at the organisational, programme or project level.

There are three main approaches to impact assessment. Forward tracking studies which start with research and trace forward into policy or practice settings to investigate impact (Molas-Gallart et al. 2000; Nason et al. 2007). Backward tracking approaches analyse a policy or practice setting to explore the use and impact of research (Gabbay and le May 2004; Smith 2007; Jung and Nutley 2008). Evaluations of knowledge exchange initiatives aim to investigate the success of activities aiming to increase the impact of research (van Eerd et al. 2011). Forward tracking approaches are more common but there are issues and limitations of these (Nutley et al. 2007; Donovan 2011). In backward looking studies behaviour can be examined and tracked back to research. Specific interventions such as researcher outreach activity can be assessed. However, this type of assessment raises questions such as whether it will be possible to show impact of specific research projects or programmes (Buxton 2011) and, if so, will this be generalisable. Forward tracking studies rely heavily on the researcher's and research user's own recollections of research use and meet methodological problems that we shall discuss later. Focussing on knowledge exchange activities themselves may only demonstrate immediate uptake and use of research and make it harder to identify impact over any longer time period.

Although other approaches to impact assessment are less common than forward or backward tracking there are some studies that take alternative approaches. Molas-Gallart et al have conducted several studies focusing on user communities (Molas-Gallart et al. 2000; Molas-Gallart and Tang 2011) that are explored in more detail in

section 3.2 below. Gabbay and le May (2004) took an ethnographic approach to looking at research in a general practice setting, and explored ways research was used in two Communities of Practice (Gabbay et al. 2003). Whilst such an ethnographic approach did not intend to offer a framework for assessing impact, and is too intensive and time-consuming to be utilised as a regular method in many cases, data from the study was used to create a model of research-utilisation in clinical practice settings that could inform further impact work. Their resulting work on 'Mindlines' reinforces a view of research utilisation as complex, with many factors influencing practitioner's use of research. The study identifies the processes through which research is joined with other types of knowledge: practice experience, discussion with colleagues, existing knowledge and beliefs. Gabbay and Le May conclude that network-based methods could be more widely employed as a tool for identifying research impact because communities of practice were important in the ways these 'mindlines' were created. Taking approaches that focus on user communities allow for more complex understandings of impact than traditional forward tracking dissemination to impact models (Nutley et al. 2007).

Nutley et al (2007) argue that any approach to assessing impact needs to be underpinned by an appropriate model of research use: "Models are important because they shape and provide means of assessing the appropriateness of different approaches to assessing research impact" (p283). This view has been echoed by others in the field, e.g. (Bell et al. 2011; Brewer 2011; Molas-Gallart and Tang 2011). Indeed those utilising the 'Payback' framework, for example Nason et al (2007), recognise this in their use of the framework to evaluate a programme of work: "(the framework) provides a logic model of the research and dissemination process and a classification scheme for the immediate and wider impacts of research" (pxii). The other frameworks in this Chapter also develop models of research-use.

For the purposes of this study, an interactive model of research use is especially interesting. This approach includes a consideration of research conducted in partnerships with research users, which is the starting point for the PhD project:

"increasingly research impact is not seen as an end-stage activity to be achieved postcompletion. Instead, researchers may seek to engage with those anticipated to be the main users of their research throughout the course of the research process. It is not uncommon therefore for researchers to target user-engagement activities around multiple stages, for example, developing research questions, clarifying the research design, interpreting the research data and communicating the research implications." (Nutley et al 2007:p286)

In this interactive approach, process impacts are important in the early stages – the ways in which research is conducted, communicated and taken up; and outcome impacts in the later ones - the wider utilisation and impact of research. An interactive model also acknowledges the importance of networks as discussed earlier, and of research impact as a process. However, many of the existing frameworks for assessing impact do not do this and focus on traditional research into policy models, especially when they are forward tracking studies (Hanney et al 2003).

There is agreement that it is important to tailor impact assessments to the type of research and focus of that research (Lavis 2003). It might be that a project, programme or centre is the object of assessment, and that different kinds of approaches will be appropriate to each. In addition the user environment for the research is important to consider: "Impact measures need to be fine-tuned for each target audience and both the types of decisions they face and the types of decision making environments in which they live or work." (Lavis et al. 2003:p166)

It is also important to consider what types of impact to include in any assessment and to think about the context for impact, and whether it is actual or potential impacts that are of interest and how these might be bounded. The complex relationship between research use and impact, and the different possible perspectives on impact as outlined in section one, mean that impact may be different for different audiences and purposes and this needs to be reflected in approaches to assessment.

3.1 Frameworks for impact assessment

There are a variety of existing research impact frameworks which have helped to inform this PhD project and form the basis of discussion in this section. Like the literature elsewhere in this field they come from a variety of disciplines (Bell et al. 2011; Donovan 2011). Two of these approaches have been more widely utilised than others (Boaz et al. 2009): the RAPID framework (Court and Young 2004) and the

Payback framework (Buxton et al. 1994). These will be considered first in this Chapter before moving on to consider what other approaches might offer this study.

The RAPID Framework

Court and Young propose an approach that aims to integrate the complex issues of research use into a framework for understanding the processes involved in research impact:

"ODI's (Overseas Development Institute) theoretical, case study and practical work has identified a wide range of inter-related factors, which determine whether research-based and other forms of evidence are likely to be adopted by policymakers and practitioners. These factors can broadly be divided into three overlapping areas: the political context; the evidence; and the links between policy and research communities, within a fourth set of factors: the external context." (Court and Young 2004:p2)

This approach, considering the context, the credibility of evidence, and the ways in which policy and research are linked in communities or networks, allows us to move beyond static one-dimensional ideas of policy-research relationships:

"It (the RAPID framework)...represents the use of research as a dynamic, complex, mediated process which is shaped by formal and informal structures, by multiple actors and bodies of knowledge, and by the relationships and play of power that run through the wider policy context." (Nutley et al 2007:p111)

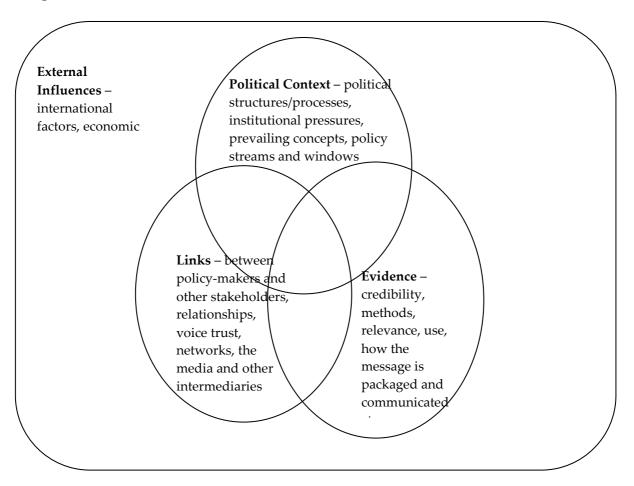


Diagram 3.1 The RAPID Framework

The framework gives shape to impact assessment through three overall research questions focusing on the three spheres set out above, as follows:

- 1. *Policy Context: politics and institutions*: To what extent is the impact of research on policy-making shaped by political and institutional structures, ideological assumptions and development of policy during practice?
- 2. Evidence: credibility and communication: To what extent did local involvement, the quality of research, and communications strategies affect the impact that research had on policy-making in particular areas?

3. *Links: influence and legitimacy*: To what extent is research used more effectively in policy processes if researchers and policy-makers share particular kind of networks and develop chains of legitimacy for particular policy areas?

(Crew and Young 2002:p18)

The framework has a clear model of research utilisation which underpins it, recognising that research is more likely to have impact if it resonates with the research utilisation context, there are networks of researchers and policy-makers, and there is clear communication of legitimate results (Crew and Young 2002). This approach acknowledges the complexity of research use and addresses it in an integrated way, and reflects all of the elements of the three generations approach outlined earlier, acknowledging the importance of translation, the relationships, and the context and wider influences. The framework does not distinguish between research use and impact but instead the authors discuss adequate or inadequate use of research or underuse of research.

A particularly useful element of this approach for the purposes of this PhD study are the contextual analysis tools offered by the RAPID framework, setting out questions for a detailed analysis of the contextual factors influencing the uptake of research.

Table 3.1 RAPID Framework Political Context Analysis

Research Questions	Information required
1.How did the global, national and	Any political, social or economic factors
community-level political, social and	which might have influenced the key
economic structures and interests affect the	decision makers. For example, in the
room for manoeuvre of male and female	planned ODI case studies these might
decision-makers in particular policy areas?	include:
	financial interests of international banks in
	relation to debt cancellation
	• socio-economic interests of vets in blocking
	the liberalisation of regulations
	• impact of local political interests of warring
	factions on food distribution
2.Who shaped the aims and outputs of the	Information about:
research, how and why?	why the research was carried out
	• who commissioned, funded, planned and
	monitored it
	who influenced its aims and outputs
	• the interests of the designers and other
	stakeholders
3. How did assumptions influence policy-	Information about:
making, to what extent were decisions	existing knowledge and values and the
routine, incremental, fundamental or	various actors
emergent, and who supported or resisted	• the old and new ideas underlying decisions
change?	how much new policies threaten the status
	quo
	who supported and resisted the changes
	and how
4. How did applied and academic research	Trace how the policies were developed,
influence the development of policy when	adapted or distorted as they were put into
being put into practice?	practice by, e.g., getting information about
	actions taken and research used, by project
	partners, 'street level bureaucrats', and
	communities

(Crew and Young 2002:Appendix (not numbered))

Although some of these questions are specific to the field of international development, the approach is useful including: consideration of global, national and community-level political social and economic structures; consideration of the particular decision making context and its openness to research; the ways in which research was communicated and reinterpreted; and analysis of the networks and groups influencing the policy agenda. For each of the questions shown in the table above a theoretical basis was identified, drawing on political, organisational and

development literature, giving the model a sound theoretical base. However, the questions are orientated towards analysing the policy context rather than practice or other organisational or community contexts where research might be used, and would need some adaptation to apply more broadly.

The RAPID framework is thorough in terms of drawing on perspectives and understandings of research use from different fields to develop an approach to assess impact. It continues to be used by the Overseas Development Institute today as part of a programme of work seeking "to understand the relationship between research, policy and practice and promoting evidence-informed policy-making" (Davies 2007). However, as can be seen by the depth of the questions for analysing the policy context above, it implies an in-depth and intensive investigation of impact that could be beyond the scope and resources of many projects and which may be challenging. For example, information on "any political, social or economic factors which might have influenced the key decision makers" (my emphasis) could be extensive and difficult to put boundaries around, especially if a large number of decision makers at different levels were involved. The framework does stand out though in its acknowledgement of the policy context for research utilisation and in offering tools for analysis of this.

The HERG 'Payback' Framework

Another useful framework, developed by Buxton et al. (1994), is the 'payback' framework for analysing the impact of health research, developed by the Health Education Research Group (HERG), which has been widely used (Boaz, Grayson et al. 2008). Nason et al. (2007) developed it to evaluate social science research in a study of the impacts of the 'Future of Work' programme on policy-makers - of particular interest to this study as its focus is on the impact of social research on policy. The framework concentrates on categorising impacts into knowledge production, research targeting, informing policy and product development, and sector and societal benefits (Hanney et al. 2003).

Table 3.2 HERG 'Payback' Model

1. Knowledge production

Journal articles; conference presentations; book chapters; research reports

2. Research targeting and capacity building

Sparking new research proposals; providing research training; supporting career advancement

3. 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

The following two categories, as defined for the future of work programme, would be differently defined for different projects. Category 4 appears in the original model as Health Sector Benefits. The sector chosen would relate to the area of research being considered. Societal and economic benefits would be similarly defined to relate to the area being researched.

4. Employment sector benefits

Improved working conditions; higher participation in workforce; more effective regulation

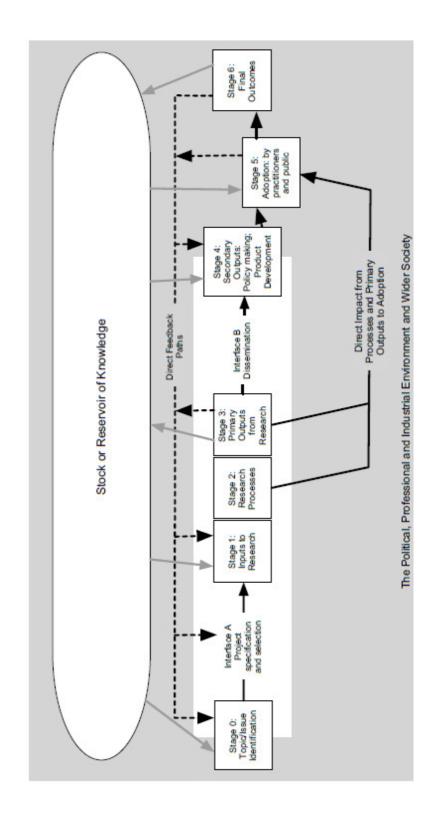
5. Societal and broader economic benefits

Lower stress among workers; improved public health; improved mental health through decreased unemployment; greater productivity; improved equity

Payback model developed by the Health Services Research Group (Buxton et al. 1994). the version presented above was adapted by Nason et al (2007) to apply to social research

A criticism of this approach is that the focus is on types of impact or sectors of impact rather than the processes of impact that have been established in the previous Chapter as important, and there is no acknowledgement of the issue of the time lag between output and impact implicit in the categories above, although this is discussed elsewhere in the Payback literature (Buxton 2011). The categories are presented as discrete, however there might be overlap or transition from one to the next, for example impacts on policy leading to wider social and economic impacts. The first two categories are about academic impacts, which are of no interest to studies using a definition of impact as beyond the academy. However, the framework does set out potential units of assessment and it is underpinned by a model of the research-utilisation process that bears further examination.

Part I: Concepts and Methods



From Hanney (Hanney et al. 2004:p7)

In the model a staged approach is taken to the process of impact, with different types of impact being categorised along the way, thus research outputs through dissemination lead to initial stage 4 outputs, like policy-making and product development, before resulting in stage 5 adoption by practitioners. The model recognises the wider environment and addresses the issues of how impact goes beyond any research project or programme in the development of 'stocks of knowledge'. This idea of a stock of knowledge implies some acknowledgement of the issues of timing, in that research can contribute to this stock of knowledge and be drawn on at a later date. The difficulty of identifying the best time to assess impact is briefly discussed suggesting "a compromise usually has to be made between the quality of records/likely ability of researchers to recall their activities and the selection of grants whose outputs have had sufficiently long to develop" (Hanney et al. 2004:p3). However, further discussion of the time that research might take to have an obvious impact is missing. The model could be criticised for being linear, showing a journey from research towards impact, albeit with a loop back from stage 6 to the early stages of the model, although the authors state that the model "is not meant to imply that the research process is linear" (Donovan and Hanney 2011:p181). This issue of linear representations of research processes for the purpose of impact assessment is further discussed in Chapter Six. In more recent times Buxton and Hanney have described this model as a theory of change (HERG 2011), however whilst it perhaps provides elements of an overall theory of the processes of research use, it does not specifically address change in the way that a theory of change would normally do as it specifies outputs, adoption and final outcomes, rather than emphasising changes in behaviour, attitudes or knowledge or changed actions.

The Payback approach to evaluation concentrates on asking participants from both policy and research communities about self-perceived and self-reported descriptions of impact which has limitations, as arguably all those questioned have an investment in the programme's success. As with the categories presented in the previous table, the model is weighted to the supply side with more emphasis on academic inputs and outputs (stages 0-3) and dissemination (interface B) than on wider non-academic

uses or benefits (stages 4-6). In the examination of the future of work programme using this approach (Nason et al. 2007) adapted the original categories within the payback framework for social science research. This included changing the language from 'benefit' to 'impact'. It was felt that health sector benefits was an accurate term as outcomes were more likely to be positive, and that for broader social science topics the language of 'impact' was more neutral. Files and paperwork relating to the research under investigation were examined and interviews with policy-makers and researchers were carried out but, importantly, policy documents were not included in this study. Nason et al (2007) conclude that the Future of Work Programme had "significant" impact on knowledge and research, public policy and career development of researchers. It was harder to trace impact on the policy and practice of organisations. The environment for policy-making had a great effect on impact. However, the approach was weighted towards interviews with academics rather than users of research, and using this model meant that much of the description was about academic rather than wider societal impacts.

Questions about measures used are relevant here: all impacts were based on self-reported data and were counted equally. Nason et al (2007) recommend the development of measurement approaches to a further level of sophistication, for example with consensus scoring of level of impacts. This would create more nuanced understanding of the nature and extent of any identified impact and allow for better comparison between studies.

In a further paper on understanding research utilisation and impact, the Payback authors (Hanney et al. 2003) consider three levels of policy-making – agenda setting, policy formation and implementation - advocating an examination of the actual role played by research in each of these. This development of the model focused on measuring 'degrees of influence' of research at various stages:

- (i) Consistency of policy with research findings
- (ii) Degree of influence of research on policy agenda setting
- (iii) Degree of influence of research on policy formulation
- (iv) Degree of influence of research on policy implementation.

However, this work does not seem to have been developed in further incarnations of the framework.

Klautzer and colleagues (2011) further discuss their learning from the Payback approach in 2011, concluding that there is a tension between the reliability of data and allowing enough time to pass for impact to occur. They found forward tracking more productive than backward tracking, and added to the consensus on the importance of networks in creating impact. They use the stages of the Payback model to describe the process of impact of specific research, albeit in very general terms.

Both the 'Payback' and RAPID frameworks go some of the way to address the issues raised earlier in this Chapter, in that they acknowledge the complexity of the process of research use and impact, and create measures which aim to explore the outcomes from research in a systematic and extended way. They are also both interesting and unique because they have been utilised by a variety of assessors and in different settings (Boaz et al. 2009). However, as described above, they also both have limitations. Other impact studies are also worth examining to build on this base.

3.2 Other impact studies

Molas-Galart (2000) and colleagues have developed a framework for assessing impact looking at expected outputs, diffusion channels and forms of impact. Initially used to examine the impact from a programme of work on AIDS (Molas-Gallart et al. 2000) it has been extended to investigate a programme of work on business (Molas-Gallart and Tang 2011) and in an FP7 project (Spaapen and van Drooge 2011). This approach has been named the SIAMPI approach ("Social Impact Assessment Methods for research and funding instruments through the study of productive interactions between science and society" (Molas-Gallart and Tang 2011).

SIAMPI interestingly uses a network approach to examine ways in which research outputs reach non-academic users: "In fact the growing interest in 'networks' is grounded in the growing acknowledgement that the generation and application of knowledge is based on personal interrelations" (Molas-Gallart et al. 2000:p175). This network approach builds

on the earlier discussion about understanding research-use as complex, and network approaches clearly have salience with this conception of the research use process. The approach recognises that research-use is a process and that instrumental and easily identifiable impacts often don't occur, instead it sets out to explore the ways in which research users integrate research into decision making. It also acknowledges issues of timing, additionality and sampling raised elsewhere in the impact literature.

This approach is a forward tracking one and aims to create positive utilisation narratives that could be used to assist organisational learning. The focus is on the concept of 'productive interactions' with 'productive' meaning that the interaction leads to efforts by stakeholders to somehow use or apply research results or practical information or experiences (Spaapen and van Drooge 2011). Interactions are mediated through certain 'tracks', e.g. a research publication, an event. Impact follows from this "when productive interactions result in stakeholders doing new things or doing things differently we say that research has had an impact" (Molas-Gallart and Tang 2011:p219). The interactions are categorised as direct, indirect and financial.

The approach results in detailed descriptions of the processes of interaction and how they led to learning and change. Interactions were identified, examined and discussed to build narratives and identify change. Molas-Gallart (2000) concluded that qualitative interviews yielded the most useful material and that these can be conducted by phone, and that a gap of one or two years from the research to the impact study seemed to be a good compromise on timing. They identify limitations of the approach in that the forward tracking nature - from researchers to stakeholders - means that it does not identify stakeholders whom researchers do not already know about. Analysis of internet usage of publications is suggested as a way of creating more data, and Molas-Gallart et al suggest that social network analysis could be useful.

The SIAMPI method does not identify indicators of impact, preferring a focus on processes, however Saapen and van Drooge (2011) use this focus on processes in order to extract indicators that might be more robust forms of social impact assessment.

Table 3.3 Indicators of 'productive interactions' to support the SIAMI approach*

Direct interactions	Face-to-face communications with user communities, clinical and charity professionals, peer groups, administrators or commercial companies Number of researchers holding dual posts Number of memberships of advisory committees
	Number of presentations for lay audiences
Indirect interactions	Contextual Response Analysis (CRA): analysis of uptake of
	electronic outputs (e.g. reports, papers etc)
Financial	Contracts, licences, project grants, sharing of facilities,
interactions	personal sponsorships, travel vouchers.

^{*}taken from (Spaapen and van Drooge 2011)

Indirect interactions were also plotted onto five social spheres: science, communication, government, the health sector, and general. It is not clear how these categories were devised but the graph gives a sense of the reach of the research in these domains. The other categories above may give a starting point for suitable indicators for this approach, although those in 'financial interactions' bear close resemblance to traditional ways of assessing the impact traditional scientific research through commercialisation and may not be of use for much social research. For direct interactions the first indicator is types of stakeholder and disappointingly not types of interaction. The remaining indicators again bear strong resemblance to traditional ways of analysing researchers' activity rather than presenting a new approach. However, Saapen and van Drooge (2011) point out that the aim was not to create a tick box approach but to create a narrative around impact where the aims of the interactions; the context of the research; and the stakeholders involved are more important than any indicators.

Lavis et al (2003) build on their producer push, user pull, linkage and exchange model described earlier to present a proposed impact assessment framework utilising these concepts within the field of health research. Drawing on the literature about research utilisation through five assumptions that underpin the model, Lavis and colleagues suggest that 'impact' be defined as at the intermediate outcome level of research informing decision makers rather than on more final health outcomes. The model defines measures and potential sources of data for process, intermediate

and final outcomes. There are two dimensions: the first defines the target audiences and suggests that impact measures be fine-tuned for each of these. The second dimension defines type of impact based on who is promoting the research: 'producer-push' where researchers promote their research to decision-makers; 'user-pull' where decision makers are looking for research; and 'exchange' mechanisms where the focus is on links between the two. They set out some useful pragmatic pointers to studying impact which include agreeing impact measures within peer groups for similar types of research which would enable comparison. They suggest that case studies offer the most useful data and a mixed method approach is advocated, with researchers ranking the impact on a scale for push, pull and linkage mechanisms. The authors suggest that the tool is best understood as an inventory of impact measures that research organisations select according to the specific study they are conducting.

Whilst Lavis et al's (2003) approach is based on a clear model of linkage and exchange, and sets out both process and outcome measures, it is very much focused on health examples and may be less useful for wider bodies of research or for research where it is more difficult to study the processes of decision making as the relative influence of other factors is higher (e.g. social research where public opinion or values might be as important as evidence in decision making). It also implies being able to easily identify groups of decision makers who are relevant to research which is more likely within health where there are clear hierarchies of decision making from national to local levels, and clear boundaries around responsibilities.

Meagher et al (2008) conducted a multi-method study of ESRC-funded psychology research using a forward tracking methodology. This study looked for evidence of

research using a forward tracking methodology. This study looked for evidence of connectivity between researchers and research users to create proxy indicators of impact. Projects were ranked on a scale from 'engagement with users' to 'exclusively academic approach'. Like the other studies discussed here, multi-methods were successful with interviews giving the most detailed information but wider methods, in this case a survey of award holders, also yielding useful data. Meagher and colleagues' study uses a conceptual framework building on Lavis et al's (2003) work. This aims to highlight the main categories of actors, their roles and the potential

ways in knowledge expertise and influence flow between them. It has been adapted to help frame the flows of knowledge in the partnership research in this PhD study as set out in Chapter Five (Diagram 5.1)

Kuruvilla et al (2006) developed a descriptive model for the impact of health research with four main categories: research related impacts, policy impacts, service impacts and societal impacts. Their objective is to assist researchers describe the impact of their work, enabling them to self-report. The descriptive categories are welldeveloped but again focus on categorising types of impact rather than processes. Several of the categories developed (research related impacts, publications and papers, products and processes, research networks, research leadership and research system management) relate to the academic impact of research and are not relevant here. More relevant categories relate to user involvement, communication, policy impacts, and service impacts but focus on categorising rather than identifying impact, e.g. by the level of policy-making or where service impacts are located rather than what they are. However, their discussion of societal impacts does include consideration of knowledge, attitude and behaviour impacts, before moving into category containers for other kinds of societal impact (e.g. health, equality, etc). The authors suggest that the framework "provides a useful set of descriptive categories to help researchers identify and describe the impact of their work" (p15) that might help researchers think through possible strategies to enhance research use. The description of the potential range of areas of impact does help to develop categories much more widely than the Payback framework and is useful for thinking through potential areas of impact.

One study that moves towards process orientated categories of stakeholders rather than focussing on stakeholder roles is Lyall et al (2012). In this study of agricultural and biological research users are categorised according to their relationship with the research programme. 'Upstream end users' are those who influence the funding and strategy of the research programme; 'collaborators' work with the research team; 'intermediaries' help to channel research; and 'downstream end users' are research users and the public. In this model stakeholders might be in more than one category.

This kind of definition is more helpful in focussing on research-users roles in terms of how impact occurs.

Bell and colleagues (2011) report on 10 exploratory studies of environmental research impact assessment in practice which allow for broad learning about approaches to impact assessment. The studies included had multiple objectives including accountability to funding organisations, improving effectiveness, and learning about impact. This paper draws on Best and Holmes' (2010) three generations concepts, arguing that there is little evidence of systems thinking within the studies, especially in terms of wider interpretations of what constitutes knowledge, use of organisational networks, or acknowledgement of contextual factors that might hinder the process of knowledge to action. Not many of the studies are based on any theory of research utilisation, although one utilises the links and exchanges model described above. This paper outlines key challenges of conducting impact assessment including timing, reliability of data, resource intensity, attribution and the 'Cassandra problem' of identifying the value of advice not taken. However unlike other papers the authors offer some suggested solutions to elements of these. Interestingly, one of the studies included in the review proposes three solutions for attribution problems: the CGIAR study in 2008. This study suggested the identification of a counterfactual in terms of the likely policy outcomes without the research, by asking key informants for their opinion about what would have been expected if the research had not played a part, for example later or different policy decisions. Whilst somewhat subjective, Bell et al (2011) suggest that a minimum requirement of impact studies might be to explore the context in which change occurred and consider the likelihood of other factors also shaping events and outcomes. The study also suggests the use of backward tracking to examine the ways research from different places influenced decisions, although it might be difficult to separate the relative influence of different factors. More robust recording of outputs, dissemination and known policy responses be routinely undertaken by staff is also suggested, so that this data could be made available to independent evaluators to create measures of impact.

In terms of addressing the best time to assess impact, another study in Bell et al's (2011) review suggests a two stage process: firstly that documents and a few key interviews are conducted shortly after project completion. Secondly a workshop is held with key stakeholders once potential benefits are expected to have emerged. However, as Bell et al point out, there might be issues with recall bias or staff turnover. They suggest supplementing this with a less intensive web based questionnaire survey for those not able to attend a workshop.

Bell et all suggest that reliability issues are difficult because of differing levels of engagement with the research, staff changes and informant recall issues. One of the studies in this review used independent consultants along with a matrix tool to help identify potential informants rather than relying solely on the researchers in an attempt to reduce bias. Addressing the question of resource intensity is a recurring theme in the discussion of different approaches to assessing impact. Bell et al (2011) acknowledge the need to balance robustness with cost, suggesting a combination of intense (e.g. interview) and less intense (e.g. web based survey) methods, alongside better documentation of knowledge exchange activities to create more cost effective data for impact analysis.

3.3 Issues in assessing impact

There is broad agreement across the impact assessment literature on the key challenges to assessing the impact of research on policy and practice in terms of challenges of timing, sampling and additionality (Nutley et al. 2007; Boaz et al. 2009; Bell et al. 2011; Donovan 2011; Klautzer et al. 2011). Whilst none of these issues are easily resolved, it is important to take them forward into any study of research impact.

A key issue emerging from the above discussion is the need to focus on understanding the processes of research utilisation, especially given the relatively few empirical studies in this area. Some of the existing frameworks for assessing impact focus on categories of impact rather than processes, and this PhD project aims to develop a more process-focussed understanding as well as a process-orientated method for assessing research impact. The definition and description of **research**

uptake, research use and research impact as separate but connected processes set out in the previous Chapter is an important element of this, creating pointers towards possible ways of categorising and assessing impact.

Existing frameworks for assessing impact set out in this Chapter offer useful starting points for developing approaches to assessing research impact, particularly in paying attention to the purpose of any impact evaluation. However, the task of undertaking an evaluation based on them is large and expensive. For example, the RAPID framework recommends "an historical, contextual and comparative methodology, the aim of which would be to create a narrative of policy continuity and change" (Court and Young 2004:pv) and perhaps not easily done as part of the implementation of a KE strategy but more realistic, like the Payback framework as a funded external evaluation. The work presented in this PhD aims to develop a method, like Kuruvilla's (2006), which could be used by researchers themselves or knowledge exchange practitioners, and following Lyall et al (2012) and Bell et al (2011), aims to create opportunities for ongoing learning and evaluation rather than one-off assessment.

Whilst the existing frameworks offer models of research use and impact, many are focussed on categories of impact, their sector or type, rather than the processes of research uptake, use or impact. What this thesis aims to do is to better understand the detail missing in the current models by drilling down into the processes of interaction, dissemination, policy-making and adoption. In this sense the work here aims to add to the understandings developed by the HERG group by exploring the 'interface B' and the arrows between stages 4, 5 and 6 in their model.

There is general agreement in the utility of a case study approach and, whilst interviews were often the most useful source of information (Molas-Gallart and Tang 2011), mixed methods have been useful particularly in dealing with different timescales, and as a way of identifying research users for further follow-up (Bell et al. 2011; Phipps 2012). Existing research suggests that impact studies will be more successful when they follow cases where there has been some knowledge exchange effort and where research has been used rather than a broad sampling approach (Grant et al. 2000; Donovan 2008; Bell et al. 2011)

Timing of research impact studies remains a challenge, with some pay-off between the reliability of shorter-term recall of participants with the longer term nature of research impacts emerging over time. Molas-Gallart and Tang (2011) propose a gap of 1-2 years between research and evaluation. Bell at al (2011) suggest early documentary analysis with workshop based follow-up after a time lag in order to capture both immediate and intermediate outcomes, perhaps utilising web based methods for later follow-up in order to be more efficient. Meagher et al (2008) suggest that immediate studies would capture short-term and local impacts, with a time lag needed in order to understand long-term and wider impacts.

The issue of attribution is highlighted in several studies and becomes more acute when utilising a complexity-informed approach. In a complex, interactive model of research utilisation, where research findings are incorporated with existing beliefs and understandings, can it ever be reasonable to attribute change to research? Meagher et al (2008) suggest this is further complicated by a difficulty in separating the influence of individual research projects from the researchers that conducted them, with an academic's views, and interaction with research users drawing from their body of work rather than an individual study. In a similar way to Grant et al (2000) and Saapen and van Drooge (2011), the concept of contribution rather than attribution will be developed in the following Chapters, suggesting that research is one factor amongst many influencing outcomes.

Bell and colleagues (2011) suggest that better analysis of context can help illuminate attribution issues. Indeed, understanding the context for research use emerges as important in many of the studies outlined and as a theme throughout this thesis. Bell suggests that complexity-informed approaches which focus on networks and relationships and take account of context will be important for future studies (Bell et al. 2011). Most studies do not offer tools to assess contextual factors, and learning from the RAPID framework, which perhaps offers the most developed approach to this, will be taken forward in this PhD.

Whilst all of the approaches outlined in this Chapter help to provide pointers for framing the impact study outlined in this thesis, none provides an approach

appropriate for the practitioner-led exploratory approach this study takes. Lessons about methodology, timing, attribution and context will, however, be the basis for the development of the approach and will be built on during the rest of this thesis.

Chapter Four: Design and Methods

The challenges of making a clear link between research and broad societal impacts have been well documented as discussed in the previous Chapter (Boaz et al. 2009; Bell et al. 2011; Buxton 2011). When embarking on this research colleagues often commented on the difficulties of undertaking such a study. Despite this the approach has been a 'can do' one – that the need to be able to say more about the impact of social research beyond the academy means exploring ways this might be achieved. A focus on processes and how they led to impact has been useful in framing the approach as discussed in Chapter Two. The need to develop an understanding of these processes in order to link research with outcomes has informed the design and methods. It has been necessary to take an exploratory approach – moving from one piece of evidence to the next, and being open to understanding the processes of impact wherever they occurred.

In this Chapter the research strategy is outlined taking on the issues identified in previous Chapters, and identifying the overall aim and objectives of the project and research questions to be addressed. The overall approach and research questions are presented, along with the research design and the methodology used in this exploratory study.

The idea that research can have an impact on actors or events implies a realist approach (Knight 2002), i.e. that tangible change occurs. The project attempted to uncover the processes and actions that led research to be utilised in a range of settings and the wider impact this might have. This project also recognises that research users are not passive recipients of knowledge but that they engage with research from their own perspectives, and that complex relationships and networks of researchers and research users are often channels through which research is communicated, debated, utilised and developed. This means understanding these perspectives, relationships and networks in order to understand research impact. As a critical realist Archer (1998) sees the processes and mechanisms by which social actors make sense of the world within the complex systems in which they find themselves. Taking a critical realist approach acknowledges that "knowledge claims"

are fallible, the best we can do is improve our interpretations of reality, rather than seek a definitive, finished 'Truth'" (Cruickshank 2003:p2). Within a critical realist approach research use and impact is understood alongside the recognition of the meanings brought to this by actors. This approach informs this PhD project, focusing on exploring research participants' perceptions and interpretations of research impact or documentary reflections of impact.

Building on the definition of research uptake, research use and research impact from the previous Chapter, the processes of the impact of research from an academic-voluntary sector partnership has been explored through a case study. The approach includes attempts to deal with issues of time, forward and backward tracking (from research to impact, and from policy back to research), and retrospective and prospective approaches to assessing impact.

Building on the literature discussed in Chapter Two, there are several overriding issues that form the basis for the research design:

- To have modest expectations about identifying 'impact'
- To link our understanding of research use to impact studies
- To recognise the complexities of research use
- To work with projects where there has been effort to facilitate the use of research in policy
- To try to identify direct policy and practice impacts but to also explore processes of research use
- To recognise the importance of context.

As explained in the rest of this Chapter these issues have informed the PhD research in several ways. The exploratory nature of the study has enabled detailed understanding of processes and exploration of relevant theory. The research has been conducted in two phases, a retrospective case study, followed by the development of a framework for assessing the impact of research.

4.1 Aims, objectives, research questions

The overall aim of this study was to develop a methodology to assess the impact of social research on policy and practice

The research objectives are as follows:

- to *explore* the process of research impact on policy and *describe* what research impact looks like, the social actors involved and their roles in facilitating impact. This will include an exploration of what impact means and an exploration of the different contexts in which impact might be observed, and different actor's perspectives on these.
- To reach a clearer *understanding* of the full range of possible ways it might be claimed that research has had an impact on policy. This is distinct from explanation in Blaikie's (2000) terms as it focuses on the reasons or accounts social actors give for their actions. Understanding is based on an insider's view, and that fits with the practitioner-research approach of this project and the challenges of uncovering impact.
- To *evaluate* the process of research impact and the extent to which the actions aimed at creating research impact have been successful, and to explore methods for evaluating the impact of research on policy and practice.

In order to investigate the above aim and objectives, a main research question and a series of sub-questions have been devised.

Overall research question

The overall question for the PhD project was:

How can the impact of social research on policy and practice be assessed?

The focus here is on understanding how impact might be assessed and on developing a methodology for assessing the impact of research on policy. In order to explore this overall question, the following sub-questions were developed to allow for further exploration out of the issues and processes involved.

Sub-questions

1. What is research impact?

- A: What activities, actions or consequences of a research partnership might be identified as having an impact on policy or practice?
- B: Is research impact different in different settings: local and devolved government, committees and debates, practice and sector settings?
- C: What does research impact mean for researchers, policy-makers and voluntary sector research users in different settings?

2. How does impact occur?

- A: What activities and events lead to research impact?
- B: What is the effect of the context in which research takes place on impact?
- C: What is the effect of changes in this context over time?
- D: What is the relationship between the way research is produced and its impact on policy?

3. How can research impact be assessed?

- A: Can research impact be captured in robust ways?
- B: What are the appropriate methods for assessing impact in local and devolved policy contexts?
- C: What data should be collected to assess research impact?
- D: How and when should data be collected?
- E: What is the effect of assessing impact at different times?
- F: Are different methods required for assessing short-term and long-term impact?
- G Who might be the appropriate person to assess impact?

These questions allow for the exploration of process and outcome. They link context, the way research is produced and actions to increase the uptake of research with

assessment of impact. These issues have been framed in a practitioner-led, actionorientated, research project as outlined below.

4.2 Outline of Research Design

This section outlines the overall approach of this research project, taking an exploratory approach to developing understanding of research impact. The benefits and challenges inherent in this approach will be discussed. This section picks up on the issues identified through the literature and sets out a design that attempts to address the areas which are key to studies of this kind, including those of timing, sampling, reflexivity and additionality.

Practitioner- research

My approach was as a practitioner- researcher exploring the process of research impact on policy. The development of a better understanding of the impact of research, and piloting methods to explore impact, has an action-research flavour to it, although this was not an action-research project per se. The first phase resembled a more traditional research project, and the second phase having more of an action-research element.

However, some elements of action research orientation help frame the approach for a number of reasons. According to Denscombe (1998), there are four defining characteristics of action research:

- It is practical and deals with real world issues, usually work or organisational.
- Change is an integral part of this approach, particularly to address a problem or to learn more about something.
- It is cyclical, with findings generating possibilities for change that then can be implemented. (see also Knight 2002; Barbour 2008)
- Practitioners are seen as a crucial part of the process: "To accord with the spirit of action research the researcher needs to investigate his or her own practices with a view to altering these in a beneficial way" (Denscombe 1998:59)

Knight (2002) suggests that action research is often small scale and carried out by practitioners with an aim of making a difference: "It can hardly be called objective, and it is often a passionate matter for the researcher, who may bring to it considerable commitment, energy and spikiness" (p37). This research project is clearly attached to my professional role and embedded within an organisation which provides the rationale and starting point for the investigation. It is important to consider the advantages and disadvantages this has brought. In some ways my personal commitment to the research topic is no different from many academics, and undertaking this research in middle age means that I bring twenty years of professional experience in linked policy and practice sectors to the PhD project.

The practical orientation of this project, its role in change, and the advantages of insider status bring with them positive and helpful resources and perspectives. However, as Barbour (2008)suggests "This type of research is particularly demanding, especially as it requires practitioners to step back from their occupational roles and take a critical look at their own taken-for-granted assumptions" (p169). Denscombe (1998) elaborates this point, considering the advantages the insider can bring to research in terms of their privileged insight into how things work, reminds practitioner researchers of the need to be able to stand back and understand the meanings that they are involved in creating.

The need for a reflexive approach is clear, and is an important component of this study as discussed in the following section, but my role as insider is an integral and essential part of this investigation. Yin (2009) suggests that case study researchers need to have a thorough understanding of the issues they investigate in order to respond to the interaction between investigation and theoretical insights. My deep understanding of the organisational constraints and opportunities, my participation in the partnership, and my knowledge of the policy and practice worlds where respondents are based has helped me to build a picture of the processes of research impact. CRFR as an organisation, with its particular orientation to research use and impact, is also an important component of this study as discussed in the choice of case study selection.

Other challenges of practitioner-research that are relevant to this project include: that it is necessarily limited in scope and scale; that it does not allow for the manipulation of variables; that ethical issues may be hidden by professional access to respondents and documents; and that there might be ownership issues within research partnerships (Denscombe 1998). The first two of these challenges are addressed through the research design and are integral to it, the second two through adopting a reflexive approach and consideration of ethical issues as described below.

There are some complexities of levels of meaning in my approach as action-orientated and practitioner-based. Usually practitioner-led action research takes place in settings like schools, community projects and social work departments, in this study the site of action is the university itself and relevant policy and practice arenas. Within this project there is research about research, and also an action-orientated approach to research in a setting where action research is usually theorised rather than carried out. This creates a need to be clear about definitions, to include literature from parallel fields, and to communicate the purpose of the study to potential participants clearly.

A reflexive approach

Choosing to work with cases with which I have a personal involvement has presented opportunities and posed challenges. My knowledge of the work and access to documents and people brings increased access to data, personal commitment, knowledge and interest, and is a key feature of the practitioner research orientation of this project. However I could be seen to have a vested interest in identifying positive policy influence of research I have been involved in promoting, although a focus on understanding the processes of research utilisation as well as impacts helped to tackle this. My existing relationships with some informants gave a starting point to my interaction with them which was different from usual researcher-researched relationships, and the experience of interaction with me for this PhD project will also be taken into my future relationship with them. In particular issues of confidentiality might be raised, although as this is not a particularly sensitive area these have not been an overriding concern with most

respondents being happy to be identified with what they said at interview. Meyer (1993) identifies that the practitioner-researcher never has a clear boundary around fieldwork that other researchers have, and I experienced this in the study with some interviews drifting into other conversations about work. However, being based in a research environment (rather than a traditional practice setting) meant that most interviewees had a good understanding of the nature of social research, and were able and willing to enter into the research process in a professional way.

My perceived objectivity in relation to this work is partly addressed through the practitioner-researcher frame, however Bondi adds a helpful perspective in arguing that, holding up objectivity as an ideal state in opposition to emotionality is a false dichotomy as all research encounters are rich with emotion, and 'objectivity' is also an emotional standpoint. It is our task to develop reflexive approaches that allow us to analyse this as part of the research process (Bondi 2005).

Developing this work as a practitioner-researcher has also allowed for piloting the use of impact assessment from the perspective of someone working to increase the use of research. Within this PhD project I have experienced the process of trying to track the impacts of research in a similar way that researchers or knowledge exchange professionals who might use the method will experience. The model developed here is for impact assessment to be carried out as part of a process of research and evaluation, rather than a separate external assessment. My role as a practitioner-research means I have been able to understand some of the benefits and pitfalls of that approach.

In addressing these issues a number of practical steps have been taken. In my Masters year I took a course on reflexivity which helped shape my approach to both data collection and analysis, as well as my overall orientation to the project as a practitioner-researcher. Following each interview I wrote up a fieldwork diary and reflected on my role as practitioner-researcher in relation to the interview process and data and some of this data was used in the analysis. In reality my relationship with interviewees varied depending on the informants involved. Some were people with whom I have long-standing professional relationships, for example the project

partners and my colleagues at CRFR, some were people with whom I have had various interactions during my professional life. Others I had never met but had a strong attachment to the research we had produced so had a particular view of me and my role, particularly with the second sub-case 'sexual health'. Sometimes I felt interviewees were trying to say the right thing (i.e. that they had used the research) because they knew of my link with the research and they felt that in their professional role they should know about it and use it - co-operational bias in Gomm's terms (2008). These dimensions have been taken into account during the analysis of the interview data and are further discussed in section 4.3 which looks in more detail at data collection and analytical methods. In some ways these issues are particular to this project and my role; in others they are similar to any research in that individual respondents will react differently to the interviewer based on issues such as gender, age and personal disposition (Bryman 2004).

However, I have taken caution from Pillow (2003) who warns against using reflexivity as a tick box: something we can say we have done to remove personal bias. She suggests that reflexivity should always "leave us in the uncomfortable realities of doing engaged qualitative research" (p193). In this sense I have reflected on and utilised my role as both practitioner and researcher to develop understandings of the processes of impact in this context, while staying aware of the implications of my dual role throughout the project. This has meant paying attention to and acknowledging these issues when they arose in conducting the research, analysis and write-up to ensure a robust approach.

Qualitative approach

Following other work in this area, and in keeping with the practitioner research approach and the focus on developing a methodology, the approach in this study was qualitative. Within the complex area of research utilisation a purely quantitative approach seems to be inappropriate, indeed, the social science research funding council in the UK recently reviewed across several impact studies and concluded that "a qualitative approach to impact assessment based on robust conceptual models allows for an evaluation of impact processes and contexts" (ESRC 2009:16). In existing research impact

studies some quantitative elements have been incorporated such as counting research outputs, bibliometrics or citation analysis, (Lavis et al. 2003; Boaz et al. 2009); but on their own they offer a limited picture of the impact from research. Wooding and colleagues have developed a survey based approach to assessing the impact of arthritis research allowing for quantitative analysis by asking respondents to rank impact on a scale (Mullen 2005). As the main focus for this PhD project was on exploring processes, qualitative enquiry was better suited to the task. In Creswell's (1994) terms the study fits with the assumptions about qualitative approaches in a number of ways. It investigated how the actors involved make sense of the issues of research use, both from research producer and research user's perspectives; the processes, meanings and understandings that can be gained from looking at this issue in a descriptive way; and built up concepts and theories from these details. Morse suggests a qualitative approach is appropriate when:

"(a) the concept is immature, due to conspicuous lack of theory and previous research; (b) a notion that the available theory may be inaccurate, inappropriate, incorrect or biased; (c) a need exists to explore and describe the phenomena and to develop theory; or (d) the nature of the phenomenon may not be suited to quantitative measures." (Morse 1991:p120)

There is limited existing research on assessing research impact in the social sciences, and it is a new and emerging area. The existing theory on research utilisation is underdeveloped and the theory on policy-making offers limited pointers for a methodology for impact assessment. There are few studies of this kind and so there is a need to explore and describe the phenomena which is clearly not suited to solely quantitative measures.

Case study method

The learning from existing impact studies as outlined in Chapter Three pointed towards the use of case study as the most appropriate method for investigating the impact of social research (ESRC 2009). A case study approach seemed appropriate here for a number of reasons.

Using a case study enabled an approach which sees the process of research utilisation as complex in that it is dynamic, non-linear and indeterminate as previously

discussed in Chapter Two. Anderson et al (2005) suggest that case studies may be particularly useful in developing an understanding of a complex phenomenon. A case study approach allowed for exploration of the complexity of research uptake, use and impact, with a focus on process as well as outcome. To address the research questions 'what is research impact' and 'how does impact occur' a case study enabled the uniqueness of the particular projects in the study to be explored. This could then be built on to develop theoretical generalisations to address the research question 'how can impact be assessed'. In keeping with the exploratory nature of the study, a case study approach allowed for theory building from the data or 'theory-after' in Creswell's (1998) terms.

The choice of projects from my own work was integral to the approach of this project. As discussed, CRFR has been at the forefront of developing work on increasing research use with the aim of increasing impact, making these particular examples unusual, in the extent to which engagement with research users has been attempted, and interesting in the extent to which this has been successful. Following Gomm et al (2000), the choice of CRFR for a case study makes sense in that it is investigating atypical cases which represent the 'leading edge' of change. In Stake's terms the focus on CRFR as a case was appropriate in two ways: intrinsically – it can be used to develop better understanding of the particular case; and instrumentally – it can help to provide insight into the issue of research use and research impact (Stake 2000).

As discussed earlier, research impact assessments are best suited to work where attempts have been made to increase or open up ways in which research might be used by non-academic audiences (Nutley et al. 2007), so choosing studies which are linked to knowledge exchange work is important.

Choice of case study

As a research centre, CRFR's approach has been to open up research agendas to non-academic agencies, through dialogue and partnership. Part of the rationale for this is that researchers can benefit from interaction with non-academic partners as much as policy-makers and practitioners can benefit from involvement in research. One

aspect of this is partnership research with non-academic agencies, as discussed in Chapter Two. Another aspect has been to develop relationships with policy-makers and government analysts over time which create channels of communication, and sometimes lead to research projects and other research related activity. Both of these approaches reflect the interactive model of research use as defined by Weiss (1977) and outlined earlier (in section 2.2).

Some consideration was given to whether the project should include one or two case studies. A list of potential case studies was drawn up from projects at CRFR (see appendix A). The potential for using two case studies to build a "collective case study" as described by Stake (Stake 1998) was considered. This would also allow for comparison of two contrasting projects. However there were concerns about feasibility of two case studies within the scope of this project.

In deliberating over the number of case studies, a number of factors were considered. Two case studies would offer the opportunity to try methods of impact assessment in contrasting settings, but because the chosen case study contained two sub cases in contrasting policy areas it was felt that there would be enough comparison within the single case. Similarly, although two case studies might offer a wider range of timescales for comparison, the chosen case which encompassed nine years with two distinct research projects within that timescale was considered to offer an adequate range of comparison. Whilst two case studies might offer a wider range of informants and views, there was a danger of drowning in data.

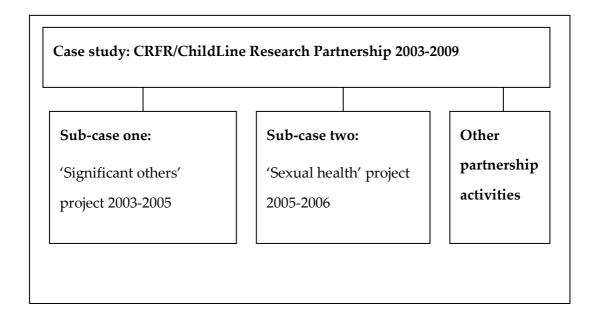
For these reasons a single case study containing sub-cases as detailed in Diagram 4.1 was chosen. A single case study approach is also justifiable in this case as this case study represents an unusual approach to research use (Yin 2009), and it can help look at the theory that research impact can be increased by partnership approaches.

The case study in this PhD project is a series of research projects carried out in partnership between CRFR and a voluntary organisation. It is interesting as it explores a partnership model outlined in Chapter Two. The PhD research explores the impact from this partnership and builds on this in order to develop a framework

for capturing impact which has been refined through feedback from practitioners working in a variety of research projects.

As presented in the diagram below, the case study examined the CRFR/ChildLine Partnership from 2003-2009. Within this partnership there were two funded partnership research projects: 'Children's concerns about significant others' funded by the ESRC in 2003; and 'Children's concerns about sexual health' funded by the Scottish Executive in 2005. These two discrete projects form two sub-cases within this study and are referred to as Project One: 'significant others' and Project Two: 'sexual health'. In addition to the funded research projects, the partnership had a development phase leading to the first funding and has conducted some other activities as described in Chapter Five. The diagram below illustrates the shape of the overall case study and the elements for analysis within that, i.e. the partnership, the two sub-cases, and other activities developed by the partnership within the timeframe of the case study.

Diagram 4.1 Embedded case studies within a single case



Sampling

The choice of case study and practitioner research approach does not attempt to produce a representative sample nor reflect the impact of CRFR as a centre. Research

impact is acknowledged as fractured and difficult to trace, so it is pragmatic to follow examples where there is suggestion of impact (Nutley et al. 2007). There is agreement across the research impact literature that straightforward sampling techniques are not appropriate for selecting cases to study research impact (Grant et al. 2000; Donovan 2008; Meagher et al. 2008). Scofield provides a useful injection of practicality in relation to sampling:

"The idea of sampling from a population of sites in order to generalise to the target population is simply and obviously unworkable in all but the rarest situations for qualitative researchers who often take several years to produce an intensive case study of one or a very small number of sites." (Scofield 2000:p74)

The case study was designed to provide material for developing a methodology for assessing the impact of research. Within the practitioner-research approach sampling is not relevant as the possibilities for research are necessarily constrained by the practitioner's professional interests, role and organisational setting.

In order to choose possible cases, a list of seven potential case studies that I have been involved in as a practitioner at CRFR was drawn up. There is not space to reproduce this in full within the word limit but a summary has been set out in Appendix A. The possible case studies considered all had related knowledge exchange activities to communicate research to and interact with non-academic research users.

The case study chosen had advantages in containing sub-cases. The sub-cases allow for some comparison of different settings and timescales, and for investigation of impact at different levels of policy and practice. Building an understanding of processes of impact from one case study generating feedback from professionals in other settings increases the generalisability of the findings. Rich thick description allows readers to make decisions about transferability (Cresswell 1998, Knight 2002).

Scope of study

The context for this study is the specific CRFR/ChildLine partnership and the impact of the research findings from this partnership on policy and practice in Scotland. This is mainly because all of the activities to increase impact carried out by the partnership were directed at Scottish government, Scottish Local authority and

Scottish practice levels. In order to be open to other impacts beyond what was planned some attempts were made to uncover impact at UK level but these were unsuccessful as discussed in Chapter Five.

There was the opportunity to look both at forward tracking (from research to policy) and backward tracking (from policy to research) impact, and indeed the relationships between these. Both policy and practice impacts have been tracked in the forward-looking elements of this project where the exploratory nature of the research meant openness to any impact, be it on policy or practice settings. One area of unanticipated impact was on the practice of the partner organisation.

For the backward tracking element of the study a single policy topic was identified as the unit of analysis. This was the development of an alcohol policy at the Scottish Government (formerly Executive) which was chosen for a number of reasons. Knowledge exchange activities to increase the impact of research had been directed at the Scottish government. Findings within the first project, 'significant others', had covered several topics but those relevant to alcohol policy had been highlighted in communication about the research by the research team and subsequently by the press. This particular policy area was interesting because key policy change occurred more than four years after the publication of the research so it allowed for exploration of the processes of impact over this longer timeframe. Feasibility scoping for the backward tracking element of the research also pointed towards investigating alcohol policy as it was a discrete and manageable policy area.

It is hard to create clear boundaries around such a study which does not have a physical setting and needs to be open to exploring impacts wherever they occur. Wells et al (2002) grappled with similar issues in their study of schools and concluded that boundaries need not be predefined but can follow the theoretical framework and the information from initial interviews. In this case the method of tracing impact meant that actors who had used the research from different sectors, settings and geographical locations were drawn into the case study as it progressed. The case cannot be defined fully in advance but is constructed as research progresses (Alexanderson et al. 2009).

Other considerations in study choice

The research production mode, whether the research was commissioned, funded independently, or conducted through a research partnership in each example, was considered with a view to being able to link this to any impacts (see section 1.3). As set out in Chapter Two, there is much discussion of the ways in which co-producing research may help to influence impact. The study chosen is particularly interesting as it allows for the exploration of a partnership mode of research and the ways the partnership might facilitate impact. The voluntary sector partners were full members of the research team and were included in the initial discussions, design, funding application, and analysis of data. They also presented findings at conferences and seminars.

Timing is a key issue in identifying impact and needs to be carefully considered (Molas-Gallart et al. 2000; Nason et al. 2007). Some research may have an immediate impact whereas on other occasions impact may take years. If impact assessments are too early they may not identify any impact, if too late it may be hard for informants to remember the relevant study, programme or policy process. Some potential cases were unsuitable because of the long length of time since completion or because they had not been completed long enough to allow for retrospective analysis. A long-term ongoing partnership allowed for retrospective analysis over various timeframes going back 9 years but with key events 3 and 4 years ago and the identification of ongoing impacts from different aspects of the work.

The relevant data for the case study was available and access to key informants was facilitated by ongoing relationships with them. The case strongly reflected CRFR's approach to working with research users in an ongoing and interactive way, creating networks of potential research users. It involved the arenas of policy at local government and Scottish government levels and allowed for a comparison of the networks of academics and voluntary sector partners in the project, and for consideration of the impact of individual research projects within the case study.

Table 4.1 Research Partnership case overview

1. Research Production Mode	Partnership with voluntary organisation
2. Timing	Retrospective 2002-2007 with possible
	concurrent phase
3. Policy arenas	Scottish Executive, Scottish Local Authorities,
	Health Boards, Practitioners in health and
	education
4. Distinctive Features	Co-production model with voluntary
	organisation full member of research team
	from start
5. KE effort	Conferences for policy-makers and
	practitioners
	Briefings published and circulated
	Evidence presented to committee
	Letters to local authorities
	Press work
	Presented to practitioner conferences
6. Access to data	Documents available through CRFR and with
	permission of voluntary organisation. Local
	authority data may be harder to access
7. Access to key informants	Through voluntary organisation, CRFR,
	further leads and survey
8. Scope	Defined partnership consisting of two main
	sub-cases and potential further work
9. Risks	Time lag
	Election and change of government since
	most work completed
	Lack of access to local authority processes
	Lack of response from local authorities
	Changes in personnel at government, local
	authorities, voluntary organisation
	Lack of identifiable impact

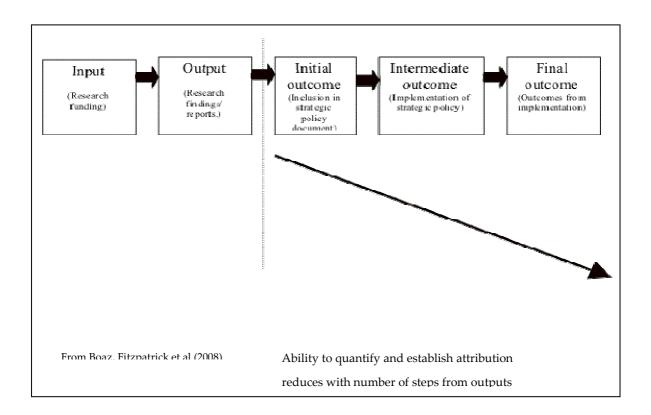
It is important to study impact where there have been efforts to get research into policy or practice arenas as previously discussed, and there were various Knowledge Exchange activities planned and carried out to facilitate the use of research in the case study as detailed in Table 4.1. In choosing case studies a consideration of the relative risks of suitable data being available was carried out as set out in Appendix A. All studies carried risks and this in itself did not point to one study over others. The study chosen does of course carry risks, for example, that access to data would be affected by the time lag, since some of the work had been completed before the

election and change of administration in the Scottish government. However, overall these risks were considered manageable in the overall scope of the project.

Additionality and evaluation

It is very difficult to assess the distinct contribution that research has made to policy within the complex world of policy or practice where there are many actors and influences on the process. There are two issues here: how to trace research and attribute change to it, and how to assess the contribution research made to a process (what would have happened without it). Boaz et al (2009) identify the issue of losing attribution the further away from the original research you move.

Diagram 4.2 Evaluating impact: attribution



Being able to identify that research was used in many policy or practice contexts will be difficult as it is taken up, used and adapted within specific settings. In further Chapters this dilemma is developed through a discussion of the issues of immediate and wider impacts and in relation to how the processes by which people use, rework and learn from research before policy or practice change might be observed.

Nason et al's (2007) address additionality in their evaluation, by asking policy-makers and researchers their views on what would have been different without the project, and this self-reporting is a common approach. Molas-Gallart et al (2000) suggest that it is necessary to find a baseline against which to measure the 'additional' contribution of the research. In their work networks were mapped before and after the research was carried out, and informants were asked to assess the additional contribution they thought the research had made. Bell et al (2011) report on an approach which asked key informants what would have been expected without the research.

Self-reporting of this nature to address either attribution or additionality has its limitations. Disturbingly, Drummond et al (1997) found that both medical and pharmaceutical advisers claim to have seen and altered advice based on studies which were fictitious inventions of the evaluators. This was a potential issue in this PhD project, particularly in work with policy-makers whose performance indicators include the use of research. The risk was that informants might report what they feel they should say or what they would like to believe they do, especially given my own involvement in the research and that many of them will be required to use research in their particular roles.

The extent of this co-operative bias (Gomm 2008) has been considered in the data analysis and number of approaches have been taken to try to minimise this. Rather than focusing solely on identifying specific uses and impacts of research interviews explored the processes and the meanings that actors bring to the ways in which research is used in policy and practice contexts. The case study built on initial interviews with key actors to develop existing models of research impact.

Informants were asked to review draft case study reports to help build internal validity (Yin 2009). Where self-reported uses or impacts of research seemed vague they were treated with caution in the analysis. Where possible, data have been sought from more than one source to provide additional validity to claims of research use and impact as discussed below. In the instances where strong impacts were identified there were opportunities for this kind of triangulation, as discussed in Chapters Four and Five.

Combining methods and validity

In keeping with case study approaches, multiple methods have been employed in order to address the research questions. Bearing in mind the scale of this study, data were generated to address specific questions from different sources so that more than one perspective on the same processes was available, for example, an interview might cover the same ground as documents available from the Scottish Parliament. Whilst it might be tempting to claim that multi-methods offer internal validity through triangulation, both Blaikie (2000) and Knight (2002) caution against such a simplistic approach. In a project which seeks to explore the meanings that different actors bring to ideas about research impact, and that takes a practitioner-researcher perspective, triangulation may not be appropriate. Blaikie (2000) suggests that "the introduction of judgement to settle the matter of convergence or divergence makes the test of validity far more tenuous than the originators of triangulation intended" (p267). Perhaps more useful here is Rossman and Wilson's (2011) concepts of corroboration, elaboration and initiation. Corroboration refers to the traditional idea of triangulation, where different data confirm a single view, elaboration describes where variations in data, perhaps reflecting differing perspectives, can open-up understanding of what is being studied, and initiation describes instances where non-corroboration of data provokes new interpretations and even new research questions or areas for new research. (Blaikie 2000:p267)

Other ways of addressing validity have included a pilot phase for different aspects of data collection in the research project, and checking recorded data with participants to ensure it reflects their views as previously described (Knight 2002).

Ethics

The subject of this project did not involve the collection of personal information or working with vulnerable populations. Level one ethics clearance in accordance with University of Edinburgh regulations was obtained as set out in Appendix B. All of the proposed participants were professionals with an interest in research and can be judged to be able to give informed consent and were not vulnerable nor was the topic area likely to cause distress. Consideration of research subject confidentiality,

which was developed as part of the consent procedures for each interview, was complicated because some participants would be recognisable from their organisational position, particularly CRFR and ChildLine staff. To deal with this, participants agreed how they and their organisation would be attributed in any reporting of the research, and all who might be recognisable from their position were happy for their organisation to be identifiable, and signed the consent form on this basis. Data was handled in line with regulations as described below.

The ethical regulations required a consideration of issues of conflict of interest, as a practitioner research project carried out by a member of staff of the University, alongside issues about my role as researcher and access to documentary evidence.

In terms of conflict of interest, the project is embedded within my role as a knowledge exchange practitioner and this involves financial recompense for my work. However, this is integral to the orientation of this project as practitioner research. Throughout the process I have been open about the research aspects of my work so that these are not hidden or disguised (Denscombe 1998). Permission was obtained before using any documents to which I have access through work.

Descriptions of other's work were negotiated and the operation of the project was open to discussion at CRFR's Co-Director team meetings, although there were only rare occasions when this was necessary. One of the supervisors of the PhD research was a CRFR Co-Director to increase the transparency of the work within CRFR and to advise on conflict of interest issues.

The role of context

Contextual analysis is important in case study research and particularly in this area where the policy and practice context has such an effect on the potential impact of research (Boaz et al. 2008). Context has emerged as a key theme in this PhD project and is discussed throughout this thesis.

Research needs to be placed within a context of local, national, and supra-national policy facilitating the identification of policy arenas in which the work might impact. Contextual analysis allows for some assessment of whether the research is timely and fits in with potential policy domains at particular times and could feed into current

debate, or alternatively if it is outside existing trends and therefore the potential impact would be less direct. The role of research findings which may challenge or confirm existing policy beliefs also needs to be considered, facilitating the potential uses of the research in terms of political, tactical or enlightenment (Weiss 1979).

Court and Young's (2004) RAPID framework includes analysing the policy context by investigating politics and institutions from both policy and research arenas. They suggest consideration of global, national and community-level political, social and economic structures, analysis of policy-makers' preferences for route, incremental, fundamental or emergent approaches to policy change, and ways in which applied and academic research influenced the development of policy.

How context can be understood and framed within an impact study remains one of the main challenges. For one of the sub-cases there were so many potential policy arenas that were relevant to the research project that contextual analysis of them all would be infeasible. Key informants were asked to comment on aspects of the policy context in relation to the ways they had utilised research. Other contextual analysis includes full descriptions of the partner organisations involved, the timing of the work and the key features of the cases studied. The background and context for the case study was examined using files of research team meetings and knowledge exchange activities, and supporting and extending these through interviews.

As discussed throughout this PhD, context was not always easy to analyse and played a larger role in both the potential impact and the timing issues of the research in this study than originally anticipated. Analysing discrete policy areas was, of course, easier than where research addressed cross-cutting issues and this is also reflected in the impact achieved. In the case of Project Two: 'sexual health', there was a clearer policy domain than with Project One: 'significant others', and analysis of this area was helpful in understanding routes to impact as set out in Chapter Five.

4.3 Data Collection

Case studies necessarily imply a mixed methods approach (Stake 2000). The case study was approached initially using partnership documentary data and initial

interviews which identified sources for further exploration in relation to research use and impact. This exploratory approach sought to identify possible impacts from the research wherever they occurred. Some elements of this process were akin to grounded theory where initial findings led to the development of concepts and areas for further investigation (Dey 1999). Consideration was given to approaches in keeping with my role as practitioner-researcher and which sought to utilise the benefits of this stance, whilst acknowledging and minimising the challenges.

The table below presents the elements of the case study and the methods for data collection, setting out the forward and backward tracking components and the initial and further data collection phases. The numbers denote the number of interviews or respondents to each element of the study.

Table 4.2 Overview of case study data collected

	Level	Initial data collection	Further data collection (no
		(no of responses)	of responses)
Forward tracking methods	Partnership data	Initial interviews with partners (3)	Follow up interviews(4) Documentary analysis Second interviews with partners (1)
	Project One: 'significant others'	Local authority survey (18) Follow-up of conference/seminar participants (email and telephone interview) (3)	Follow-up local authority interviews (4)
	Project Two: 'sexual health'	Conference attendees survey (8) Follow up of attendees at sexual health annual conference (10) Advert in sexual health newsletter	Follow-up interviews (2) Follow-up interview (1)
tracking	Partnership	Google searches	Documentary analysis (6)
Backward tracking	Project One: significant others	Search of relevant policy areas	Documentary analysis Interviews (2)

The case study was designed to address all of the research questions, along with the building a framework to assess research impact in phase two. A range of data collection methods were employed in order to achieve this, along with comparison of elements of the case study as set out below

Table 4.3 Research questions linked to methods

Research questions	Methods
1. What is research impact?	T1
A: What activities, actions or consequences of a research partnership might be identified as having an impact on policy or practice?	Identify impacts of research within case study through all methods
B: Is research impact different in different settings: local	Policy analysis
and devolved government, committees and debates, practice and sector settings?	Comparison of elements of case study Analyse context of case studies
	through documentary analysis and interviews Local government survey
C: What does research impact mean for researchers, policy-	Interviews
makers and voluntary sector research users in different	Documentary analysis
settings?	Workshop
	Local government survey
	,
2. How does impact occur?	71 46
A: What activities and events lead to research impact?	Identify processes leading to impact through all methods
B: What is the effect of the context in which research takes	Policy analysis, interviews,
place on impact?	documentary analysis of policy
	documents, local government survey.
C: What is the effect of changes in this context over time?	Comparison of contexts over time during case study
D: What is the relationship between the way research is produced and its impact on policy?	Comparison of phase one and two of case study.
3. How can research impact be assessed?	case study.
A: Can research impact be captured in robust ways?	Develop impact assessment framework and seek feedback
B: What are the appropriate methods for assessing impact in local and devolved policy contexts?	Use of methods in case study to be developed for trial in pilot phase
C: What data should be collected to assess research impact?	Collection of available data in phase one and exploration of feasibility of data collection through interviews and phase two
D: How and when should data be collected?	Compare different time scales of projects within case study. Compare with phase two 'immediate' assessment.
E: What is the effect of assessing impact at different times?	Analyse effect of data above
F: Are different methods required for assessing short term	Utilise above to identify short and
and long term impact? G: Who might be the appropriate person to assess impact?	Iong term methods Analysis of my role as practitioner- investigator. Possibly pilot framework with other practitioners?

In this single case study, most interviews were with research users and most of the data gathering and analysis focused on what happened as a consequence of the partnership, and the possible impacts. Much of the data was collected through subsequent interviews with agencies involved in implementing actions based on the research, or thorough documentary analysis of committee meetings in policy contexts. A case study protocol was developed at the start identifying methods, data access and storage, the analytical framework and core questions.

Topic Guide

Appendix C outlines the main topic guide for collecting data through questioning research participants, gathering data via a survey and documentary analysis. There were differences in the way the questions were approached for different categories of interviewees, methods and data as set out in Appendix D. However the main areas of exploration were common across the case study based on the research questions. Some questions were only relevant for the partnership level and these are marked with a 'p'.

Interviews

Approaches to interviewing which fitted with the practitioner-researcher nature of this research project were explored and the possibility of participatory interview techniques considered. These emphasise the shared experience of researcher and interviewee and take the form of a conversation around shared topics rather than a question and answer approach (Ellis and Berger 2003). Participatory interviews in the literature usually involve topics that are very sensitive and the approach is a way of opening up dialogue. However, on further reflection, although there was shared experience and knowledge between some of the interviewees and myself, the focus of the research was on their perceptions and experiences rather than my own, or our shared ones. Gubrium and Holstien's (2003) approach to active interviews seemed more appropriate as it acknowledged the site of the interview as "a social encounter in which knowledge is constructed" (p68) in which "both parties to the interview are

necessarily and unavoidably active" (their emphasis p68). Common to both of these approaches is an emphasis on the meanings that actors themselves bring to the interview table. This, alongside the idea of identifying impacts wherever they occurred, reinforced the need for a semi or light structured approach to interviews (Knight 2002). The initial interviews with colleagues who were members of the research team with whom I worked closely had more elements of a participatory interview - as we pieced together our memories of some of the activities we have been involved in. Even these interviews though, focussed more on the participant than on constructing shared meanings. Follow-on interviews were on the whole with people with whom I had no previous connection, and where the interviews followed a more conventional question/answer format. For both types of interview a fieldwork diary recorded reflections immediately after each interview to enhance reflexivity. These included reflections of the interview process, reflections on the success or otherwise of the interview approach, and on my role as a practitioner-researcher and in some cases, known person to the interviewee. In particular issues about cooperational bias were considered as part of this reflection, as well as reflecting on my own role as a practitioner-researcher with a professional interest in the ways research from CRFR had been utilised. Data from the fieldwork diary enhanced reflexivity during analysis as detailed in the analytical methods section.

The sampling issues for interviews were different from many research projects in that a purposive or theoretical sample was necessary to address the research questions within this design (Silverman 2001; Bryman 2004). Interviews were in three phases starting with key interviewees (the project partners) who helped to outline the activities of the partnership and to identify research users. These research users were followed up, along with others who had taken part in activities related to the research (conferences, seminars etc) or were potential research users identified through backward tracking. Some elements of this process resembled a 'snowball' interview technique where often one research user would identify others who were then followed up (Knight 2002). The process through which this was carried out aimed to trial different approaches to following up research users as part of the research question 'how can impact be assessed' and is further discussed in Chapter

Eight. Finally one of the project partners was re-interviewed towards the end of the project to check emerging understandings.

All research user interviewees are referred to according to their sector (e.g. Health Improvement Officer), and/or role (e.g. Director of SHAAP) each has been given a unique identifier from 1 to 12 (See appendix F for a full description). Due to the significance of the context for research use, and the very specific organisational factors shaping interviewee's role and actions it was not always sensible to create highly anonymised descriptions. Being able to identify research users by sector and /or role is key to understanding the processes of research use, and this meant that some of them would be identifiable (e.g. the Head of Alcohol Policy in the Scottish Government). Where interviewees are identifiable from the description of their role (e.g. the Director of SHAAP) their attribution has been agreed with them as part of their consent to take part in this study. Research partners are described by role and all consented to being identifiable

Interviews explored the ways in which research had been used and how impact occurred in the different settings. Interviewees were responding in their professional capacity and it was not necessary to collate personal data beyond role and organisation. Interviews therefore focussed mainly on issues of research use and impact, and on understanding the contextual factors for impact, with an emphasis on process. Some interviews were conducted face to face and some via telephone. It was felt that telephone interviews were appropriate in that they did not require a big time commitment from busy professionals, and that the content of the interview was focussed on reflection and feedback on practical work processes, rather than emotional or personal issues. Irvine (2011 forthcoming) suggests that telephone interviews can be just as effective as face to face ones. Interviews were transcribed.

Initial interviews focused on the following areas:

- The development and sustaining of the partnership
- Benefits and disadvantages of partnership working
- Networks of policy and practice contacts of the main players

- Perceptions of key impacts of the research and their timing
- Perceptions of key successes and failures of impact
- Context for the research
- Opportunities for collecting data on impact

Based on these initial interviews and the contextual analysis, further interviews were conducted with research users identified in consultation with the key interviewees. These included practitioners who were involved in knowledge exchange and dissemination activities, ChildLine Scotland contacts who were known to have utilised the research, local authority personnel who had used the research and other research users identified during the life of the project. Attempts to interview policy-makers involved in a sexual health strategy group at the Scottish Parliament where Project Two: 'significant others' had been presented were largely unsuccessful. Those contacted did not initially respond to emails and when chased up could not recall much about the research. The focus for follow-up interviews was

- Interviewees' orientations to research use and impact
- Uses of the research by informants
- Factors facilitating or hindering the use of research
- The context for research use
- Identifying a timeline for when research was used

A key interviewee from ChildLine Scotland was re-interviewed towards the end of the data collection phase to review the evidence and discuss the adequacy of the frameworks for capturing perceived impact. The initial interview was in 2009 and follow-up in 2011. This also allowed for checking of the validity of the accounts developed and feedback to the participant about the findings of the research through discussion of the identified impacts of the research. This was important to ChildLine Scotland in terms of their learning and ongoing development.

Trialling methods

Part of the purpose of this research project was to explore the feasibility of assessing the impact of research, including cost. Various methods of follow up were piloted for their effectiveness during this study and when possible different approaches were taken with similar audiences. Participants in conferences and seminars that were held to discuss the research findings were followed up by email and phone and asked to give data via interview or survey methods. Attendees at an annual conference of one practitioner group where the research had been previously presented were approached to get feedback on the impact of the research. The local authority survey included a range of methods to assess effectiveness. The time spent on different methods was also analysed with a view to developing pragmatic and feasible assessment methods for use in the framework. An assessment and further discussion of these is presented in Chapter Eight.

Local authority survey

A local authority survey was carried out in order to follow up potential impacts from the partnership research. The partnership activities had included sending letters to Directors of Education and Social Work in each of the 32 Scottish local authorities to draw their attention to the implications of the research. An exploratory exercise to follow these was undertaken, bearing in mind that the time elapsed since this action which included an election might make tracing impact challenging: initial letters for Project One: 'significant others' had been sent in 2005, and for Project Two: 'sexual health' in 2007. A survey was seen as the most appropriate method for this as it was feasible to contact all 32 authorities this way. It would allow local authorities to identify relevant personnel to respond within each authority who could then be followed up via telephone interview. It built on work by Percy Smith looking at how local authorities use research (Percy-Smith et al. 2002). Questions were developed from this previous work including categories for research use for example (see Appendix G). The survey explored how research was utilised within the local authority in general, as well as specific questions about utilisation of the CRFR/ChildLine partnership research.

A draft survey was piloted by a member of the local authorities' research network and changes made to questions following this input. All Directors of Education and Social Work were contacted (N=64) and this was done by 50% email and 50% letter, as part of the piloting research methods to understand how to assess impact. They were asked to complete a survey and return it by fax, email, letter or online. 18 completed surveys were collected from which 4 follow-up interviews were conducted. While this response rate is low, it was adequate in that it sought to understand the process of research use and explore this method of follow-up. Responses from the survey are included in the discussion in Chapters Five and Six, and the challenges of using such a method are discussed in Chapter Eight.

Documentary analysis

There are two main phases of documentary analysis in this study: background documents from the partnership, and policy documents for the backward tracking element of the study. Partnership documents, such as the funding application proposals, reports, dissemination plans and event records, were used as general context setting but also analysed early on in the PhD research for references to identifiable impact. Through this a timeline of the research partnership events and activities was developed as a basis for initial interviews. The policy and practice implications of the project were analysed in order to inform the backward tracking element of the PhD research, and to help with contextual analysis of the partnership and sub-cases.

The briefings from both research projects in the case study contain clear policy and practice recommendations. These were analysed to identify lists of key ideas which might be possible to trace into policy (see appendix E).

In order to make this a feasible task, three areas were scoped as potential areas for investigation based on the information from initial analysis. Child Protection, Alcohol and Sex Education Policy all had resonance with several areas of the research and indications that there had been uptake of the research. Alcohol policy was chosen because it was a manageable size (initial Child Protection searches returned too many documents) and allowed for analysis over a longer time from

initial publication of research in 2005- 2010. There were some key alcohol documents (e.g. alcohol strategy), mostly more recent, alongside a larger body of documents relating to drugs and alcohol. The issue of children affected by alcohol use is quite tightly defined and it was considered more feasible to trace ideas about this through the documents to the current strategy.

There are many approaches to policy analysis (Fischer 2003). A content analysis approach was been taken, informed by the work of (Stone 2002) and Kingdon (1995) in identifying the role of ideas in the development of policy as discussed below. Building on the experiences of a former student (Smith) full-blown discourse or other intensive forms of policy analysis do not elicit the way that research is used in policy development any better than a content analysis. The policy document analysis concentrated on documents at the Scottish Level as this was where knowledge exchange efforts had been directed. Initial documents were collected using the search facility of the Scottish Government and Parliament websites. The relevance and coverage of these documents was checked with interviewees who were expert in the field. The process of analysis included a combination of electronic and traditional methods. Analysis of policy documents was undertaken at two levels. Each document was analysed in relation to its orientation to research use in general and research evidence in particular. How research was described within the document was analysed and the extent to which each document identified primary research, and the type of research was noted. Following this it was examined for key ideas which reflected the CRFR/CLS partnership research findings, using strings of key words, as well as for specific references to the research findings reports. A policy document relating to alcohol published prior to the launch of the research in 2005 was analysed to identify the extent to which similar ideas might have been current prior to the research and to provide a baseline. Analysis was done in two phases: by reading the relevant documents and then electronic searches for key words and references. Electronic searches included the terms 'children', 'young people', 'research', 'evidence', as well as searches for references to ChildLine or CRFR. Content analysis through reading the documents focussed on how children and young people were portrayed within the policy documents and how research and

evidence were constructed, discussed and used. Follow-up interviews were conducted with identified research users who had knowledge of the development of alcohol policy to check emerging understanding and develop a deeper knowledge of process.

Development of framework to assess impact

Following emerging understandings from the case study, and taking an approach to understanding impact which acknowledges complexity, a framework for understanding and describing research impact was developed using contribution analysis; this is fully described in Chapter Seven. The framework was developed and explored with 11 knowledge exchange practitioners and researchers from around the University of Edinburgh who volunteered to help refine it and reflect on its usefulness. Their reflections were used to develop the model and emerging understanding of research use and impact. Individual interviews were conducted with each person participating in this excercise and an evaluative workshop was held, recorded and transcribed to capture their perspectives on using the framework.

Further refining of methods for assessing the impact of research has been undertaken through workshops and part of my role at CRFR, and is a work in progress.

Analytical methods

As an exploratory study seeking better understandings of the processes of research impacting on policy and practice, it was necessary to learn from and build on each element of data collection in order to trace and understand impact. For example, the initial interview with one of the partners identified various areas where she thought impact might have occurred. Further exploration of these led to further interviews. Trialling methods and rethinking the processes of impact was carried out in an iterative way, allowing learning from the data and diversion to areas that emerged as significant, as common in qualitative approaches (Eisenhardt 2002; Richards 2005)

As the study progressed and the picture of impact built up, complex systems approaches informed the development of the study. Following Anderson et al (2005) data was analysed with a focus on understanding interdependencies and

interactions, describing patterns as well as events, and shifting the foreground and background issues. The importance of relationships and networks was included in the analysis as discussed in Chapters Five and Six.

Interviews were recorded and transcribed within a few days of being conducted. Reflections on the interview and my relationship with the interviewee and the interactions were completed after each interview in a fieldwork diary. Reflections in the fieldwork diary provided another level of data allowing analysis of my own role in events leading to research utilisation, and ensuring reflections on my role as practitioner-researcher were included in the analysis of the data. This included consideration of the relationship between my role as a practitioner and researcher and the data provided by interviewees. The process of transcribing and reflection allowed further ideas about the study, data collection, and emerging themes to be developed. Reflections on the efficacy of different methods trialled were included in the reflections.

Where interviews took place with partnership players, they could respond from three levels: as individuals, for their organisation, and for the partnership. For interviewees' outwith the partnership, individual and organisation levels of analysis are relevant. The table below sets out the areas for exploration at each of these levels (adapted from Yin 2009).

Table 4.4 Levels of analysis

	From individual	From organisation	From Partnership
About individual	Individual attitudes, behaviour, beliefs	Individual's roles in organisations	Individual's roles in partnership
About organisation	How organisation works, why organisation works	Aims, objectives, policies protocols of organisation	Organisational roles in partnership, divisions of responsibilities
About partnership	How partnership works Why specific activities	Organisational configuration and support of partnership. Organisational benefits of partnership working	Partnership aims, activities, outcomes

These levels of analysis allow for differentiation between elements within the case study and have been used as a framework for analysing aspects of the data.

Initial, broad, conceptual coding followed the themes from the initial literature review, with issues of timing, context and attribution being flagged up, as well as unpicking the relationship between research uptake, research use and research impact. Policy and practice implications as identified within the research documents were also coded to allow for later identification, whilst remaining open to unexpected impacts. As ideas were developed and a framework emerged further coding reflected this and allowed for linkage between different data sources.

NVIVO software was utilised to manage files, timelines and coding. Data from both the local authority survey and web based follow-up of conference participants was imported into NVIVO and analysed within the process described above. In addition, the local authority survey was collated and analysed using the online interface Survey Monkey¹, and themes were drawn out from this.

Initially documentary, interview and other data was coded in NVIVO in three ways: using the research questions, the continuum of research use presented in Chapter Two (Figure 2.1), and coding other issues as they emerged from the data. These were built into wider categories from the data as new understandings of the issues and processes emerged. As themes emerged they were tested against the data across sources to identify inconsistencies and counter-arguments. . Each data source was coded as the project developed, and recoding to reflect new categories and themes was carried out on sources previously coded. Using the categories along the conceptual-instrumental scale including changes in awareness, knowledge and understanding, and policy and practice changes following Nutley et al (2007) allowed for initial analysis of types of uses and impacts of research. This led to the differentiation of research uptake, use and impact as outlined in Chapter Two, and the coding was modified to reflect this. Respondents were coded according to sector to allow for some limited comparison of perspectives. In particular, respondents' orientation to research was coded to build up a picture of these different perspectives as reflected in the discussion in Section 5.3. Initial interest in the role of timing, networks and contexts had led to coding of these elements but this was sharpened as ideas from complexity theory were developed, particularly through the inclusion of ideas of emergence as discussed in Chapter Six. The elements of the coding scheme discussed in this section are presented in Appendix K.

4.4 Conclusions

This study took an exploratory approach to understanding the processes of research impact on policy and practice through an in-depth case study, followed by the development of a framework to help assess research impact. There were many challenges in designing and conducting such a study. A case study approach was seen as the appropriate method to uncover processes and to develop thick

¹ www.surveymonkey.com

descriptions to develop our understanding of research uptake, use and impact. The case study chosen contained two main sub-cases allowing for some comparison across different policy realms and timescales. A qualitative approach allowed for a deep understanding of the phenomenon under study allowing an exploration of routes to impact as they emerged from the data.

As a practitioner-researcher my understanding of the contexts in which impact occurs and the various and diverse roles that informants played added to the study but I have also been careful to analyse my role in the project through a reflexive approach, and through methods which recognise my role as an active researcher. These included extensive consideration of interview approaches, the completion and analysis of a reflexive fieldwork diary, and consideration of the implications for cooperational bias. Data from the fieldwork diary was a useful tool during analysis in enhancing reflexivity and keeping these issues in focus as analysis progressed to ensure the robustness of this approach. Ethical issues were acknowledged and accounted for in the analytical procedures.

One of the challenges of this study is the cross-disciplinary nature of relevant literature and approaches. My initial analysis of the literature had highlighted the potential for using a complex systems approach and this has developed throughout the project as an emerging analytical tool and theoretical approach appropriate for understanding research uptake, use and impact. Having not started out with this approach, the study was not designed with this framework in mind but it has been used to develop my emerging understandings of the issues in keeping with the exploratory nature of the study and other case study approaches (Creswell 1994; Eisenhardt 2002). In particular, concepts from complexity theory in relation to networks, the importance of context and the idea of emergence have been important in the analytical process.

Part II: Understanding Research Impact

Chapter Five: What is research impact?

Chapters Five and Six set out some of the findings from the PhD Research through an exploration of research impact. This Chapter focuses on identifying research impact, addressing the question 'what is research impact' whilst the next focuses on processes leading to impact, addressing the question 'how does impact occur'. Over the two Chapters the full picture of the impacts from the CRFR/CLS partnership are set out.

This Chapter considers the case study presented in this thesis in more detail and describes the elements of the study, discussing why it is a suitable vehicle for the exploration of the utilisation of research, with the specific aim of exploring research questions 1 and 2: what is research impact, and how does it occur? This Chapter considers the research uses and impacts identified from the CRFR/CLS partnership research exploring the sub-question: what activities, actions or consequences of a research partnership might be identified as having instrumental or conceptual impacts? The relationship between the partnership and impact is explored, and different actor's orientations to research impact set out.

The ideas presented so far in this thesis of a nuanced understanding of research uptake, research use and research impact have been built on as a picture of impact emerged from the case study findings. As described in Chapter Two, an approach with similarities to grounded theory meant that understandings of research use and impact emerged through the data over time.

5.1 Case study of CRFR/ChildLine research partnership

The research partnership between CRFR and ChildLine Scotland was selected as an interesting case through which to study research impact by the process outlined in Chapter Four. This section sets out the approach and activities of the research partnership, in particular why the case study enabled exploration of the research

questions, 'what is research impact'; and 'how does research impact occur' which are the focus of this and the following Chapter.

Background to case study

The case study was based on a partnership between ChildLine Scotland (CLS), a national telephone helpline for children and young people, and the Centre for Research on Families and Relationships (CRFR) a university-based research centre. The partnership started in 2001 and carries on to the present day. The main activities have been two funded research projects and the preparation of a third funded project.

Table 5.1 Main Partnership Activities

Phase	Project	Funder	Dates
1	Development phase		2001-2003
2	Children's Concerns about the health and wellbeing of significant others Project One 'significant others'	ESRC small grant	2003 - 2005
3	Children and young people's concerns about their sexual health and wellbeing Project Two: 'sexual health'	Scottish Executive	2005-2006 (launch 2007)
4	Children and Risk	ESRC application	2008-present – delayed application due to staffing/organisational issues

The partnership can be divided into four phases: the development phase, Project One: 'significant others', Project Two: 'sexual health', and the ongoing collaboration. Each phase feeds into the development of the partnership and continued joint activities.

Development phase

Personnel from ChildLine Scotland (CLS) and CRFR initially met not long after the launch of CRFR in 2001 with a view to developing some collaborative research. However, initial conversations about research utilising the ChildLine call database had previously taken place between a CRFR Director and the Director of ChildLine who had an existing working relationship. The establishment of CRFR seems to have been a catalyst to meet and pursue joint research interests. The rationale for getting involved in research was different for the research and voluntary sector partners. The then Director of ChildLine was interviewed for this project and explained her reasons for developing joint research as a way of building on earlier collaboration, and promoting her agenda in relation to work already done by ChildLine Scotland in analysing their own data.

"I can't remember what triggered it at the launch [of CRFR] but there was stuff that was said at the launch that made me think, and it was to do with finding out more about children and their families and relationships and research ... and obviously I'd been involved with bits and pieces before But part of it to be honest was my frustration that we had done a huge amount of analysis of stuff that was coming out of ChildLine about what children say, etc ...but somehow it was never given the same kind of credence as maybe a sample of 20 people that had gone through a formal research process." (Director, ChildLine)

ChildLine were keen to pursue research that utilised their database of thousands of calls children made to their telephone helpline, in order to publicise issues emerging from practice in a way that would increase the legitimacy of their own research into the calls coming into their organisation. CRFR were keen to pursue collaborative research with the voluntary sector that would meet the organisations aims to:

'Produce high quality, collaborative and inclusive research relevant to key issues in families and relationships and make research more accessible for use by policy-makers, practitioners, research participants, academics and the wider public.' (CRFR Website 2010)

The CRFR Director involved was interested in exploring the database as it represented the views of children and young people motivated to call a helpline with their own problems and issues rather than these being sought by a research team. This was a strong theme in the application to the ESRC: the content of the ChildLine calls included issues that would be very difficult to research in other ways, and

which the children and young people themselves define and bring to the table. The fact the research represents these self-identified views of children and young people has been an important factor in the way the research was subsequently used, and was picked up by several research users as an important factor in achieving impact.

The partnership spent a year developing a proposal. A grant was awarded in autumn 2002 and a researcher was appointed to carry out the study and took up post in February 2003. The research team consisted of the researcher, a senior researcher in the form of one of the Co-Directors of CRFR, CRFR's Research Liaison Manager [myself], and two ChildLine staff, their Director, and a newly appointed Policy Officer. Partners from the academic team and voluntary organisation were fully involved in the research team, including looking at emerging data, discussing findings, and writing reports. The knowledge exchange activities around the research were also conducted collaboratively.

In both projects the idea that impact should occur was central to the partnership's aims, and user engagement activities were planned from the start and reviewed during implementation to ensure effectiveness. This clear link between research and user engagement activities and dissemination made it much more likely that it would be possible to identify impacts from the research. This quote, taken from the application to the ESRC for funding for Project One: 'significant others', illustrates this approach.

'Dissemination is a key aspect of this proposal, and the plans for the outputs of the project include targeted specific briefings aimed at relevant groups, involving children and young people in discussing the findings, a conference to draw out the implications for various groups of practitioners and policy-makers. In addition to this there will be academic articles submitted to relevant journals. Both ChildLine and CRFR will utilise this process to develop strategies to promote the voices of children and young people, and to model inclusive dissemination practice.' (From original application to ESRC for Project One: 'significant others')

Most of the material in this PhD research investigates the uptake, use and impact following from the two main research projects and their associated user engagement activities carried out by the partnership, and allows for some comparison between the contexts for research use, projects, and the time elapsed since they were completed. It is helpful to outline the basic activities of each project before moving

on to discuss how they have been used in a variety of settings and any subsequent impacts.

Project One: 'Significant Others'

The overall aim of the study was to explore the concerns children themselves identify in relation to the health and well-being of parents and significant others. The objectives were:

- a) to analyse the range and content of 11-15 year olds calls to ChildLine Scotland in relation the issues above;
- b) to examine in depth the reports of 11-15 year olds regarding these concerns and the impact on their lives;
- c) to maximise insight into children's self-identified concerns about the health and well-being of parents and significant others by fully utilising ChildLine Scotland's unique database; and
- d) to ensure effective dissemination of findings into policy and practice through an integrated and targeted dissemination plan.

A 'dissemination strategy' (this was the terminology used at the time) was developed which was reported in full in the report to the ESRC. There was a combination of face-to-face interactions and targeted messages disseminated to policy-makers and practitioners.

- Children and young people were involved in discussion of the implications
 of the findings through activities with a children's participation agency (The
 Children's Parliament), and these views were disseminated alongside the
 findings.
- A seminar aimed at practitioners to draw out implications for practice, and again these discussions were utilised in further dissemination, some of those taking part have been followed up in the case study.
- A research briefing was produced aiming to make the research accessible and this was used in the other activities below
- A launch event with a target audience of key policy decision makers from local and central government, alongside a successful media campaign to open up further audiences. Some of these attendees have also been followed up.
- Due to a disappointing turnout from local government further targeted work was aimed at them in the form of letters and findings sent to all directors of education and social work of Scottish local authorities.

An in-house seminar and discussion with Scottish Executive representatives

This extensive dissemination programme went beyond what was usual for ESRC grants, particularly at the time, and was commented on by the ESRC as outstanding in their final evaluation of the grant. There is clear evidence of research uptake in this programme: 41 people attended the practitioner seminar, 500 copies of the briefing were distributed, 46 people attended the launch event, and around 15 people were at the in-house seminar and discussion with the Scottish Executive. Potential research users in different sectors were interested in the research findings. What the PhD research investigated then was the relationship between this uptake and further research use and impact.

Project Two: 'Sexual Health'

As a result of the successful partnership through Project One there was a desire from both CRFR and CLS to pursue further issues raised by the research, in particular some of the issues in relation to sexual health, including abuse. The policy climate at the time included a high profile and controversial sexual health strategy at Scottish level. One of the research team, the Policy Officer from ChildLine Scotland, was involved in policy influencing activities related to this area, and was a member of the Scottish Parliament's Cross Party Group on Sexual Health which sought to increase understanding of sexual health issues. Through her professional contacts, she was able to identify and secure funding for a further one-year project to investigate children and young people's calls to ChildLine about sexual health issues. Policymakers were particularly interested in the nature of calls to ChildLine Scotland because, as discussed in relation to Project One, they were seen as representing the self-identified concerns of children and young people – that is, children and young people call about whatever they wish to discuss as opposed to being questioned by researchers on a pre-set agenda. This was seen as particularly useful in relation to sexual health issues which are difficult to research as they touch on embarrassing, sensitive and taboo subjects. The funding was secured in 2005 and the research took one year supported by a research fellow.

This project had research questions relating to sexual health and well-being but was framed in terms of the need for policy to be based on sound evidence:

'In order that the Sexual Health Strategy for Scotland and associated initiatives are effectively implemented, more information is needed about children and young people's own views, concerns and experiences regarding their sexual health and well-being.'

(Final report from Project Two: 4)

The project was completed and raised some challenging findings about sexual health, sexual abuse and young people's lack of good information about sexual matters and their rights. It was returned to the Scottish Executive in early 2007 but a long delay occurred before it was disseminated, possibly because the sexual health strategy was the subject of high profile controversy in the press and parliament.

Eventually the findings were launched in November 2007 and a range of user engagement activities carried out.

- A short accessible research briefing was produced and made available on both agencies' websites, sent to relevant stakeholders, and given to seminar participants.
- Young people were involved in disseminating findings, this time through ChildLine Scotland in the form of a drama presented at a seminar.
- Young people's drama was made into a DVD for further use in practice.
- There was some further work disseminating the findings to specialist audiences interested in sex education through conferences and meetings.
- Presentation to the Cross Party Group on Sexual Health.
- A launch seminar for policy-makers and practitioners was held with associated press work.

Again here evidence of uptake of research can be seen: 114 potential research users participated in the launch conference, and the research was presented to a further 100 practitioners at a conference for a network of sexual health workers. The briefing was widely distributed and there was uptake in the press of the research. Again this PhD project aimed to build on this evidence of uptake to explore specific uses and impacts of this research, to examine the different ways impact occurs in different settings, and to explore what impact meant for different research users. It also allowed for further exploration of where impact had not occurred and to use this to improve understanding of the process of research impact. It elicited data about how impact can be assessed by trialling different approaches and methods.

Chapter Four established this case study as appropriate for exploring impact as there were activities to increase the use of research, anecdotal evidence about research utilisation, and as a partnership research project it allowed for further investigation of the processes of partnership in relation to research impact. There is clear evidence of uptake of the research but the extent to which this had led to research being used or wider impacts was unknown. A range of uses of the research and impacts from the research were identified through this PhD project, as well as detailed information about the processes through which research is used.

5.2 Identifying impacts of CRFR/CLS Partnership research

Through the mixed methods employed within this PhD research many uses and impacts from the research carried out by the CRFR/CLS partnership were identified. This section sets out some of those uses and impacts whilst the next Chapter looks in more detail at how they occurred. It is not possible to say the extent to which this covers all of the impacts from the partnership as the process of tracing impact is difficult and fractured. In some areas where there had been more activities utilising the research it was possible to feel that new interviews and data collected were confirming the picture of impact rather than adding new insights (saturation in Richard's (2005) terms), particularly in the use of the research from Project Two: 'Sexual Health' in the West of Scotland. Uncovering impacts was affected by issues of time, memory of participants and luck in being able to trace people, find references to the research, and follow through on leads. Indeed as I was drafting this Chapter in February 2011, I received a health promotion booklet in my daughter's schoolbag about children and alcohol from the Scottish government which makes reference to calls to ChildLine on the topic of their parents' drinking. This seems a use of the research and could contribute to wide-ranging impacts if sent to thousands of parents in Scotland. However, the way I found out about it illustrates the unpredictable and complex ways in which research is used, re-used and integrated into various fields and debates which are at the heart of the challenge in tracing and assessing impact.

However, as stated in Chapter Four, the approach has been a 'can do' one. It may not be possible to assess the total impact of any research, programme or project but it is feasible to assess some of the uptake, use and impact of research, and demonstrate its contribution to wider societal issues. In this section some of the emerging impacts from the research partnership between CRFR and ChildLine Scotland are discussed, before focusing on some of the specific uses and impacts of research from each of the two main research projects conducted by the partnership.

Tracing impacts from Project One: 'significant others'

Evidence of research uptake, use and impact of Project One: 'significant others' was traced initially through the forward tracking component of this study, and then was enhanced through the backward tracking element: looking at alcohol policy. There have been difficulties in the time lapse between the completion of the research in 2005 and the follow-up research in this PhD (from 2008-2010). These are mainly memory issues for participants in recalling their engagement with the research, uses of it, and possible impact but also include difficulties in tracing those engaged with knowledge exchange activities. However, there has also been an advantage in this delay, allowing the longer-term impact on alcohol policy to be investigated through the backward tracking element of this study which would not have been obvious over a shorter time period. Most of the focus in this section is on the impacts of the research following dissemination. Later on in this Chapter and the next one there is discussion of the links between the developing partnership and impacts prior to publication.

In the initial period following the launch of the CRFR/CLS research on 'significant others' many potential research users from policy or practice settings were engaged with the findings of the project in a variety of ways, demonstrating a level of uptake of the research. 41 delegates from academic, policy and practice settings attended a seminar to draw out policy and practice implications of the research. Local authority Directors of Social Work and Education, along with Chief Executives of Health Boards, were invited to an official launch and briefings were sent to follow this up. Press work resulted in radio, newspaper and TV coverage. Children were involved

in discussing the findings, and the research team presented findings to a crossdepartmental group within the Scottish Executive.

Uses of the research from Project One were identified by seven interviewees and in the survey of local authorities. These data were from:

- two interviews with the ChildLine partners (Director and Policy Officer),
- two research users who had engaged with the research through the knowledge exchange activities associated with the project,
- three research users who had used the research in relation to alcohol policy,
- nine respondents to the local authority survey said they remembered the research, two of these giving some more detail about their use of it.

Following up people who had come to the policy and practice conference and the launch of the research was difficult. It was hard to trace participants after the time lapse of four years, email addresses were out of date, and people had moved on from their posts. As discussed in Chapter Eight where the challenges of impact assessment are elaborated, only three research users from these conferences were identified and two of these had a continuing link to CRFR and/or ChildLine.

Uses of Project One research by partners

Both the ChildLine Director and Policy Officer identified a range of ways they continued to use the CRFR/CLS research. ChildLine's Director had moved on to a new post as Chief Executive of a large Scottish children's charity in 2009, whilst the Policy Officer remained in her post in ChildLine, and in both of these settings the research has continued to be a useful resource.

ChildLine's Policy Officer had used the research to respond to consultations on alcohol policy put out by the Scottish government and to create a group response to the policy with other children's charities. In responding to the Scottish government's alcohol consultations her aim had been to support the government's population-level approach, and to draw attention to the family issues in relation to alcohol that had emerged from the research:

"Our response to the government discussion paper on alcohol was that we wanted to be really supportive of this forward-looking strategy of looking at alcohol at the population level, what research had shown to be efficient at reducing alcohol in that way. All the measures around price seemed to us to be absolutely crucial because we hear from a diverse range of children, so anything that can reduce alcohol consumption in general within the

family, within parents, is a good thing based on the messages we get from children. We are also trying to draw attention to - and this is from the CRFR research-what you hear so much of in the media is young people drinking, young people's problem drinking and young people's alcohol consumption increasing, and yet what we are being told about is what goes on in families when young people are watching their parents drink, so it's just trying to refocus that, get a bit of attention to that message." (Policy Officer, ChildLine)

Here the research was used instrumentally; to support a particular policy position that was perceived as evidenced based and could address the kind of issues ChildLine were concerned about. The aim was also to shift attitudes about the way young people were viewed in alcohol policy away from the idea of young people as problem drinkers, towards recognition of the family issues that ChildLine saw as a bigger problem in Scotland. These two messages formed the main substance of ChildLine's response to the government consultation on alcohol. Previously ChildLine had also linked with other children's charities to present the alcohol aspects of the research findings to politicians at party political conferences. These other children's charities also had messages about alcohol from research into their own services and practice knowledge, and held joint fringe meetings at the Labour, SNP and Scottish Liberal Democrat party conferences in late 2005 and early 2006.

"So there were various MSPs [Members of the Scottish Parliament] at these fringe events. I suppose I like to think that has been part of the gradual build-up, because our message at that was clear, and it's the same as many, many people's messages in the field, you know there has been a great deal of attention given to children affected by parental drug use but alcohol has very much been neglected and this is what we hear [from children who call the helpline]. So one of the findings in that was, as a problem for significant others, alcohol was really out there and drugs were way down the line. That wasn't to try to suggest that children that are living with drug using parents don't need a lot of help but it was just to say these children do too." (Policy Officer ChildLine)

The Policy Officer hoped that these kind of meetings had contributed to a gradual shift in the agenda away from funding drug related services towards tackling alcohol issues. She had used the research with an aim to change the knowledge and understanding of these issues amongst Members of the Scottish Parliament (MSPs), and particularly refocus resources aimed at families affected by drug use towards a wider group including those affected by alcohol. This agenda was also important to the Director of ChildLine and Conference Participant 9 as described below. Perhaps this strategy had some success as alcohol policy has risen up the political agenda,

although the extent to which this is linked to specific research would be hard to evidence.

Other uses of the research identified by ChidLine's Policy Officer were that it was presented at alcohol and physical abuse focussed conferences, and it was the catalyst for a joint statement on alcohol policy from the children's charities. The research became part of the stock of knowledge for ChildLine's Policy Officer, to be used whenever appropriate: "It's not that the research gets done and then it's all dusty and we never look at it again" (Policy Officer, ChildLine).

This approach to using the research is echoed in the interview with the Director of ChildLine who continued to use it in her role at ChildLine and subsequently in a new post as Chief Executive of a large children's charity. She could remember less specific instances of using the research perhaps because she had moved on from ChildLine and had a high level of demands on her in her new role. She claimed to use the research in presentations she gave and had two specific examples of where it had made an impact. The first was as a member of the board of a voluntary sector funding body where she had presented and continually mentioned the research. This very specific use of the research led to a change in policy of the funding agency over a period of a few years:

"The [organisation's name] which I have been on since it was established 18 years ago now, when it was first established it was very clearly drugs, very clearly, and that was partially where the money came from, and I remember saying, alcohol is actually a bigger issue [they said] yea, we kind of accept that but the money is from drugs. Interestingly that has really shifted over the years and more and more of the applications from projects for funding include alcohol." (Director, ChildLine)

The Director of ChildLine describes a long-term change in attitudes through persuasion by bringing up issues highlighted in the CRFR/CLS research. She also felt that the research had an impact in that it helped to shift attitudes in relation to alcohol problems away from a focus on young people to an acceptance of the wider nature of alcohol problems in Scotland. She saw this as a shift amongst professionals, politicians and the media.

"I think there is a massive shift. I can't put that all down to this (the CRFR/CLS research), but I have no doubt that it helped in the process whatsoever. I think there has been an attitudinal shift and I think that is really quite difficult to pin down and evidence.

Well I think we can evidence that there is an attitudinal shift, what is harder to evidence is why. I think this is one of a number of things. I do remember there was massive coverage of it in the press." (Director ChildLine)

This interviewee perhaps had a vested interest in the research from her organisation making an impact, although she acknowledged that it is difficult to attribute a shift in attitudes specifically to the research, she sees it as playing a role in changing people's attitudes. She acknowledges the difficulties in understanding how such shifts occurs but sees the press coverage of the CRFR/CLS research as playing a role. This opinion about the possible impact of the research is not easy to corroborate, although the way the research influenced the policy agenda on alcohol is more fully discussed in the next Chapter.

Uses of Project One research by others

The forward tracking approach within this project initially identified three research users who could remember and were able to respond to questions about how they had used the research. All had been attendees at the practice conference held to discuss the research findings. One could remember very little about the research except that she had talked about it with colleagues in her practice setting, a voluntary organisation. The second had used the research in her work supporting women's services in a local authority. She had used it in several ways:

"We visited women's agencies and talked to them about the issues the research raised. It changed our awareness of issues rather than changing policies as the policies were quite well-developed anyway. We spread the research findings amongst about 100 staff in the social work housing office and discussed them in a staff meeting and an equalities meeting." (P1 conference participant local authority 8)

The research raised issues for this participant and her service about how children of service users were supported. Policies were already developed but she thought it could be helpful in changing practice. However, recall was an issue for this participant as well because it had been four years between the conference and the follow-up interview. She could remember the specific uses detailed in the quote above but found it harder to recall anything about whether these uses might have had an impact on practice, how the research was received by the research-users or any further follow-up from it.

However, the other conference participant who had used the research was interesting as the research had huge resonance with her practice area and had been used extensively:

"It was incredibly helpful for [my agency] who had their own policy agenda. It highlighted alcohol as a 'hidden' issue in families. It showed that there were many more families out there that our services were not reaching and so could be used to argue for expansion of services." (P1 conference participant voluntary sector 9)

For this one research user the CRFR/CLS research from project 1 had fitted into an existing agenda within her role and agency. It highlighted a concern about the numbers of children affected by these issues and was so relevant to her current work that it had been used in many ways in addition to the expansion of services mentioned above:

- Quoted the research many times
- Talked about them [the findings] in practitioner networks
- People were aware of the research from the media coverage but I was able to share the findings with practitioners who were very impressed with them
- I acted as a broker as I was a researcher with [voluntary agency] so used to alerting practitioners to research
- The findings were particularly useful as they were unsolicited calls, gave insight into the problems for children who were not in touch with services
- I used them to develop further research proposals (including an application for PhD)
- Used to apply for funding to develop [voluntary agency] services
- Used in response to government consultation on alcohol
- Used regularly in my work with [voluntary agency] including presenting it to MSP cross party group and privately to other MSPs and civil servants
- Have gone on to work with CRFR and ChildLine

(P1 conference participant voluntary sector 9)

This one research user emerges as a key player in the use of the work from this project, and indeed gets drawn into the CRFR and ChildLine networks as a result of engagement with this research-related conference. A combination of practice and service development work within the organisation along with policy-related work about this issue is apparent from the list of uses this individual identifies. She felt that the research came at the right time for her and that it had helped to influence the agenda away from drug using families towards recognition of the issue of alcohol in a similar way as the Director of ChildLine's views above. She also felt that the research gave insight into children who were not in touch with services which was

particularly pertinent to her role in service development. The development of funding proposals for new services can be seen as an impact of the research in this case, although this interviewee would probably have been writing applications for funding in her role in any case. Again, the media coverage of the research is mentioned as one aspect of its persuasiveness.

Within the local authority survey nine respondents claimed to remember the research, although lack of detail and lack of consent for follow-up by the respondents might suggest that these recollections were very vague or that they were responding in a way they felt appropriate within an evidence-based policy and practice agenda, i.e. that they felt they should have remembered the research. Two of these respondents offer a little more detail about how they had used it. The first of these gives very little information:

"Considered in terms of our ongoing service and practice development" (Local Authority respondent 13), perhaps reinforcing the analysis above. The other offers slightly more detail:

"I have a recollection of the studies and of them being circulated within the service and across our Child Protection Committee. They were therefore considered. I am not in a position to identify definitively that there was direct impact on service/policy/procedural development. It is noted however that areas identified are covered within our policies etc." (Local Authority respondent 21)

Here a probable use of the research is identified: it was communicated within the relevant local authority departments but, as the respondent suggests, it would be difficult to claim a direct impact from this. The recollection is vague and given the time lapsed this is unsurprising. The mention of the local authority Child Protection Committee might suggest a more concrete recollection of how the research was used, although again this is an obvious response to the research findings so it is hard to judge how genuine the claim might be.

In addition to the ways the research was used in alcohol policy already set out above, a further three research users were identified through the backward tracking element of the PhD research. These were a government analyst who had used the research in a consultation document (Government Analyst 12), a voluntary sector organisation – Scottish Health Action on Alcohol Problems (SHAAP) - who used the research to

influence policy (Director of SHAAP 11), and the civil servant responsible for the development of alcohol policy (National Policy-maker 10)

The National Policy-maker whilst mentioning some lack of clarity about the research had some very specific recollection of the ways the research had been used:

"If I'm utterly honest I didn't go back and check out precisely when that [CRFR/CLS research] came out and how we fed it in but it is certainly part of the picture, and we definitely have included references to it in briefings for ministers and whatever. You know when [the Minister] would have been going into the Chamber, you know, into debate, that would have been in her briefing. I can't remember if she has actually explicitly used any of it, you know." (National Policy-Maker 10)

So the research here fed very directly into the policy process through being used by the alcohol policy team as part of research available to support the policy development, although it did not appear in the debate in the Scottish Parliament. In addition to this use it had been included in the consultation document drawn up by government, on top of being fed into the consultation process by both ChildLine and Conference Participant 9. Finally it was used by a policy influencing organisation, SHAAP, as a basis for commissioning further work on the topic of children affected by parental alcohol misuse. The processes through which the research came to be used in alcohol policy development and the impacts of that are fully discussed in the next Chapter.

Overall then it became evident that the CRFR/CLS research from Project One had been used in many diverse ways by different research users. Whilst not identifying all possible uses of the research the ways the research has been taken up is summarised in the table below, breaking down the uses mentioned above into categories on the research use spectrum as set out in Figure 2.1 in Chapter Two. This helps to build a picture not just of research use but of types of use in different settings. Only some of these might be considered wide societal impacts.

Table 5.2 Uses of research from Project One: 'significant others'

		Identified uses
ป uses	Awareness of research	 Presentation of research to a variety of audiences by ChildLine Director (now chief executive of large children's charity) Discussion of research findings by conference participants with wider networks and colleagues Raised awareness of research with 100 colleagues in local authority setting Used to develop further research proposals and to apply for funding by national voluntary agency Circulated to Child Protection Committee in local authority Presented to Child Protection Group in government Press coverage mentioned as raising awareness
More instrumental uses	Knowledge and understanding	 amongst colleagues by one practitioner Increased awareness of the issues for children affected by their parent's problems in a local authority area Wider understanding by policy-makers and practitioners of the nature of the alcohol problem in Scotland Increased knowledge and understanding of issues affecting children and young people amongst national policy-makers
	Attitudes, perceptions, ideas	 Shift in attitudes towards seeing young people as affected by parental alcohol use rather than binge drinkers amongst children's charities, practitioner communities and alcohol agencies Basis for linking across charities to develop policy work
	Policy and practice changes	 Used to argue for expansion of alcohol services by national charity Change in funding policy of national drugs funding agency Development of further research on children and alcohol with associated policy-influencing activities. Women's services adapted to include children in one local authority Contribution to change in Scottish policy on alcohol

The Table 5.2 shows a range of ways in which the research had been used, with conceptual and instrumental uses set out in a spectrum. Some of these are policy and practice changes but it is apparent that many different things might also be considered as impacts. The links between the different kinds of impacts are also apparent, for example, that changing policy-makers' attitudes about children affected by parental alcohol misuse might be a prerequisite to create a change in policy or practice. The connections between different kinds of impact are explored more fully in the next Chapter which focuses on processes of impact. Meanwhile, this section returns to exploring impacts from the other project within the partnership, Project Two: 'sexual health'.

Tracing Impacts from Project Two: 'sexual health'

Impacts from Project Two: 'sexual health' were traced in a similar way to those from Project One, although there are important differences. A similar range of user engagement activities were carried out as for Project One and there was evidence of a high level of uptake from this. The research was presented to a stakeholder conference attended by over 100 delegates. Young people were involved in making a drama out of the findings and presenting these to the conference. This drama was then made into a DVD and used in other settings. Briefings were sent to all local authorities and health boards in Scotland and the research was presented to the Scottish Parliament's Cross Party Group on Sexual Health and to other relevant practitioner conferences. It continues to be used by ChildLine in policy responses to government. The research was picked up by the press and was featured in Scottish national and specialist (teaching) newspapers, although it did not receive the same level of attention as research from Project One.

Tracing impacts for Project Two: 'sexual health' was closer to completion and publication of the CRFR/CLS research and so memory issues were less acute, although not completely absent (research was completed in early 2007 and launched in November 2007, follow-up was 2009-2011). Due to the ongoing use of the findings from this project it was easier to identify uses and impacts. Unlike Project One, no backward tracking from policy to research was carried out for this project because it

was outwith the scope of this project, and the national policies in this area were developed prior to the research. The following data was collected for this project:

- Follow-up with conference attendees through an online survey eliciting 10 respondents, 8 of whom remembered using the research.
- Two interviewees identified through the initial interview with the Policy Officer from ChildLine
- An annual sexual health network conference where the CRFR/CLS research had been previously presented was attended in order to ask delegates about any use of the research: 16 delegates were approached and this elicited 5 responses from people who had used the research.
- A notice in the same sexual health workers' network newsletter brought a further two research-users to light.
- Attempts to contact a civil servant and two politicians who had been involved in the cross-party group were unsuccessful.

One of the key differences between the two projects carried out by the CRFR/CLS partnership was that Project Two was commissioned as part of an ongoing policy initiative to address sexual health issues. As such it had a ready-made policy and practice context into which it fitted. Whilst similar activities were undertaken to engage with research users, in Project Two ChildLine Policy Officer's role as an active member of the relevant networks and communities of practice seems to have been a factor in the level of engagement with the research. In the quote below a Health Improvement Officer who had used the research explains how he knew about the research before it was published:

"How did I hear about it? Probably in a couple of places, I am suspecting that we knew it was coming out, actually before it was done. Might have been through the National Sexual Health Advisory Committee but I don't think it was actually. I think also NHS Health Scotland, which is the national health promotion organisation, I think had been involved in letting us know about that before it had been done. And if I'm right, was the timing of this not around the time of the national Strategy being formed, it's a few years ago now." (Health Improvement Officer 2)

The interviewee paints a picture of many organisations networking in the context of the national sexual health strategy, and that there was an expectation and knowledge about the research before it was published. He has some difficulties recalling the exact time he heard about the research, so although the publication date was closer to the interview date in this project memory is still an issue in some aspects of how the research has been used. The research sitting within this national policy framework

has been an important part of how it has been used as set out in the Diagram 5.3 below.

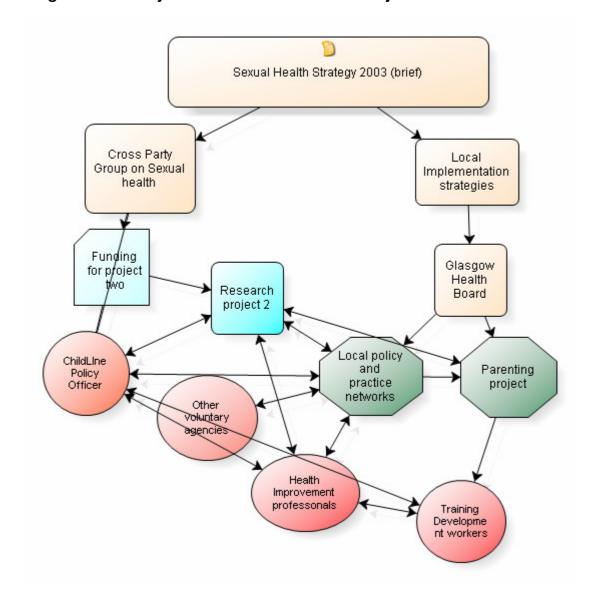


Diagram 5.1 Policy and Practice Context for Project Two: 'sexual health'

The model above illustrates how the research project sits within national and local strategies relating to sexual health (in rectangles), with the funding for Project Two: 'sexual health' coming from links with the Cross Party Group. The policy context of the sexual health strategy meant that at a national level the Cross Party Group on Sexual Health was interested in funding Project Two. Parallel to that, local implementation strategies were being rolled down to local health board level as illustrated on the right of the diagram. All of the circles represent actors involved in

the processes, links between them illustrated with arrows. ChildLine Policy Officer on the left is a key link between the research, local policy and practice networks, the policy framework and key agencies. The hexagons represent agencies involved with the implementation of the sexual health strategy, with the parenting project picked out as a key research user. The diagram illustrates the high level of connectivity between these players at local level as evidenced in much of the impact tracing carried out for this project. It also shows how the Sexual Health Strategy framed the activities around research uptake and use.

Uses of Project Two research by partners

The research from Project Two: 'sexual health' had been used more by ChildLine Policy Officer than the Director as it had been more relevant to her ongoing work. The Director left ChildLine in 2008 to take on a new post, though some of the issues around abuse have continued to be relevant:

"I am not personally so involved in that policy area [sexual health] but I think I do remember at the time there was quite a lot about the linkages with sexual abuse and sexuality, and I do remember one of the areas that I think I have used quite frequently is the whole area of the expectations particularly of young women about how they will be treated by their partners.... from my [current organisation] perspective we have got two main key areas we are working on, one of which is about violence towards children and young people, the other one is about child protection so that links very closely because there are powerful messages there." (Director ChildLine)

Here she makes a link between the research and her current role but is less explicit about how the research might be used in this beyond giving her some background knowledge of the issues, and sometimes using the research in presentations about her current work. It fits as part of the stock of knowledge she draws on to inform her work.

The Policy Officer on the other hand, as in Project One, has continued to use the research in an ongoing way:

- Presented at various conferences
- Used for policy work around a sexual offences bill (Scottish Parliament from 2006-2008). ChildLine were cited as one of the three agencies that influenced the Law Society's decision to change their recommendations about the decriminalisation of sex for the under16s

- Two national conferences watched the DVD produced by young people on the findings, and at one of these two of the young people answered questions about the research
- Used to inform practice development within ChildLine

However, the initial interview with ChildLine's Policy Officer, as well as identifying the ways she had used the research above, identified some key research users who continued to extensively draw on it in their work.

Uses of Project Two research by others

The processes through which identifying research use from Project Two: 'sexual health' was carried out is set out in Diagram 8.1 in Chapter Eight. The main users of Project Two research were, perhaps unsurprisingly given the context set out above, Health Improvement Officers in a variety of settings. Four health improvement officers were interviewed: two were leads from the ChildLine Policy Officer interview, and the other two were recruited through an advert placed in a sexual health workers' network magazine requesting research users. Amongst the eight responses to the online survey which followed up people who had attended the launch conference, were a further four people with a health improvement role.

The major use of research from Project Two: 'sexual health' with the biggest and widest impact has been its use in training parents, teachers and other professionals with a sex education role in three local authority areas in Scotland. Hundreds of these training participants have engaged with the research and it has influenced their approach to sex education with children and young people at home, in school, and in youth and care settings. The processes through which this uptake, use and impact has occurred are the subject of a section of the next Chapter. Three of the interviews with Health Promotion Officers concentrated on this use of research in training (1, 3, and 4). The focus then of this Chapter, whilst acknowledging this significant use of the research, will be on other uses of the Project Two findings.

Health Improvement Officer 2 had a senior role within a health board area and had used the research extensively. For him the research struck a chord with his professional interests and could play a role in developing the sexual health agenda

for which he was responsible. In particular, the fact that it represented issues children themselves define and call ChildLine about was particularly powerful:

"These young people or children have not filled in questionnaires or participated in focus groups or whatever, this is just what they phone up about, what's on their minds, so it's terribly powerful because of that. It really is the only work of that particular type to that kind of level. We have always presented the research in that way, so where I found it most helpful is in arguing the case about why you need to do that work [around sexual health] Usually the way I'll frame that is that if we don't this is what happens: this is what children tell us when nobody talks to them or nobody tells them this language for their body parts and these are the concerns children have around relationships; this is how they feel about their self-esteem; how they feel about their bodies and so forth, because it is comprehensive, it's a comprehensive report." (Health Improvement Officer 2)

This interviewee saw ways in which the research could do a job of changing people's minds about the issues he addressed in his work, particularly to persuade them that sexual health work was needed because 'if we don't, this is what happens..'. The issue of legitimacy emerges here too with the fact that the research is 'to this kind of level'. He elaborated on the specific ways he had used the research and identified the following:

- Research presented to local sexual health strategy groups in six local authorities to inform strategy development
- Included in curriculum development for schools within one local authority
- Research briefing given to teachers undergoing sex education training in three local authority areas

As in Project One, this research user was key in creating wider impact by sharing the research widely within his networks and using it extensively in his work. What emerges from the interviews and survey in relation to the ways Project Two has been used is a well-developed network of practitioners who talk about and share research. The CRFR/CLS research was well-known in this network as evidenced through the interviews and survey but also emerging through attendance at the sexual health workers network conference, where tracing specific uses of the research was less successful but knowledge and reference to the work more generally were obvious.

Following up the launch conference, participants identified a range of ways the research had been used and shared. In particular, five respondents commented that they used the research in developing and delivering training around sexual health issues. This included reviewing the provision of sex education in schools,

incorporating it into training, and using it to persuade people of the case for sex education. This persuasion job, building on the case quoted above, is exemplified in the following comment:

"It made me much more confident in presenting information as it was backed up by solid evidence from children themselves who had phoned ChildLine. You can't dispute this. It really helped when we were introducing a new sexual health and relationships curriculum within our area. It helped to reassure teachers and parents." (P2 Conference Participant 34)

The role of the CRFR/CLS research here is in providing an evidence base for the development of practice, that gives confidence to the practitioner involved but also has a persuasive element, to help reassure training participants that they were doing the right thing.

When asked, respondents were much less sure about the wider impacts of the research than those on their own practice. One suggested that the voice of children had been powerful at a policy level, and another felt that it had helped in raising the recognition of the rights of children. Most of these research users felt that it had been easy to use because it fitted in with their work at the time (N=6) and that it was presented in easy to use forms (N=3). Memory issues in the time lapse from the conference to the follow-up was mentioned by one respondent, who felt they had learned a lot from the research but found it hard to remember exactly what.

The following table presents an overview of the uses and impacts of Project Two: 'sexual health' uncovered through this PhD research.

Table 5.3 Impacts of Project Two: 'sexual health' research

Identified uses			
	Awareness of research	 Widely known and used in health board networks in Glasgow Presented within 6 local authority areas Presented in training courses Young people reworked into drama Talked about with colleagues Developed into quiz for use in training Used in lesson plans in schools 	
	Knowledge and understanding	 Increased knowledge of the needs of children and young people around sex education amongst practitioners at conference Increased confidence in presenting sexual health needs of young people to others Use of research in training teachers 	
	Attitudes, perceptions, ideas	 Helped shift teachers' attitudes about their role in supporting sexual health education needs of young people Helped change parent's attitudes to sexual health role in their children's lives Shocking aspects of research impacting on attitudes, perceptions and ideas Change in views on what is appropriate to include in training 	
	Policy and practice changes	 Changes in training and education in sexual health for parents, teachers, health improvement staff, youth workers Curriculum development Local authority sexual health strategies informed by research Young people receive more age appropriate support on sexual health matters Parents give more age appropriate sexual health support to children New volunteer for ChildLine Changed approach to sexual health calls taken by ChildLine Informed retention of law on underage sex 	

As with the summary of impacts from Project One, different uses of the research have been made: some more conceptual, others more instrumental. Again there was a link between changing people's minds about issues, in particular in the training context, and subsequent changes in practice and policy relating to sexual health training.

Tracing the impact of research: emerging issues

The impacts identified in this PhD research from the partnership research-based activities have limitations. These are related to the scope of this research project, methodological challenges of tracing use and impact, timing and memory issues, and other issues of luck and serendipity. There are also areas or fields where it is hard to assess whether or not impact occurred due to a variety of factors, including where impact-generating activities were targeted. It has been necessary to follow from impact generating activities through to research use and impact in most of the tracing work in this study for practical reasons, as well as this being the most fruitful approach (Nutley et al. 2007). Even when doing this there have been issues about tracing participants, getting participation and identifying clear links from the research. For this reason it is probable that the impacts identified in this Chapter do not provide a complete picture of the impact from the research partnership for the reasons outlined below.

Tracing issues

There were two main rich seams of data about the impacts of research from this partnership. One around the sexual health networks in the Glasgow and South West Scotland regions, where research and information passing through a network has generated impact, the other within the alcohol policy agenda, where the research may have helped shift thinking over a much longer timescale and has been used in policy development and policy-influencing activities. For both of these areas it has been possible to get a sense of capturing key impacts from the research. Other evidence of impact is scattered across sectors and arenas, and therefore much less easy to identify and explore.

In the local authority survey it was very hard to trace clear evidence of the impact of the research. Asking about the specific use of the briefings from the case study was not very successful. Just over half had no recollection of the briefings (n=10) and of those who said they could remember, none agreed to follow-up which may suggest a lack of clear recollection. The comments reflected that there was a long time lapse, that there were staff changes in several authorities, so that the briefings were sent before they were in their current posts. One respondent thought that the findings were presented to the Child Protection Committee but again recollection was an issue, and lack of consent for follow-up means this is difficult to explore further. Two respondents did suggest that the briefings had led to a change in policy or practice but were not specific about what, so these claims are treated with caution. Overall it is hard to judge if the findings here suggest a failure of uptake or a lack of recollection due to the time elapsed since publication.

In order to carry out the backward-tracking element of this research project it was necessary to narrow down potential policy areas for examination. Through examination of all of the findings from the first project some feasibility testing into what would be manageable was undertaken. Whilst there were findings and recommendations around child protection, mental health and domestic abuse, it was difficult to define a clear policy area to investigate these. Alcohol policy had clear boundaries, had been developed since the research was published and so was a feasible area in which to consider impact. That doesn't mean that impact didn't occur in other areas, and there is some limited evidence in the case study of other impacts but it means the available data in this PhD research about impacts in other policy areas is limited.

An attempt to trace wider impacts beyond the Scottish Government and outwith the alcohol policy area were made using Google searches. The research from Project Two: 'sexual health' was cited three times but no references to Project One research were identified using this method. UK policy documents on sexual health and alcohol were also examined but again no evidence of the research was identified in these.

Resource allocation

Beyond the methodological challenges there is also much clearer evidence of impact where efforts have been focussed to increase the use of research. In Project One: 'significant others', the focus on alcohol emerged through the data and was then further emphasised by the press. This led to a higher profile of the alcohol findings in preference to other issues. This was not intended by the research team, although it is also practically necessary to draw a line around where resources are allocated. As discussed in the next Chapter, the alcohol related findings have found a place in a policy process that could not have been anticipated at the time of the research but to which they have made a clear contribution. However, this means that perhaps other findings from the research have been neglected, an issue raised by ChildLine's Director:

"I do think from that perspective it has made a difference on the alcohol side of things. What I'm not sure of is if the other health stuff didn't get lost a bit in that process, because the alcohol thing is such a preoccupation in Scotland I suppose the risk is it eclipses everything else done, and there was some other really important stuff as well." (Director ChildLine)

Timing, networking and relationships are also factors affecting where research was or was not used and are key themes within this study. Chapter Eight focuses on an exploration of these issues in carrying out impact studies and the associated methodological challenges.

Partnership and impact

Initial interviews with the partners from CRFR and ChildLine focussing on overall impacts of the research revealed uses and impacts at partnership and individual project levels. The reasons for establishing the partnership were clearly linked to increasing the impact of research as discussed earlier and in Chapter Two. The partnership was established with a focus on the potential to use calls coming into ChildLine for an interesting academic project (for CRFR academics), and to 'make a difference' for children and young people in Scotland (for ChildLine Scotland). ChildLine ensured that the idea of using the research was built into the projects from the start as outlined above in the extract from the application, and this fitted with

their confidentiality policy regarding access to the data contained in the calls: children who call ChildLine give permission for anonymised information about them to be used to help other children and young people. The following quote illustrates ChildLine's stance in relation to the link between research and the need to create impact:

"Doing lots of dissemination activities would be at the crux of the relationship – to use findings, make them as widely available as possible, use them to influence policy and practice if possible." (Policy Officer, ChildLine)

The partnership was partly driven by the Director of ChildLine, who through links with CRFR saw an opportunity to develop and strengthen the kind of work they had already been doing to pull together and publicise the concerns of children who called the helpline. When establishing the partnership this idea of legitimising the information within ChildLine Scotland's database through academic rather than inhouse research was a clear aim:

"I can't remember who it was I spoke to, anyway, one of the Directors, and just saying we have this mass of information, it's just colossal what is in there, it doesn't particularly get taken that seriously, I don't think when it is done in-house but actually it ought to be making bigger change and could we do something" (Director, ChildLine)

The mixture of the reputation of ChildLine Scotland as a national helpline listening to children and the academic credibility of CRFR led to uptake of the research by several people. For the national policy-maker on the alcohol team a mixture of credibility and accessibility was important:

"I guess just generally that it is really, really helpful to have research from really credible sources - that is really helpful. And it helps if those who are doing it are kind of mindful of the policy context and presenting it in a way that is accessible which I think this was." (National Policy-maker 10)

For a practitioner being able to assume that the research was high quality based on the partnership was a helpful starting point for using it in her work:

"SM: Did you look at the research to judge the quality?

Health Improvement Officer (1): My initial thoughts were that I was interested to see the content and I knew it was a link between ChildLine and CRFR and I had been aware of CRFR as an organisation and had read other pieces of work done by you. I didn't doubt the quality of it."

The academic reputation of CRFR here clearly gives weight to the research but ChildLine's reputation was also important to research users. For the research user below, in policy and practice development roles in the sexual health field, the credibility of ChildLine was important to the way the research was viewed by his colleagues and networks:

"ChildLine come as a really credible organisation in a way that it becomes very difficult to argue with. I think if you were coming with someone like one of the big voluntary sector charities that's around sexual health like FPA [Family Planning Association] or Terrence Higgins Trust you'd probably get an element of, oh, you would say that wouldn't you. But ChildLine you'd be really, really on dodgy ground I think to challenge ChildLine of all organisations in public. So there's a credibility which has come with it coming from them that's made it, that's just given it extra weight." (Health Improvement Officer 2)

ChildLine's reputation is important, not just as a large and well-known voluntary sector organisation but as one which has children's interests at its core. In the sexual health field, compared with sexual health organisations like the FPA this interviewee thinks that this offers a fresh approach to issues.

For another research user the partnership enabled her to feel a level of confidence in the work when challenged:

"I'll give you an example, a teacher who said 'aye you can prove anything with research or statistics', and my response was that I was happy with the piece of research, with who had done it and the methods used, and the fact it was a joint venture between ChildLine and yourselves. She kind of accepted that." (Health Improvement Officer 4)

The partnership process itself was highlighted by the Director of ChildLine as part of the way that research could 'make a difference'. The commitment of both agencies to the dissemination activities and how the research could be used to influence change was part of the early discussions and was an essential component of the partnership approach for her:

"I wasn't interested in just a bit of academic research which confirmed what had already been said. That wouldn't have done it. Way back at the very beginning it was about being dead clear, dissemination has got to be built in, how we make a difference has got to be thought about now, and that has to be part of it otherwise to be perfectly honest I would have been much less interested in being involved in it. I think why the partnership worked was partly because we collectively agreed to that right at the beginning. So we did both need to be involved, so the academic bit was covered, but the other bit was covered as well, and we could really make it into something that had the potential to shift things."

(Director, ChildLine)

So the joining of academic credibility with activities to make sure the research reached a wide audience was important. However, although this was a very clear aim for the partnership and explicitly built into the proposal for funding, how this played out for the CRFR Director involved reveals a different perspective:

"SM: One of the aims of the project was having an impact on improving the life of children – was that why they [ChildLine] wanted us [CRFR] to be involved?

CRFR Director: At that stage though, Sarah, although CRFR was committed to knowledge transfer, I was naive about the extent to which we would do big events and lots of writing and lots of briefings, all that kind of stuff

SM: So you didn't know what you were letting yourself in for?

CRFR Director: No, I didn't, because it is not in my nature to go out and do all-singing all-dancing, but that said, it was exactly what should be done."

Here the difference between the organisational commitment of CRFR to making an impact is contrasted with the personal perspective of one of the actors. The CRFR Director was personally challenged by the extent of the activities carried out through a partnership approach, although in the end agrees that 'it was exactly what should be done'. In some ways the impact of the partnership here was to extend the orientation of one of the academics involved to user engagement activities.

For ChildLine there were unexpected consequences of the research partnership as well. The findings from the research in Project Two: 'sexual health' led to internal reviews of some of their procedures and some development work in relation to how calls to children and young people were taken. The ChildLine Policy Officer commented on the unexpected nature of this impact:

"There have been messages for the service from the research which have been almost equally as strong [as the external messages], we have used it to challenge the way things have always been done. This is an unintended but real impact on how things are done at ChildLine." (Policy Officer, ChildLine)

One example of this was a review of the way volunteers take calls on sexual health issues following Project Two. A group of volunteers got together to discuss issues in taking these calls which may be particularly challenging as call takers may be embarrassed when dealing with sexual issues. This led to inviting the Family Planning Association into ChildLine to deliver training on sexual health issues which has since been incorporated into regular training. The impact of this was that

children calling ChildLine about sexual health issues will be listened to more openly and better supported. This is an immediate and ongoing impact on organisational policy and practice. It required a change in the attitudes, knowledge and understanding of the volunteers taking calls which has been achieved through the material available in the research. This is further discussed in Chapter Six where the processes of impact are examined in more depth.

ChildLine have continued to utilise the research in their policy responses to government to the present day, in particular using outputs to respond to consultations on the development of alcohol policy, and issues relating to young people's sexual health and relationships. This has resulted in contributions to policy debates and decisions around these areas, some of which have not been followed up under the auspices of this PhD research. Although ChildLine used call information to respond to policy before their involvement in this research partnership, academic involvement in the research adds to the legitimacy of the claims made as outlined above. ChildLine's Policy Officer, whose role is to generate policy consultation responses, commented on this:

"I think you just have to accept that you need to keep saying the same things in different ways over and over again for years before things change. If you can't do it on your own – and you generally can't - it's about adding much more weight to it." (Policy Officer ChildLine)

Setting out to have an impact was at the heart of this partnership, and for the non-academic partners that meant making a difference for children and young people. For the academic partner impact was an accepted part of the partnership agenda, with its full implications only being fully realised once impact generating activities were underway. For the user organisation some unexpected impacts emerged through their changing understanding of issues raised through the research.

Aiming to make a difference, changing knowledge and understandings, and policy and practice change are all part of the impacts of the CRFR/CLS research at partnership level.

The partnership between research producers and research users was central to the projects and KE activities undertaken. Here primary knowledge producers and

knowledge users (in this case a voluntary organisation) worked together at the core of a system in which knowledge flows. While the knowledge user partners (ChildLine Scotland) were immediately drawn into increased use of research through the partnership, they were also key to creating links with a range of other policy and practice users with whom they regularly interact. The knowledge-producer partners (CRFR) are drawn into closer relationships with potential research users and policy and practice settings, through a commitment to enhanced knowledge exchange activities.

Following Meagher et al's (2008) development of a conceptual framework outlining the flows of knowledge and expertise in research use, a model of the flow of knowledge in a research partnership has been developed (see Diagram 5.1 below). Meagher and colleagues built on ideas of the importance of networks and flows of knowledge (Molas-Gallart et al. 2000; Hanney et al. 2002; Lavis et al. 2003; Davies et al. 2005) and aimed to develop a model illustrating the main categories of actors, their roles, and the potential for the flow of knowledge, expertise and influence between them. The major difference between the model outlined here and Meagher et al's approach is the effect of bringing knowledge producers and knowledge users together to produce research. This draws relationships with user communities into the heart of the knowledge production process.

The model below was developed as a conceptual tool before data collection began, to depict the processes of knowledge development and exchange involved in the research partnership. It provided some early categories to aid exploration of the processes of research uptake, use and impact. It was developed as the project progressed.

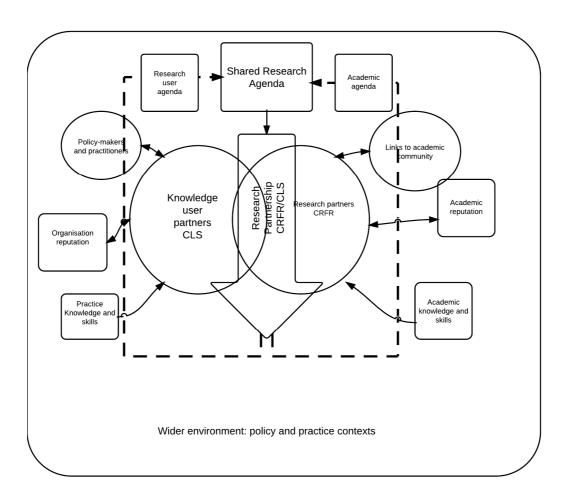


Diagram 5.2 Flows of Knowledge in the CRFR/CLS research partnership

Key: = organisations and individuals
= types of knowledge and expertise
----- = flows of knowledge

The research partnership is at the centre of this model, pulling research producers (CRFR) and research users (ChildLine Scotland CLS) into a close relationship. Users and researchers can be seen to be bringing different skills and knowledge set in square boxes. They also bring links with different groups of research users either organisations or individuals (circles). These are utilised in developing negotiated shared research agendas, and in providing channels for the flow of knowledge from the partnership. Outputs are discussed and developed by involving research users

from both academic and policy/practice communities. The consequence of one partnership research project is further discussion and development of other research agendas. The dotted line shows the flow of knowledge from the partnership, through the policy and academic communities and back to a renewed agenda for both academics and user organisations. This is then negotiated into a new shared agenda for other research projects and activities.

The whole model is framed within the wider environment. This includes the influences of wider social and economic factors on the research production and research use environment, as well as the organisational factors for the partners and wider research users which influence the context for research production and research use. Indeed, the significance of the wider environment and the specific contexts for research use have emerged from the data collected in this project and are discussed as a theme throughout this thesis. How this affects individual research user's orientations is discussed in the next section.

5.3 What does research impact mean for different research users in different settings?

A range of orientations to research impact for different actors emerge from the interview and questionnaire data. In order to explore these different meanings data were analysed relating to the research question 1.C: What does research impact mean for different research users in different settings? 9 of the 10 interviewees directly addressed this question and data is drawn from their interviews in this section:

- three research partners, two from ChildLine, one from CRFR;
- three health improvement officers (1, 2 and 4) who had used the research from Project Two: 'sexual health,
- three further users who had used the research from Project One: 'significant others':
 - o one conference participant from the voluntary sector (9),
 - o a national policy-maker (10),
 - chief executive of a national voluntary agency involved in policy influencing (Director of SHAAP 11).

From these interviews a range of perspectives on research impact emerge. Some people had an interest in evidence-informed approaches because they were expected to in their professional role or believed these approaches were better. Others saw their role as sharing research or as conduits for other's research use. Several people in different settings wanted to use research to change other people's minds about issues, either through policy or practice influencing processes, usually with a goal of improving the circumstances of children and young people. These differing but not mutually exclusive perspectives are explored in more detail below, starting with an exploration of the perspectives of the research partners.

Within the partnership the main academic partner wanted to use research mainly for academic impact but thought that creating wider impact was "the right thing to do":

"they [ChildLine] knew what I wanted out of it – the listening to children's voices unmediated and academic things – getting a grant – my reasons were academic – things for CRFR and things for me and they had their own reasons but nobody contested anybody's reasons, they weren't seen as contradictory, they were seen as, yes when we get to the point of dissemination and if you want to use this in any way that's fine by me, and equally they would and have seen the publication that has come out of it." (CRFR Director)

This is a unique perspective on impact in this research as the only academic interviewed. It demonstrates the strength of trust in the partnership approach to research – that there was respect for the differing academic and partner agendas and that they were not seen as contradictory. The benefits of the research were seen as two-way, the concerns about balancing academic independence with partnership working described in Chapter 2 are absent from this account.

Impact as 'making a difference'

The perspective above contrasts with that of ChildLine Scotland partners who had an explicit objective to make a difference for children and young people through influencing policy, practice and people's attitudes.

"Director, ChildLine: I think it gives you richer decision making basically. That's my motivation; it was about making a difference for children.

SM: Could you see ways that you could then use that, in your policy work and other...?

Director, ChildLine: Influence policy, influence legislation, influence people's thinking, influence the public about the way they see young people, I think it has got massive scope, and also hopefully improve actual practice in terms of support networks for young people so I see these things as having massive potential to shift things as long as they are used and don't just end up on a shelf."

Here "richer decision making" is further developed to suggest research impacts across the spectrum of changing policy and practice: in terms of developing support for children and young people but also changing opinions. The implication here is that it is necessary to change people's thinking, especially the public, as a route to changing policy or practice. Richer decision making also implies valuing research as a particular way of knowing about issues which is relevant to policy and practice.

The ChildLine Policy officer emphasised the importance of children's voices and the role of research in forwarding this agenda:

"I think that the weight of authority that academic research can add to what we are trying to do, which is raise children's voices, is really vital, and going through that process with CRFR on the first project just made me realise that that was just really important for ChildLine to be doing that in an ongoing way." (Policy Officer, ChildLine)

The Policy Officer came into post as the first project was underway, and her quote reflects that her understanding of the importance of the research developed during the first project. The idea of research adding weight to existing understanding was reflected earlier in ChildLine's rationale for developing the research partnership and was expanded on by ChildLine's Policy Officer in her later interview:

"I have reinforced this all the way through that ChildLine looks at its own information regularly but as far as I'm concerned anyway it just doesn't have the impact that an outside academic organisation has, it just doesn't. It can't have that because people perceive it as an organisation just looking at itself." (ChildLine Policy Officer)

It is perhaps appropriate to reflect on my own role in relation to what research impact meant to me, as a knowledge exchange professional with a role to help ensure research had a place in policy and practice. In some ways my role can be seen as sitting between the roles of the academic and user organisation and my perspective reflects this. I was interested in utilising research to change policy and practice. I very much did think that impact was about making a difference for children and young people, as well as trying to ensure that the voices of those who are often absent from decision making were included in that process. This was also linked to a

belief in the role of research in providing knowledge for the processes of policy and practice development and change. To some extent I shared more of the agenda of the ChildLine partners in that I had no interest in academic publications or outputs, although securing grants to conduct research was obviously central to CRFR's ongoing success and therefore my role.

So the partners brought different perspectives on impact to the research and dissemination activities. Beyond these there were four distinct approaches to impact from different research participants which are not mutually exclusive. These are: impact as evidence based policy or practice; impact as changing people's minds about an issue; or impact as changing policy or practice; in addition to impact as 'making a difference' as seen above.

Impact as evidence based policy or practice

A national policy-maker and three health improvement officers referred to the idea of impact as evidence based policy or practice. In both of these sectors evidence based policy or practice is a well-developed concept within expectations of their professional role. For civil servants Professional Policy-Making in the 21st Century identifies nine core competencies, one being:

"Using evidence — uses best available evidence from a wide range of sources and involves key stakeholders at an early stage." (The Cabinet Office 1999:p13-14)

Unsurprisingly perhaps, evidenced based policies as a goal are a clear objective for the policy-maker using research in this case study: "Absolutely the aim is to have policies that are evidence-based. That is the fundamental objective." (National Policy-maker 10). In the next Chapter a detailed examination of how research plays out in the policy process allows a more complex picture to be uncovered, with research being used in different ways. However, as seen here, the goal of evidence based policy perhaps acts as a lever to include research in the developing policy agenda, and to allocate resources to evidence gathering.

There are similarities in the health sector where evidence based medicine has a long history, with research having an explicit role as the basis for the development of

policy and practice (Davies and Nutley 2000). This attitude to research was reflected in two of the interviews with health sector research users who used research as a key way of carrying out their roles. The first situates himself within the funding structures of the National Health Service (NHS) and the demands this places on his role in terms of an evidence based approach:

"My role is about Health Improvement, an NHS statutory funded organisation, so everything that we do needs to be seen to be evidence based. Our role is to develop evidence informed interventions or evidence informed practice in the field of health improvement that has a sound theoretical base, based on what evidence is saying. So we would gather that evidence in a range of ways, either through the standard systematic evidence review like the journals that come out. In the field of health improvement there is a fair amount of grey material available that we would make use of and we would also commission research or needs assessments or evaluations of interventions. It is standard practice to be using research in a range of ways or to be contributing to research." (Health Improvement Officer 2)

In this quote, the need to "be seen to be evidence based" is important, implying a tokenistic view of this agenda and a need to meet expectations. However, in the elaboration of how research is used, where this interviewee uses the language of evidence based policy and practice but also explains a range of types of research evidence that are useful, and suggests an everyday familiarity with using research rather than a tokenistic approach.

Both of the examples above acknowledged that the evidence-based policy or practice agenda is what is expected in their professional roles. However, for some practitioners in the health sector evidence based practice is about change and moving away from assumptions to ensure effective practice. This is reflected strongly in the following quote about using research in training:

"...to get away from doing things because that is the way we have always done them or because a practitioner says it's good, we need to be able to say why we are doing this ... the source of why you are doing something needs to be explicit all the way through so it's not – well I'm a parent- so it wasn't based on people's own anecdotal experiences, but on this is what we know, this is from evidence, this is what we don't know from evidence."

(Health Improvement Officer 1)

This version of impact as evidence based practice shows a desire to use evidence to change and challenge practice which is linked to the ideas about impact below.

Changing awareness, knowledge, perception, ideas and attitudes are all ways in

which research is used and has an impact in this project. Part of this is the need to change people's minds as discussed below.

Impact as changing minds

The idea that research impact means changing people's minds about an issue is apparent in both projects, although perhaps more so in Project Two: 'sexual health'. Here changing people's minds in order to get them to act differently has an ultimate aim of changing policy or practice to make a difference for children or young people. The relationship between changing people's knowledge and awareness of issues in order to influence their attitudes to achieve policy, practice or wider change is apparent. The relationship between conceptual and instrumental uses of research is clear here, five interviewees talked about using research to change people's minds about an issue. In relation to delivering training the need to change minds is perhaps the clearest:

"There isn't other Scottish Research like it.... For our client group, parents and carers I thought it would be particularly interesting for them because I wanted something that would show them, this is what we think, as adults, what children need. ... we don't necessarily know what children and young people want to know about or are concerned about, and it often surprises you. And I thought that parents and carers needed that as part of their starting point. ... The research is a snapshot – it's not everybody's children, but it contributes to expanding the thinking before you start to pin down what to do. (Health Improvement Officer 1)

It was very much used deliberately to try and shift some people's attitudes with regard to the age at which children and young people need sexual health information. For example, the LGBT issue that comes up in the research – at age 13 young people are worried about how to tell their parent or carer, because much younger than this they have understood their own experience. We use it to try to say to people we have a responsibility to try to support our children and young people through these issues." (Health Improvement Officer 4)

In both of the above quotes there is a clear objective: to use research as part of a training process, where the aim is to aid learning. Using the research to inform the training is part of this but it has been picked up and used here because the practitioners can see how it will help to achieve the learning objectives in their setting.

In Project One: 'significant others', the need to change the minds of policy-makers as part of a policy-influencing process is clear from three interviews. The overlap between using research to influence policy and changing people's perspective on an issue is apparent:

"Our first task was how do we get the evidence to lead the policy? What I worked out ... was that the first thing we had to do was get people to accept that there was not just a problem about chronic drinkers and youth, it was a problem about all of us... So we had all this evidence so [others in the organisation] were really comfortable saying — look we have this evidence that people are drinking far more." (Director of SHAAP 11)

Influencing policy in the situation above meant convincing people within a policy-influencing organisation about an issue, in order to subsequently influence policy-makers themselves. In policy arenas like this, where ideas are important, the need to change people's minds about an issue is obviously important and research in this case was seen as a key way of doing this. This chimes with the perspective of the partners from ChildLine Scotland and with the interviews with policy-makers who were using research to influence the policy process as discussed below.

Impact as changing policy or practice

To some extent the views about impact discussed above are linked to an understanding of impact as changing policy or practice. Often it is necessary to have an evidence based approach or a desire to change people's views on an issue in order to change policy or practice. As seen above, the voluntary sector partners wanted "richer decision making" and "using the findings to influence policy and practice if possible". The quote above from the Director of SHAAP also illustrates this view. She goes on to elaborate this view of research use and impact:

"The particular role I played was that SHAAP knew the evidence and knew what was needed but [the people involved] were less comfortable in influencing the policy process — were not used to dealing with politicians, were not totally up-to-date on how the policy process worked, and the main thing was that they didn't want to be seen as partisan or party political. I think what I really brought to the table was my research background having done a PhD — looking at how you influence the policy process in a devolved Scotland — I developed an evidence-based policy-influencing strategy SHAAP."

(Director of SHAAP 11)

This view illustrates an instrumental approach to using evidence to influence policy, with a clear belief that evidence should play that role. The processes through which impact subsequently occurs are the subject of the next Chapter. This interviewee sees the process of using evidence to change policy or practice as a skilled task (she has a PhD so can understand the evidence), part of a particular approach to policy-influencing, based on a belief that using research evidence is important.

Impact in the practice influencing process looks a little different and again has links to changing people's minds about an issue. This interviewee describes her approach to using evidence as a way of challenging current practice:

"I was particularly keen on having our approach based on evidence because in my experience of training professionals there's an awful lot of practice, and I include myself in this, where people say, well, I'm just doing this because it's what I have always done. When our job was to make the parents feel like the experts..., our entire task was to say, what we know from research is if you talk to children about this then generally you get these kind of outcomes, what we know is X number of 13 year olds in Glasgow are doing this, so what might be useful for you and your children to talk around it."

(Health Improvement Officer 1)

This illustrates a complex understanding of the process of creating practice change through influencing people's knowledge and understanding of an issue. The research is used instrumentally to fit within a specific context where there is a need to influence current practice, and move away from "just doing this because it's what I have always done". Research is pulled in with very specific aims to shift people away from practice habits that are not in line with research.

In this section orientations to research that demonstrate links between different kinds of research uses and impacts can be seen. For those with responsibility for practice or policy development using research is seen as a way of helping conduct work agendas that already exist. The motivation to help make a difference for children or young people, parents or wider society, is clear in many of these accounts which might be seen as wider societal impacts. However, it is only through a process of accepting research because it chimes with current needs that it can make a contribution to wider impacts. In this case research users have welcomed the findings from the CRFR/CLS partnership research, and much of the utilisation resulting from this - especially early uptake and use as a result of interacting with the

researchers and their findings - occurs when the research helps with research users' current agendas. Issues of timing and context emerge which are recurrent themes in this PhD. If research is more challenging or controversial, or does not fit within existing agendas, impact would be harder to observe or would take longer to emerge.

5.4 Conclusions

In summary this Chapter has set out some of the uses and impacts of the research from the CRFR/CLS partnership by the partners themselves and a range of research users who were traced mostly through forward tracking techniques. Some of the material from backward tracking for Project One has been included but will be more fully analysed in the next Chapter. The focus of this Chapter has been to develop understanding about ideas of research uptake, use and impact and how these play out in the example in this case study. It has also started to open up understanding of some of the issues about how research impact can be assessed.

Through the case study of the partnership between CRFR and ChildLine Scotland research was used by many actors within the networks relating to the two main topics explored by the research. The non-academic partners used the research as part of a stock of knowledge from which they continue to draw to inform their work, at ChildLine Scotland and in other subsequent settings. Other research users picked up and utilised the research when it had resonance with their own work agendas. The credibility of the partnership between a well-known charity and a well-known research organisation has been important to those research users in giving them confidence in the findings, and being able to use them to influence others, as was the unique nature of the research in representing evidence from children's unsolicited calls.

This Chapter has built on a nuanced understanding of research uptake, use and impact developed in Chapter Two. Instrumental and conceptual uses of the CRFR/CLS research have been identified and links between types of impact, from raising awareness of issues towards changing attitudes, have been developed, along with an emerging understanding of how these might be linked. Research impact is

clearly different for different people in their specific settings, although these different meanings may be linked. For example, a professional commitment to evidence based approaches may also include using research instrumentally to change people's minds about issues. The partnership approach to research production helped to facilitate impact in a number of ways: in ensuring the relevance and timeliness of the research due to the research-user partner's in-depth understanding of emerging issues; ChildLine's continued use of the research in responding to policy developments and utilising it in their work; and in adding credibility to the research findings in the eyes of research users.

The focus in this Chapter has been to identify impacts from specific research activity and to explore the question, what is research impact? However, in exploring this question issues about the processes of research uptake, use and impact have emerged, particularly the links between them and the ways that different kinds of research uses might be linked to wider impacts. Chapter Six picks up on these issues, focusing on the processes leading to impact in three areas where the research seems to have been widely used. Together these two Chapters help to develop a picture of the research-impact processes which build towards Chapter Seven which further explores how impact might be assessed.

Chapter Six: How does impact occur?

6.1 Introduction

Chapter Five discussed research impact, demonstrating its layered meanings for different actors. It drew out key impacts from the partnership research and linked these to how research uptake, use and impact might be categorised and understood. In this Chapter these issues are further explored, focusing on the processes leading to research impact. Examples of where impact occurred are discussed, examining the processes of impact in three contrasting settings over differing timeframes. These three examples have been chosen from the available data in the PhD research as they are all cases where there is demonstrable impact in terms of change in policy or practice which can be related to the CRFR/ChildLine research.

The first is the impact of research from the CRFR/ChildLine partnership on national alcohol policy which takes place over six years, with most impact emerging later in the timeframe. In this complex case there are several routes to impact which converge on the Scottish National Party government's alcohol policy development starting in 2008, three years after the publication of the research and associated knowledge exchange activities. The research was used by policy-makers within the developing policy process, was used by ChildLine to influence that policy process, and was picked up by a key policy-influencing organisation, Scottish Health Action on Alcohol Problems (SHAAP). The processes through which this complex mixture of research use, re-use and adaptation can be seen to influence policy forms the first section of this Chapter.

The second and third examples are simpler and both relate to practice. The second illustration is the impact of the research on the practice of the partner organisation. In this case, ChildLine Scotland felt the research raised issues which required further thought and consideration in terms of how they delivered their own service. They reviewed the research internally with staff and volunteers which led to a change in training and the way calls on sexual health issues were approached by volunteer counsellors.

The third is the impact of research on sexual health practice, where impact happens more immediately and is ongoing over four years. Here the networking of ChildLine Scotland led to immediate uptake of the research by an organisation working in developing training for parents and sex education workers. This led to research use and impact for the clients of this organisation but also created a way of using the research which was useful to a wider group of similar practitioners, creating a much wider impact on practice.

These three examples form the main substance of this Chapter, examining the processes which led to impact in each of the three cases. The concept of a 'pathway to impact' is developed in order to set out these processes. This approach acknowledges that ongoing incorporation and adaptation of research are necessary in order for that research to influence policy or practice. Setting out the steps on such a pathway for each of the cases above helps to focus on the processes through which impact occurs and draw lessons across the cases.

The Chapter concludes by addressing some of the emerging issues. These include a discussion of the processes through which impact occurs, who creates impact in specific contexts, and how this happens. The role of the partnership approach to knowledge production and how the CRFR/ChildLine partnership can be seen to link to impact will be further explored. Issues of relationships, commitment and trust which are implicit in the findings will be examined in more detail.

6.2 Uncovering impact on alcohol policy development

Project One: 'significant others' carried out by the CRFR/ChildLine partnership covered a wide range of areas, and policy and practice recommendations were made in relation to alcohol, friendship, mental health and child protection amongst other topics. One of the more hard-hitting issues was that children and young people calling ChildLine because they were concerned about their parents drinking also reported physical abuse. This was one of the key project findings and was picked up by the media the most extensively. Indeed, careful work by ChildLine and the University's press officers to negotiate a Sunday feature in one of the Scottish

national papers looking in depth at the research findings was pulled by a sub-editor to a short front page story about the link between alcohol and physical abuse.

As discussed in Chapter Five, all of the policy recommendations from Project One: 'significant others' were examined for potential policy impact, and alcohol policy was chosen as a feasible and discrete policy area where the impact of the research could be examined. The discussion below demonstrates the shift in thinking on alcohol policy from 2001 to 2010 which is in line with the findings from the research. Through policy analysis and stakeholder interviews this shift and the potential influence of the research is analysed. This backward tracking (from policy to research) element of this PhD research was supplemented with interview data from both ChildLine Director and Policy Officer whose roles include a policy-influencing function, and with an interview from someone who had attended the launch conference for Project One. To some extent then the whole picture of the contribution of the research to alcohol policy is constructed and corroborated through a mixture of backward and forward tracking.

Policy documents relating to alcohol policy were analysed using a thematic content analysis, with a particular emphasis on looking at the way that children and young people are conceptualised which was a concern of the research in Project One. They included documents from 2001- 2011 (see appendix H) to cover the relevant period when an observable shift in policy can be seen, as set out in Table 6.1 below. They were also considered in terms of how research was used and referred to, and a search of references to the CRFR/ChildLine research was carried out.

Table 6.1 Alcohol Policy process development and related research activities

Date	Policy activity	Research related activities
2001-	Labour government Alcohol Policies	2005: CRFR/CLS research published
2007		Presented to Scottish Executive civil
		servants
May	Scottish National Party government	
2007	Elected	
2008	New policy framework: 'Changing	CRFR/CLS research referenced in
	Scotland's Relationship with Alcohol'	consultation document
	consultation process	ChildLine use research in
		consultation responses
2009	'Strategy for Action' based on	Children's organisations use
	consultation process	research to make joint statement
		supporting strategy
		SHAAP commission and publish
		supplementary research with CLS
2010	Alcohol etc Bill passed	

The documentary analysis was supplemented with data from six interviews described below. Policy-maker interviews as part of the backward tracking process sought to uncover the processes through which the CRFR/CLS research had come to be used in this policy process, and to check out the understanding of the direction of shift in policy observed in the documentary analysis. Other interviews from the forward tracking element of this PhD study which mentioned alcohol policy were also relevant to this.

Policy Interviews:

- 1. Director of SHAAP 11: policy influencer in alcohol policy process and known research user.
- 2. National Policy-Maker 10: senior civil servant with responsibility for alcohol policy.
- 3. Government Analyst 12: analyst seconded to the alcohol team to support the new policy development and responsible for drawing up the consultation document that mentioned the CRFR/CLS research.

Other interviews:

- 1. Conference Participant (voluntary sector) 9: had attended the launch conference for the research and was involved in policy and practice development in relation to children affected by their parents' drinking. She was traced through the forward tracking element of the PhD research and provided comment on the relationship between the research and subsequent alcohol policy development.
- 2. Policy Officer ChildLine: responsible for influencing policy and author of the ChildLine consultation responses in this process. Also instrumental in getting children's charities to support the Alcohol Scotland Bill.
- 3. Director ChildLine: involved in policy influencing as part of day-to-day work and keen interest in the development of alcohol policy.

The process of backward tracking from policy to research, supplemented with interviews from forward tracking is set out below

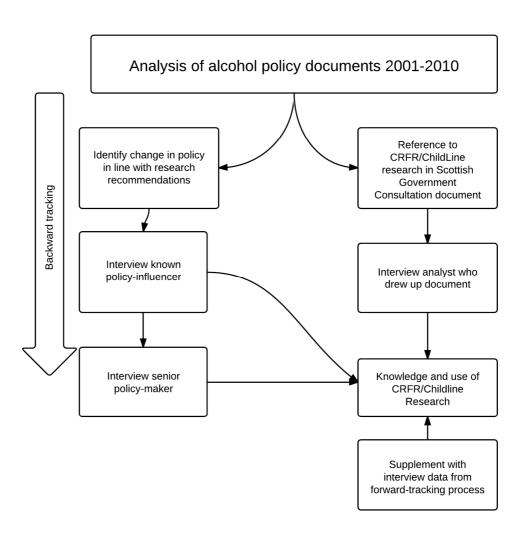


Diagram 6.1 Backward tracking in alcohol policy

Background to alcohol policy

There has been a flurry of activity around alcohol policy since the SNP government came to power in 2007. This has included a shift from a focus on a minority of extreme problem drinkers, to a 'whole population' approach which sees Scotland's relationship with alcohol as problematic for a majority of the population (Scottish Government 2009). Within this change, an analysis of the documentary evidence reveals that children and young people have been reframed from mainly problem drinkers to the victims of their parents' problematic drinking behaviour.

Previously public concern about the role of alcohol in society often concentrated on the problem of small groups of excessive and binge drinkers, where young people were very much seen as part of the cause of alcohol related problems rather than affected by other people's drinking. The previous Liberal-Labour coalition government's alcohol policy very much reflected this as demonstrated by the quote from Malcolm Chisholm in the ministerial forward to the Scottish Executive Plan for action on Alcohol:

"Alcohol is widely used and enjoyed in Scotland. The drinks industry and the licensed trade make valuable contributions to our economy. Drinking small amounts of alcohol is compatible with a healthy lifestyle. Drinking too much can, however, lead to illness, accidents and anti-social and criminal behaviour.... There is already some good work to address alcohol problems across Scotland. However, there are some concerning upward trends. Young Scots are drinking more than ever before. The effects at an early age can be very serious. Binge drinking is also increasing and can harm individuals and society more generally. We are responsible for our personal behaviour and the impact it has on our families and communities. We estimate that alcohol problems are costing Scotland at least £1billion each year. We need to tackle these problems." (Scottish Executive. 2001:pii)

In the quote above young people's drinking is top of a list of concerns about alcohol. The focus of the Health Committee in session two of the Scottish Parliament reflected this by focusing on young people's drinking patterns and commissioning a comparative study of young people's drinking in Scotland and other European countries (Lamb and Payne 2005).

It was this conceptualisation of children and young people in alcohol that the Director of ChildLine was particularly keen to challenge through the partnership research, given the number of calls coming in to ChildLine where children were affected by their parents' drinking. She had been involved in research on this issue in the past. In her interview she identified the need to have a better understanding of the nature and effects of parental alcohol misuse to shift an agenda that focused on young people's drinking:

"What I can observe from working in this area for a long time is that the discussions taking place about alcohol which when I think back to before I did the first one for ChildLine [report on calls about alcohol] were almost exclusively about young people's drinking behaviour. And how atrocious that was and how awful that was..., like we as adults have got nothing to do with that. When I did the first [study] that was part of the motivation for that. What we were hearing was that it was actually parental alcohol misuse was a much bigger issue for young people." (Director, ChildLine)

The calls coming in to ChildLine had alerted the organisation to the issues of the increased rates of alcohol consumption having a negative effect on family life.

ChildLine's knowledge of key issues based on their practice experience was an important factor in framing the research carried out by the CRFR/CLS partnership and making it relevant and topical.

In Scottish Executive documents from 2001-2005, children and young people affected by parental alcohol use are subsumed within policies on drug using families. The focus is very much on a small minority of families affected by substance misuse, with alcohol mentioned but not included within the further discussion. For example, children affected by alcohol are included in a key policy document on children and families affected by substance misuse but seen very much as a small minority of the population:

"Although our focus is on the impact of parents' problem drug use on their children and families, some of the advice and suggested protocols will be useful in work with parents who misuse legal drugs, such as alcohol." (Scotland. Scottish 2001:p1)

This view is reflected in other policy of the time (Advisory Council on the Misuse of Drugs 2003; Scottish Executive and Advisory Council on the Misuse of Drugs 2004). In 2006 the document Hidden Harm (Advisory Council on the Misuse of Drugs 2006) mentions the number of children affected by their parents drinking as larger than those affected by drug-misusing parents but the only references to alcohol are as references to 'drugs and alcohol' throughout the document with no distinction made. The one exception to this is one mention of Foetal Alcohol Syndrome, something that affects only the very small minority of children born to alcohol dependent mothers.

In 2008 the new SNP led Scottish government released a discussion document which suggested a different approach to alcohol problems. They wanted to reframe the problem as a whole population approach rather than one concentrating on a minority of problem drinkers:

"Over recent years, increased consumption has been influenced by factors such as a decline in the relative cost of alcohol; increased availability; and changing cultural attitudes. Excessive alcohol consumption is closely linked to harm: the more we drink, the greater the risks. It is clear that alcohol misuse is no longer a marginal problem. Nor is it one that affects only binge drinkers or those who are dependent on alcohol." (Scottish Government 2008:p4)

Alongside concerns about the levels of drinking amongst young people in this discussion document, attention was drawn to the fact that drinking caused harm to

others, including children in families where parents drink. This included a reference to the ChildLine/CRFR research four years after it was published.

ChildLine responded to the consultation document, welcoming its overall approach but re-emphasising the need to see young people as affected by parental alcohol misuse rather than as problem drinkers themselves:

"CLS greatly welcomes this discussion paper. The children who call us leave us in no doubt the extent to which achieving the government's key objective of making Scotland a Wealthier and Fairer, Safer and Stronger, Healthier and Smarter society for children to grow up in depends on tackling Scotland's often harmful relationship with alcohol. We strongly support the aim of reducing overall consumption as well as many of the key objectives in achieving this aim.

Nevertheless, CLS is firmly of the view that the emphasis in the strategy is too much on problem drinking by young people, and not enough on the consequences of parents' problem drinking on their children. This does not mean CLS does not acknowledge the serious nature of young people's drinking patterns nor support key proposals to deal with these. Nevertheless, we are firmly of the opinion that the impact of parental misuse of alcohol on children must be given far greater emphasis in this strategy."

(Response on behalf of ChildLine in Scotland to the Scottish government's discussion paper on Changing Scotland's relationship with alcohol 2008)

ChildLine used the research to inform these responses and ChildLine's Policy Officer reported that it gave them the confidence to make claims about the levels of problem drinking that they might not have made otherwise. Linked to the discussion in Chapter Five about legitimacy, the fact that the research had been carried out by university researchers rather than solely ChildLine gave it authority which helped this confidence.

In the strategy that followed the consultation, the government still aimed to change policy to a whole population approach which would recognise a widespread problem affecting families and communities. Indeed, the need to address family and community needs has a high profile in the strategy as the second main section of the report and reflected throughout the discussion. In summing up the responses to the consultation there is particular focus on the shift away from young people as the cause of the problem:

"...overall there was an acceptance that there is a problem; that it is not just confined to young people and those with chronic alcohol problems; and that something needs to be done. We believe this is an endorsement of our whole population approach. Alcohol

misuse isn't a problem that just relates to other people; it's a problem that relates to all of us, and we all have a role to play in finding the solutions." (Vestri and Health and Community Care Research Programme Scottish Government 2009:p9)

The role of research

All three interviews that relate to this policy area see the CRFR/ChildLine research having played a part in the reframing of children and young people, and the move to a whole population approach in alcohol policy. In this example, the policy-maker on the alcohol team discusses the role of evidence in reframing the problem of alcohol in Scotland:

"Also really crucial to us was evidence of what the nature of the problem was because one of the changes that we have made is really fundamentally changing the sort of way in which we frame the problem in Scotland. Traditionally it has been seen as something that was predominantly about dependent drinkers, you know people with a strong serious problem with alcohol. We were trying to open it up to a wider understanding of a cultural problem and a whole population problem. Thinking about children and all of that, that is quite a key part of the jigsaw... The ChildLine stuff has been helpful in helping to expose some of the nature of the impacts on those other than the drinker." (National Policy-Maker 10)

Here the policy-maker is discussing the role of research in changing knowledge and understanding of the issues of alcohol. The CRFR/ChildLine research was useful because it suggested that the problem was much more widespread than before, but also that there were impacts on children as a result of parents drinking. This view about research contributing to a shift in thinking was echoed by one of the conference participants from the policy and practice conference which was part of the knowledge exchange activities carried out by CRFR and ChildLine in relation to this research. She felt that the research had helped to address knowledge and understanding of alcohol:

"There is more money channelled into drug and alcohol -using families and the [CRFR/ChildLine] research contributed to the debate around these issues. It also helped move the focus away from young people's own alcohol misuse to parental alcohol misuse which is much more hidden." (P1 Conference participant 9)

The idea that parental alcohol misuse is more hidden, and so had gained less attention than young people's own drinking, is an important one here. It had been common for young people to be portrayed in the media as drunk and causing trouble and so this had become a populist policy area. Conference Participant 9 is arguing that parental alcohol misuse, often taking place behind closed doors in the

home, was less easy to bring to the attention of policy-makers but that the CRFR/ChildLine research had helped to do this.

So it would seem from these two accounts that the research played a role in influencing policy but it would be hard to claim that it was the only cause of this shift. It is more reasonable to claim that it contributed to the shift. Understanding the process of research uptake, use and impact within a complex system of factors influencing the policy and public agendas is helpful here. Evidence of research utilisation - the references to the research in policy documents and interviews - might be considered enough evidence to claim that research has had an impact on this policy process. But other data about alcohol problems, government actors own experience, constituents experiences and public opinion amongst other factors have an arguably more important part to play.

But if the CRFR/ChildLine research did find a place in this public agenda, what is of interest is how did it occur? It has already been established in this case that a research partnership aiming to make a difference for children and young people, set out to raise the issues of children affected by parental alcohol use with policy-makers and practitioners. The subsequent direction of policy or sequence of events that led to such a shift in policy could not have been anticipated. There are many factors in the system that led to the research finding a place in this emerging policy agenda including, importantly, a change in government. What is helpful in exploring this is further inspection of the processes through which research played its role.

Pathways to impact on alcohol policy

Initial analysis of the policy documents identified a reference to the CRFR/ChildLine research in the first consultation document issued by the SNP government setting out their approach: 'Changing Scotland's Relationship with Alcohol' (Scottish Government 2008). However, how the research came to be cited in the main consultation needed further exploration. Other mentions of the research in policy documents are traceable to where ChildLine have included it in their response to the consultation. Interviews helped to drill down into the processes through which the research had been used in this policy process, revealing three main sub-pathways

within the overall policy process. The first is ChildLine's use and re-use of the research in the emerging policy process; the second the uptake of research by SHAAP, a key policy influencing organisation; and the third was the research being picked up by analysts in the original consultation document.

In the initial interviews both the Policy Officer and Director of ChildLine felt that the research had contributed to the change in alcohol policy. For the Policy Officer this was partly about linking with others who had similar concerns, as well as utilising the research in policy work:

"Linking up with other children's charities on these findings created a groundswell that has ultimately led to the current government trying to be really bold with the current alcohol strategy and that's where this has come in. It's not that the research gets done and then it's all dusty and we never look at it again - we used that in our responses to the government's alcohol discussion paper – that research informed our response enormously." (Policy Officer, ChildLine)

Here, and in other discussion with ChildLine's Policy Officer, the effect of partnership research goes beyond any initial dissemination activities and becomes part of the stock of knowledge for that agency which is used and re-used to carry out their business, in this case policy influencing. They used the research to make bold claims in their consultation response to the government's proposed alcohol policy but also developed this to build consensus with other agencies around the direction of travel in this policy process:

"We felt we had just very, very clear evidence about the impact on children and young people and that it wasn't a big leap at all to make — to look at how reducing alcohol at a population level would obviously impact positively on children and young people, and minimum pricing was a key way to do this. I think the other children's organisations were worried about that argument, about impacting on [poorer families]...all we saw was the evidence on the impact on children and young people of harmful parental drinking... in the end we got a joint statement and we got seven organisations signed up to it."

(Policy Officer, ChildLine)

It is clear that ChildLine's confidence in the evidence helped them to drive forward this joint agenda. They felt the evidence was clear and that they could link what the research had told them with the emerging new policy direction in a positive way. This allowed them to lead on the children's charities taking a joint position, even

though there were worries amongst some of these about the political situation and the potential that the Labour opposition, who opposed the policy, would be in power after the election and therefore responsible for their funding.

However, the Policy Officer was also clear that the joint statement was important in terms of its impact on the policy process. Other groups had come out in support of the proposed minimum pricing policy as a strategy to tackle alcohol consumption at a population level, and she felt that the children's organisations added weight to that:

"I think that [the joint statement] was definitely important and Nicola Sturgeon [Health Minister] referred to it as that. It was the last whole group to speak out and it came on the back of the medics who were absolutely united about it. The Police had put themselves on the line and said this has to be done in Scotland. I think for children's organisation then to come out it was really important and actually if they hadn't I think it would have been really terrible to be honest, if they hadn't managed to coalesce on that because it is such a key issue for Scotland, the impact on children." (Policy Officer ChildLine)

The Policy Officer thinks that this grouping of children's organisations endorsing the new policy direction was important and this view was echoed by the National Policy-maker from the alcohol team. She also felt that the research had been a focus for children's charities in supporting the main measures of the Alcohol Bill, and in developing more work on this area which had influenced the minister:

"The children's charities were very supportive of minimum pricing and of the bill in general because they very much recognised that parental drinking is a major impact and I'm sure that their views were partly informed by the ChildLine work. Everyone was very active in encouraging the children's charities to be aware of parental drinking as an issue, in fact they are all coming in to see the minister .. to urge her to do more on parental drinking." (National Policy-Maker 10)

Although the proposed minimum pricing element of the Alcohol Bill was not passed in 2010, this process of groups endorsing minimum pricing as a key policy measure in tackling the population level alcohol problem in Scotland led to it being a manifesto promise in the SNP's 2011 campaign to be brought back to parliament in the next session.

The processes leading to impact here include new actions in response to emerging new contexts for research use. ChildLine reworked the research in policy consultations and used it as a focus for negotiations with other agencies in developing policy influencing work. These activities and instrumental uses of the research would not have been anticipated when the research was commissioned or carried out, although they fit very much within ChildLine's remit and aim to help children and young people. There are similarities with this process and the next example, where further adaptation of research contributed to the policy process.

The second of the key factors in increasing the impact of the CRFR/ChildLine research was the commissioning of further work on calls to ChildLine about alcohol by a key policy-influencing group, a national alcohol voluntary agency along with ChildLine. I had been aware of this through my work with CRFR but the significance of it in terms of the developing policy agenda only emerged through the investigation in this PhD research. SHAAP and ChildLine carried out a small study to build on the initial CRFR/ChildLine research. This informed my decision to interview the Director of SHAAP.

In this case the research-user is someone whose role it is to use evidence to influence policy, a role which had been created due to a concern that existing policy didn't use evidence effectively:

"Director SHAAP: I was brought in as Director of SHAAP, to develop focus on alcohol. The specific aim to advocate for evidence-based alcohol policy – so we would be calling for an evidence-based policy, this informed our whole approach

SM: Were the royal colleges [who set up SHAAP] concerned that policy was not based on evidence?

Director: Absolutely, absolutely – I gave them an analysis of the existing alcohol documents at Westminster and Scotland – I checked these to see where they were referring to the evidence, what language they were using etc, and it was really clear that what they were calling for were those measures which were least effective."

The Director of SHAAP was concerned that policy was not taking account of the evidence, and that there was a need for a shift away from a focus on education and on a few problem drinkers towards an approach that recognised Scotland's wider problem with alcohol:

"Existing policy documents didn't talk about the whole population – they talked about the majority drinking responsibly, only a minority misusing alcohol, and therefore the efforts should be on those who drink the most. We had three decades of evidence saying, no, your efforts should really be on the whole population." (Director SHAAP 11).

What can be seen here is an emerging policy agenda where the shift to a whole population approached is underpinned by evidence. It is also a shift where the CRFR/ChildLine research carried out some time before could play a specific role.

Part of this was a need to reframe the problem away from problem drinkers:

"Our first task ... was how do we get the evidence to lead the policy? What I worked out on behalf of [SHAAP] was that the first thing we had to do was get people to accept that there was not just a problem about chronic drinkers and youth, it was a problem about all of us. To get them to understand the population approach that was in the evidence we needed them to accept it was about everybody." (Director SHAAP 11)

However, there was limited evidence on the effect of drinking on families and communities. The national policy-maker commented on this: "We are still up for a challenges in terms of the evidence base around children in terms of getting facts and figures" (National Policy-maker 10). There was also impetus to get evidence around this issue because in the previous government's tobacco policy strategy, evidence about 'harm to others', that is harm to those around someone who smoked, had been key in getting the policy agreed. SHAAP's strategy was to try to address this gap in the evidence:

"We did stuff around trying to build the evidence base – we didn't have much evidence around that – there was a piece saying that every problem drinker will affect two others in his or her family – we used that as a basis and we did the research with ChildLine which was taken from the CRFR research – that had provided a good baseline – we wanted to drill down a bit more qualitatively and talk about what that meant for children and how they described it. The Untold Damage report is cited quite widely now – that CRFR initial research then prompted people working in the alcohol policy field to develop that evidence base further. That's been quite important." (Director SHAAP 11)

The account above illustrates the importance of an understanding of the specific context for research use. The research has been used but it has also been built on to provide the evidence base to meet the needs of this particular policy context. The CRFR/CLS research provided some important information about this group: children affected by parental drinking who were now in the focus of a new policy agenda. However, the work of this particular policy-influencer in understanding the specific ways research might be used to influence policy led to her organisation commissioning a follow-up study with ChildLine, focussing specifically on alcohol and drawing out issues which were of concern for policy-makers at this particular

time. This adaptation of the research in order to meet the needs of the research use context is a theme which runs through the three pathways in this Chapter.

In this case a new policy context where research was relevant emerged sometime after it was published. This re-emphasises the need to understand the context for research use but also how it changes over time. In this instance alcohol policy, which had not been a main focus of attention and had been subject to mainly incremental changes, goes through dramatic change associated with a change of government.

Both the punctuated equilibrium (Baumgartner and Jones 2009) and policy streams (Kingdon 1995) approaches might be useful in assisting understanding of this dramatic change in policy direction. For Kingdon it would represent a moment when policy, politics and problem streams were linked and change could occur. The research found its place in the problem stream in terms of understanding the nature of the alcohol problem in Scotland. In the punctuated equilibrium model the research could be seen to both contribute to creating a wave of enthusiasm for a new policy direction, that of tackling Scotland's relationship with alcohol, and with getting caught up in that wave and being drawn into the activity around the new policy area which emerged.

However, in order to continue the story of the pathways to impact in this particular case, further discussion of the backward tracking of the research in this policy process is useful first.

The interview with the Director of SHAPP identified a further key research user as the Head of Alcohol Policy in the Scottish government unit with responsibility for the development of this policy under the SNP government. Her role was to oversee the consultation process on the consultation document 'Changing Scotland's Relationship with Alcohol', and developing relevant legislation and strategy following the consultation. In her interview several ways in which the CRFR/CLS research fed into the process were identified. What emerges is a picture of building up evidence to support the policy shift to a whole population approach with a range of evidence playing a role, with the CRFR/CLS research sitting within that:

"I guess one of the things that was really crucial for us in terms of moving to a whole population approach was the evidence around the numbers of us who are consuming above recommended limits and we were trying to triangulate that with bits of data... But really it is just layer upon layer of information and statistics around impact. The increase in deaths, the increase in admissions, all of those sorts of things have fed into it." (National Policy-Maker 10)

This picture of lots of research feeding into policy-making reveals the research-use process from the policy-maker's point of view. No one piece of research is going to clinch a changing agenda and as illustrated below, the complexity and speed with which lots of evidence is assimilated becomes clear. While this policy-maker was sure that the CRFR/ChildLine research had been used, it was less evident from this interview *how* the research came to be considered in this process. In terms of backward tracking, finding specific references to the research, and being able to identify it through discussion with those involved with policy influencing is arguably evidence of impact. In terms of understanding pathways though, it would be helpful to be able to track back further and understand how the research came to be included.

The interview with the senior policy-maker for the alcohol team revealed she rarely looks at research herself, and relies on others to provide research input for the policy process:

"SM: Does part of your role involve using research?

National Policy-maker 10: We have lots of dedicated analysts, so we are fortunate in that I would look at research myself but I would be heavily reliant on analysts and also the likes of Health Scotland [the national health agency] who have done some work for us on logic modelling and looking at the evidence base right back at the beginning of the process. Absolutely the aim is to have policies that are evidence-based. That is the fundamental objective. ... So yes, absolutely."

For someone at this level there are evidence generating mechanisms in place to support the objective of evidence based policy-making. A team of dedicated analysts, along with specialists from Health Scotland, are part of that machinery. In order to pursue more information about how this process looked on a day-to-day level I asked a further question about how this individual policy-maker used research:

"SM: So how often do you yourself access research findings? Do you look at briefings yourself or are you relying on analysts?

National Policy-maker 10: I would but to be honest I pretty rarely get beyond summaries. I would be looking at what the headlines on things are rather than - the occasions when I have looked in more detail is when we are going through a parliamentary process and stuff was coming up around the impact of alcohol minimum pricing on low income drinkers, I was reading one or two articles fully.

SM: Because you needed to have a more detailed knowledge?

National Policy-maker 10: Yes or just looking for the needle in the haystack – help or something that the minister could quote from or whatever.

SM: So that's more trying to find bits that are helping the political process would you say?

National Policy-maker 10: Yes to be honest, that was the point we were at in the policy cycle."

Here a much more instrumental and political approach to the evidence emerges. First of all there was increased engagement with research – reading a few select research articles in full - but it is clear that this is not for a deeper understanding of the issues. But when there is political pressure, and in the midst of the political process of this bill, this policy-maker was looking for useful research to support the minister and government position on minimum pricing. At this point in the policy process research needs to be used in this tactical way. The policy-maker was apologetic: 'yes to be honest that was the point we were at', and a picture emerges of an almost frantic search for a nugget that might be useful for the minister to have to defend her position – the 'needle in the haystack'.

As part of the backward tracking process, the reference in this interview to Health Scotland background research was followed up. A range of specific projects relating to alcohol were published by Heath Scotland during this time but nothing specifically looking at children or young people and no references to the CRFR/ChildLine research. Other people identified by this interviewee as key to helping support this role in supplying evidence to the process was the Director of SHAAP, interviewed earlier, and a specialist secondee from Health Scotland who was an expert in the field, and some key academics who were alcohol specialists who did not work in relation to issues of children and young people.

In order to dig a bit deeper into the way research was used in this process, the analyst involved in drawing up the consultation document in 2008 which references the CRFR/ChildLine research was approached and agreed to be interviewed. The intention was to further explore the processes by which this research had come into the policy consultation. The interviewee was the principal researcher for the alcohol team (Government Analyst 12). His role had been to draw up the consultation document but what became clear from his interview was that he could not remember the specific CRFR/ChildLine research, and that he confused it with the research done later with ChildLine funded by SHAAP:

"SM: Can I just ask you about if you are aware of the research that was carried out by the Centre for Research on Families and Relationships with ChildLine looking at children's views on alcohol issues which was referenced in that first consultation document?

Government Analyst 12: Oh, yes, I am aware of that, I have got quite good links with SHAAP particularly who were obviously involved, so yes I discussed that research with [the Director of SHAAP] prior to it coming out. Yes, quite keen to link in with government on what you know that was showing and we put out a news release, you know, around what that report showed, you know, the proportionate amount of alcohol coming from Scotland, again it kind of reinforced what we were saying, that Scotland had a particular problem and there is a huge impact on children. So, yes, that would probably have been after the initial discussion paper.

SM: Well, what happened was we did some initial research with ChildLine and then SHAAP then commissioned a kind of follow-up study which came out much later. But the initial research with ChildLine is talked about in the first consultation document.

Government Analyst 12: Yes, is it that heavy drinking is a cause of family break-up?

SM: [outlines research topic]. It is quite a while ago which is one of the problems of trying to do this sort of follow-up. But I don't know if you have any recollection of that?

Government Analyst 12: I was aware of the initial research but I wasn't sure if, it was three, four, years ago since the discussion paper was drawn up so, but I am certainly aware of the updated one with SHAAP. I think that was a really - that is quoted quite a bit in our communications, you know, if we are putting stuff out on children and young people that is quite a common start, you know, that the ChildLine research demonstrated a disproportionate number of calls, and the link with physical violence and such like. I'm certainly aware of that because there is not a huge amount on the kind of harm to others side on alcohol consumption I think that is something we may want to look at going forward."

This excerpt from the interview illustrates the limitations of this backward tracking method and also reinforces the evidence about the way research was used in this process. For someone in this kind of role it is difficult to unpick events that happened

three or four years previously and when amassing evidence for a policy process it is not easy to identify single pieces unless they were key to the debate. When asked about key evidence this Government Analyst has clear recollection of some of the data around cirrhosis rates which had been important in changing Ministers' minds about the need to address alcohol issues but in this case, some research which is tangential to the main agenda about alcohol use is less easy to recall.

However, the significance of the SHAAP commissioned research with ChildLine is clear and arguably an impact of the original CRFR/ChildLine research. It was only through the publication of the original research that SHAAP were aware of the potential for data to come from ChildLine and that they commissioned extra research. What is apparent here, and in the examples elsewhere in this Chapter, is that often some extra specification of the research is required for it to have an impact, making it suit the specific context where it is being used. In this case, commissioning extra work to bring home the message about harm to others in the alcohol debate was a tactical move by a pressure group. It built on the work in the CRFR/ChildLine research but it required this to have a different emphasis for the purpose in hand, in the specific context, and at a particular time in the policy process.

Conclusions on alcohol policy and research

What has emerged from this investigation is that the issues of time and timing are important, and that three main routes to impact were important in this specific example. The research was quoted in the consultation document drawn up by the new SNP government in 2008. There was a change in the policy-making context where issues about alcohol had risen up the political agenda which made the research more useful. It has not been possible to find evidence that the research played a role in shifting this agenda, although several interviewees felt it had.

The research was used by ChildLine to respond to policy consultations and these can be seen to have an influence on the policy process, although arguably this is because they support rather than challenge the direction of that policy. The research was used as a catalyst for children's organisations to get together around their concern about families and alcohol and try to influence the policy process. By being in

partnership with a voluntary organisation the research was timely and relevant to the needs of the sector.

Perhaps the biggest impacts can be seen in the way the research was reworked by a SHAAP and ChildLine to influence the alcohol policy agenda. This involved bringing the research up-to-date to ensure its continued timeliness, focusing down of the specific issues that were relevant to policy at that time, and transforming it to ensure impact in this very specific policy context. This reworking of research to suit the context where it is being used can be seen elsewhere in the impacts of the research, as will be discussed in the other examples in this Chapter. The importance of context is a theme which will be revisited during the next example and elsewhere in this PhD.

Developing a pathway concept

It is helpful to set out the processes of the research impacting on policy in a simple linear model or pathway. The idea of a pathway draws on literature from the evaluation field which suggests that simple logic models of how impact might be achieved should be set out at the start of projects, in order to create a basis on which to monitor progress, allowing for flexibility as projects develop (Douthwaite et al. 2003; Walker et al. 2010). The idea of a pathway to impact has been picked up by the UK research councils as a tool for planning knowledge exchange activities:

"The purpose of Pathways to Impact is to encourage applicants to explore, from the outset, who could potentially benefit from their work in the longer-term, and consider what could be done to increase the chances of their research reaching those beneficiaries." (Research Councils UK)

In this Chapter the idea of a pathway is being used to show the subsequent ways in which research can be linked to changes in policy or practice, as a way of setting out the idea that research contributes to wider policy or practice changes through a series of relationships, interactions and sometimes reworking or adaptation to suit the specific context. It creates a way of mapping the processes of research uptake and use through to research impact.

Diagram 6.2 Pathways to impact on the development of alcohol policy

F: Children and young people affected by parental drinking better supported. Reduction in alcohol abuse levels amongst families in Scotland



E: Policy shift from focus on small group of problem drinkers, and young people as drunken youth, to whole population approach which addresses effect of wide alcohol issue on families and communities

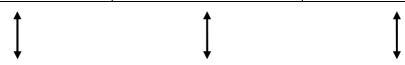


D: Recognition of need to change focus on policy and practice away from problem minority to whole population approach, policy discussion documents and consultation



C: Research used by analysts in drawing up consultation document for alcohol policy development ChildLine feed research into consultation responses and to negotiate a shared response to policy recommendations with other children's charities

SHAAP commission and disseminate additional research looking at calls to ChildLine in response to issues raised in research



B: Research discussed and taken up by policy-makers, practitioners and other actors with an interest in alcohol policy and practice, research reworked for specific settings



A: Research conducted through partnership and made available for discussion and debate through seminars, briefing papers, press coverage, direct mailing, launch event and used in consultation responses by partner

The pathway sets out in simple linear format the routes through which the uptake, use and impact of the CRFR/ChildLine research has been seen to influence alcohol policy in this case. As discussed above, in fact there is some movement back and forth between each stage during the time of the pathway as indicated by the double arrows between each stage. For example, the initial use of the research in the consultation document (C) results in more discussion and uptake described in step B, or the recognition of a need to change focus described in section D happens for different groups, parties, or individuals at different times and in reaction to differing elements of the process. What the pathway model enables is the identification of some of the processes through which research is used and eventual impact occurs. Specifying it in this way clarifies what evidence there is that the research did indeed make a contribution. For each of these steps in the pathway assumptions are made and there are risks. These are closely linked to how such a model might be evidenced. For example to get from A to B, the assumption is that through knowledge exchange activities the right audiences can be reached, and the risks are several: that they can't be reached or they are not interested in research or this specific research; that the messages from research are challenging or distorted by the media; or the timing is wrong. These risks are drawn from the literature about what helps and hinders research utilisation as discussed in Chapter Two (Walter et al. 2004; Mitton et al. 2007). This process of identification of risks and assumptions is further explored in relation to developing methods for assessing research impact in Chapter Seven. The same process of setting out a simplified pathway will be undertaken in the next two examples.

6.3 Impact on sexual health policy and practice

In contrast to the above example, the impacts of the research for Project Two were uncovered using solely a forward tracking approach, starting with the activities to increase the use of research as set out in Chapter Five, and following up contacts and participants to find out more about their use of the research and possible impacts. To understand how impact occurs it is important to note the different starting point of

Project Two: 'sexual health' compared with Project One: 'significant others'. Project Two research was focussed on a more discrete policy area than in the first research project. It had also been funded by the Scottish government under the developing sexual health strategy, so it had an immediate fit and resonance with the policy and practice context to which it related creating a route for uptake, use and impact.

The starting point for the forward tracking process for this research, following initial analysis of documents relating to the partnership, was an interview with ChildLine's Policy Officer who had been key in getting the research funded, developing ideas of what should be included in the research and networking with others in the sector. Her role in understanding the sector, the policy and practice agenda, and being a member of the relevant sexual health networks, were important elements in the pathways to impact in this case. She was a member of the Cross Party Group on Sexual Health and of local sexual health and sex education networks. Three research users, the one quoted below and two other Health Improvement Officers (2 and 3), commented that they already knew her, knew about the research prior to publication, and were expecting and waiting for the results so they could use them.

"SM: So can I ask you a bit about the particular piece of research, the ChildLine work, which was about children's calls to ChildLine on sexual health topics? How did you first hear about that piece of work, can you remember?

Health Improvement Officer 1: the [Policy Officer ChildLine] who had been working on it — I don't think we had worked on anything directly together but we knew each other and I knew that she was doing this, and we had had a chat about it before it came out she was indicating some of the possible findings. Fairly early on she was aware of the level of calls coming in under the topic facts of life. The timing of it coming out was really fortuitous for us because it was at the time when we were putting together our training programme so it just worked really well."

Here the network relationships of ChildLine's Policy Officer created anticipation of the research publication through discussion of emerging findings. Also the timing of the research was 'fortuitous' which relates to the position of the Policy Officer within the relevant networks, with an understanding of the research and information needs of those networks, as well as knowledge of what was in the ChildLine database in terms of the issues children and young people were calling about.

This same research user felt that the CRFR/ChildLine research was well-known in the networks in the region as well:

"I would say that the research is pretty well-known and pretty well used, pretty well quoted, in Glasgow based networks. I would say most of my colleagues in the NHS or other related organisations will reference it, so it did have a big impact, maybe not on their thinking but it was used, things we kind of knew but having these unsolicited views was really helpful." (Health Improvement Officer 1)

So here the knowledge of the research within local networks is important. It didn't challenge the way practitioners conceptualised the issues - 'things we kind of knew', - but having them in this form was helpful for their work at the time. This view was echoed by the conference participants who completed an online survey about their use of the sexual health research, who felt that the research was easy to use because it 'fitted in with their work at the time' (N=6).

So the initial take-up of the CRFR/CLS research by research users was linked to the fact that it fitted within current concerns about sexual health, within the agenda of the sexual health strategy, and amongst workers whose role it was to engage with this agenda. Of course, a much wider group had attended the conference to discuss findings (121 registered for the conference from across sectors) but the method employed here has been to contact as many of these as possible and follow where impact has been identified rather than represent all of the people involved. The efficacy of the methods used to follow people up is discussed in Chapter Eight. In Table 5.3 in Chapter Five the full range of impacts identified from the research project on sexual health within the CRFR/ChildLine partnership is set out. The remainder of the discussion here focuses on two pathways: the way that the research impacted on ChildLine's own practice of taking calls on sexual health issues and arguably better supported children calling on these issues; and the impact on training for parents, teachers and other workers in the sexual health field, where the research has had a wide impact in changing parents' and professionals' minds about their approach to sex education with children.

Pathway to impact on partner organisation

As identified earlier, one of the unexpected impacts of the research was a change in practice by ChildLine Scotland in relation to calls about sexual health issues. As quoted earlier, the Policy Officer at ChildLine felt that this was an unintended impact. ChildLine's Policy Officer was clear that the research had been a catalyst for change but what was interesting was the way that this impact came about and a better understanding of the processes of use that led to impact:

"So I think ChildLine was really interested in developing a special sexual health training for answering these calls and bringing together all of the issues, from the research, from volunteers' experience, from staff experience that can cause problems, and so the research really acted as the catalyst for that. That's now happened. We put together all of the issues from the research and from what volunteers had raised to come up with principles for answering sexual health calls, and what volunteers would want to achieve and what they would want to be the bottom line. And now [an external organisation are] training staff and volunteers who will then become trainers and keep sort of passing it on." (Policy Officer ChildLine)

The link between identifying research findings and then getting a change in practice is not simple, even in this partnership organisation with clear commitment to using research to create change. In this case, the research findings initially led staff and volunteers to think differently about the issues around sexual health calls. As volunteers are at the heart of the service the initial step was to involve them more in the research findings. This led to the establishment of a working group to consider the implications for ChildLine's service:

"So we got a group of volunteers involved in coming along to listen to the findings being presented, then going to the workshops that were being done around the conference on sexual health, develop their own skills, make contact with organisations things like that. And it just became clear, and also I have to say from some of the counselling team, who it was very clear to them with some of the findings from the sexual health research that maybe some of the work that volunteers do around young people's sexual health maybe needed to address more issues, take on board some of the findings from the research." (Policy Officer, ChildLine)

This working group brought together the findings from the research with volunteers' own experience and staff experience to decide what action should be taken. They identified a range of issues around answering sexual health calls which were seen as important because the volume of calls on sexual health issues was high. They

developed guidelines for taking these calls, dealing with some of the key issues for the service, like balancing listening to children with the duty to protect them. They have since invited the Family Planning Association to run specialist training which is being developed so that volunteers can also become trainers on this issue. The impact here is a difference in the way that calls to children and young people on sexual health issues are taken.

Again, as in the pathway to impact for alcohol policy, adaptation to specific context where the research is used is important to making an impact and other information, in this case the views and experiences of those involved in delivering the service, is key to the creation of wider impact.

"We got together and talked about their thoughts and they shared a lot of their concerns about the calls and these concerns can be quite complex because volunteers come from different – I mean they all generally have a value base around obviously valuing children and respecting children but then there's the whole thing about young people having sex at different ages. It's quite a complex area so partly just them discussing their own attitudes was really important and drilling down into [them]...It was really the research being laid out that helped them look at all that." (Policy Officer ChildLine)

What emerges from this description of the research use process is how changing attitudes about how calls might be taken sit within an organisational context where addressing practice issues is supported. The need for practitioners, in this case volunteers, to address their own attitudes and beliefs around an area which is difficult is part of the picture. The other part is an organisation which is committed to using research and enabling practitioners to engage with that research for themselves (going to the conference as quoted earlier), and setting up an organisational mechanism (a working group) to help transform the changing knowledge and understanding into a practice change.

Again a simple illustration of the pathway to impact in this case has been developed. The pathway shows the basic steps from the research publication and knowledge exchange activities to a final outcome.

Diagram 6.3 Pathway to impact on partner organisation practice

F: Children who call ChildLine on sexual health matters better supported



E: Volunteers and staff at ChildLine different approach to sexual health calls. Offer improved support.



D: Group approach to new understanding of issues raised by the research. Working group established to address issues. Guidelines on taking sexual health calls developed and implemented. Training on sexual health issues increased.



C: Volunteers and staff interest in research in terms of the issues it raised for their own practice. Synthesise with existing knowledge. Identification of issues in current service delivery.



B: Volunteers and staff attend conference and workshops, read and discuss research findings, supported by their organisation.



A: Partnership research project, ChildLine Policy Officer involved in data analysis, writing and communication of findings. Research findings published in accessible form, conference and workshops to discuss these.

The final impact in this case is making a difference to children and young people who call ChildLine. What the pathway sets out is the link from the research, through knowledge exchange activities, to changing attitudes and awareness, and then change in practice – through research uptake, to use and impact. As with the previous pathway in the alcohol policy example, this linear representation of the processes of research uptake, use and impact simplifies a much more complex process, with movement back and forth between different steps in the pathway for different people and groups at various times. For example, volunteers referred to in the pathway do not all address new knowledge at the same time, and the few involved in the intense work of the working group then influence those around them. As volunteers move through training cycles their awareness and levels of practice fluctuate.

As with the previous example though, the importance of reworking research within a very specific research use context has been key to creating a wider impact in terms of a policy or practice change. Changing a few people's attitudes or beliefs is not adequate to create practice change and the organisation needs to have systems for adapting practice in line with research findings. In this case ChildLine is a research aware organisation with a commitment to ensuring that research is utilised. ChildLine use and re-use research in an ongoing way as illustrated in the alcohol pathway, as part of their stock of knowledge about issues affecting children and young people whom they represent. In the following example some similarities to the process of changing minds in order to change practice emerge as illustrated below.

Pathway to impact on sex education training

As discussed above, the research on sexual health issues was timely and fitted within an unfolding agenda of work on sexual health practice. The Policy Officer at ChildLine had received an email from a key research user about using the research just days before her interview for this PhD project – another example of serendipity, although it is likely that this research user would have been traced through other methods within this project. This led to an interview with this research user who

was a manager of a sexual health project within a health board (Health Improvement Officer 1).

In this case the impact of the research had been to change parents' attitudes and practice in the way they support their children on sexual health issues. Subsequently other sexual health trainers had then used the same methods based on the research to train teachers, youth workers, and other care workers within the same and a bordering local authority area. This section explores the uptake and use of the CRFR/CLS research by the health improvement officer's team, the impacts from this work, and how it was consequently picked up and used elsewhere, creating wider impact.

The process through which the impacts on sexual health practice were tracked was initially through an interview with the Health Improvement Officer (1) who was a known research user and a key player in adapting the research to suit the practice context of sexual health training. Later on in this PhD research two other sexual health practitioners were contacted through an advertisement in a sexual health workers' network newsletter and by email, and agreed to be interviewed about their use of the same research-based training approach (Health Improvement Officers 3 and 4).

The Health Improvement Officer (1) adapted and used the research in sexual health training for parents. There is clear evidence of the impact of this work on parents attending the training courses through both an internal evaluation and an evaluation of the programme commissioned by the health authority involving a sample of 37 parents. 242 parents had taken part in training courses where the research was used and course evaluations had been pulled together into a report by the organisation based on 229 completed end-of-course questionnaires.

According to the organisation's own evaluation over 90% of participating parents said the course had made them more aware of their children's needs to learn about sexual health issues, and the importance of talking to their children about these issues. 100% intended to talk more with their children and 23% said that gaining information from research (e.g. ChildLine) had been the most useful part of the

course. In the commissioned evaluation the research featured as an important part of the course:

"Many of the parents interviewed referred to the information that had been presented as part of the course, in particular details of calls made to ChildLine:

"I was really shocked to hear that children have to call ChildLine to get answers." (Single mother age 20-34 1 son and 1 daughter)

"The things that different age groups get up to, and the age at which everything happens – it was a real eye-opener, a real shock" (single mother age 20-34, 1 son and 1 daughter) " (Fullerton and Burtney 2009:p23)."

A further reference to the research in this evaluation was that one of the main take home messages for participants was 'don't be surprised at how much children already know' which was particularly true for fathers, one of whom refers to the information from the CRFR/CLS research.

In this pathway there is clear and externally validated evidence of the impact of the research but, as in the other pathways set out in this Chapter, the process by which this happens is not straightforward and requires an understanding of the context for research-use and the processes of engagement. In this case, as quoted earlier, the manager of the service knew the Policy Officer at ChildLine prior to publication of the research, knew the research was going to come out, and had some ideas about how she would use it. In addition she was a practitioner in a health setting where using research was her normal way of working and she considered it to be an important part of her professional competencies. When asked about why this research had been taken up by her organisation, timing, quality and a desire to use the specific messages in it emerged as reasons.

The process of engaging with the research started as soon as it was published because of the existing link with ChildLine, and it was already being considered in terms of how it could be incorporated into the training programmes before she attended the launch conference with colleagues.

"SM: So you already knew [Policy Officer, ChildLine], you already knew ChildLine, did you automatically think this research will be fine because I know [her], I trust ChildLine or did you then look at it to judge the quality?

Health Improvement Officer 1: My initial thoughts were that I was interested to see the content and I knew it was a link between ChildLine and CRFR and I had been aware of CRFR as an organisation and had read other pieces of work done by you. I didn't doubt the quality of it.

SM: Did you read the report, did you hear presentations about it, can you remember?

Health Improvement Officer 1: I read the report and I think we had started to try and build stuff into our draft material before we then went to the seminar where it was launched.

SM: So you went to that and other colleagues as well?

Health Improvement Officer 1: I think we all went, yeah."

Both the prior knowledge of the research and the credibility of the research organisation are important in this research user's immediate uptake and interest in the research. The timing was also important – the agency here was set up in order to deliver the aspects of the new sexual health strategy. The research was connected to the sexual health strategy through the networking of ChildLine's Policy Officer and had been funded through it. The research was useful because it met a specific need at a particular time:

"Because it was not something that had been generated through one of the NHS areas, at the time research was often done because we needed to know something, so like the parental consultation or something like that, research commissioned by Health Boards around key issues — usually we would know about these commissions too but this was more fortuitous just in terms of timing you know..... There isn't other Scottish research like it, there is schools' behaviour stuff but that is different because if you go and ask people you get what you ask for." (Health Improvement Officer 1)

So the research fitted in with an agenda of research on this topic and came at a time when it was easy for this research user to pick up but it was also important because she saw it as outwith the usual commissioned research which was generated with specific instrumental policy or practice needs in mind. It was unique data and she could see ways in which it would meet her training agenda.

"For our client group, parents and carers, I thought it would be particularly interesting for them because I wanted something that would show them, this is what we think, as adults, what children need. Some of that we will know but we don't necessarily know what children and young people want to know about or are concerned about, and it often surprises you and I thought that parents and carers needed that as part of their starting point. ... The research is a snapshot – it's not everybody's children, but it contributes to

expanding the thinking before you start to pin down what to do." (Health Improvement Officer 1)

Here the research fitted with a need to change people's minds about their own role in the education of children in their care, and the research was seen as a tool to achieve this. It clearly fits with a learning agenda in a specific specialised context, and relates to the values and beliefs of the practitioners and their clients in this context.

However, as with the previous examples, a process of reworking the research to suit the particular needs of this context was important in achieving an impact in this situation. In this case the research was considered by the team in this agency responsible for delivering training. They wanted to include the research to help with the mission of changing people's minds as described above, but did this through a process of rethinking the research messages for their own client group:

"As a team we spent a bit of time on the research, and for us as facilitators thinking across the whole piece it was really useful. Okay, this isn't just based on our hunches, etc, we took quite a lot of it and we would feed it in to our general process and some of the work but we also used it quite specifically to help parents expand their thinking on the world outside the home. We thought that parents need to know this [children's concerns about sexual health issues], how do we translate this piece of research into bite-sized chunks and how do we actually take something that is quite heavy in terms of the findings and results, so how do we make that into an exercise? So we made it into what we call the ChildLine Quiz." (Health Improvement Officer 1)

What is clear from the above quote is that it confirmed their existing beliefs ,"this isn't just based on our hunches", and so fitted into their current work. It was timely and relevant, arguably because of the research partnership and the context of the sex education strategy in which it was funded but to get the messages in the research across to participants in a training session the research was translated into a quiz format suitable for this purpose. Their understanding of the needs to further translate the research findings into 'bite-sized chunks' and to create something with which people could engage illustrates their thorough understanding of the context for research use.

Other interviews have revealed this quiz being used in training in two other settings. In one case the trainer is responsible for sex education training for a large urban local authority area for all staff who come into contact with children and young people, in the second the trainer is responsible for training teachers in all 300 schools in the

area. Similar reasons for using the research as Health Improvement Officer 1 were echoed by these two research users:

"This [the research] has an impact because it is the right thing at the right time, you have a way of using it that makes it really relevant, and you have a message you are trying to get across anyway and it is helping you do that.... it is probably the most interesting, engaging and helpful piece of research I have come across in a few years from the point of view of exactly what we needed to act as a lever. Professionals need levers these days to do anything outwith what is in their remit. We have found it very useful, and it is compelling reading. It's not good enough that our young folk worry about these things so let's help them. This helps me to say, look it's my job, it's your job, it's the parent's job, let's ignore the fact we find it difficult and work out how we can do it better. It's really useful otherwise I wouldn't use it, if it didn't help what I was doing." (Health Improvement Officer 3)

The combination of timing – the right thing at the right time – and chiming with an existing practice agenda, 'exactly what we needed as a lever', are key for research creating an impact in this setting. The Health Improvement Officer has an agenda to make a difference for children and young people and is concerned about their welfare. The research helps her to change practice by convincing a range of people who come into contact with children to change their attitude about their role in this issue. The fact that the research is accessible ,'compelling reading', and that it has been reworked to suit this setting, 'you have a way of using it that makes it really relevant', are also factors in this process. This research user had used the training exercise based on the research in training over 300 teachers in her local authority area.

Health Improvement Officer 4 used the research in a training strategy which aimed to reach all of those in contact with children in her local authority area. This included teachers, youth workers and care workers, and was in the process of being rolled out to foster carers. She had prior knowledge of both ChildLine and CRFR which helped her feel comfortable promoting the research:

"Health Improvement Officer 4: They [course participants] know who ChildLine is but are shocked that 5 year olds would phone ChildLine. They all know of ChildLine ... ChildLine is well used, there are posters in most schools.

SM: Did you know who CRFR were?

Health Improvement Officer 4: Yes – mainly because I knew you and you have done other things as well. I knew [CRFR Co-Director] from when she was at [previous organisation].

SM: Does that make a difference do you think?

Health Improvement Officer 4: Oh, yes, when you know people and trust them to write and to use methods that , yes, uh-ha, it does. You know whose doing what and that it will be up to spec and using, you are peer reviewed aren't you?"

The credibility of both CRFR and ChildLine for both this research user and for the course participants increases their trust in the research findings. The course participants have heard of ChildLine and the facilitator suggests that their knowledge of ChildLine as a support for needy children increases the impact of the findings on participants. The facilitator has a high level of trust in the standard of the research. She knows that CRFR are an academic organisation and that there are quality standards to be expected of such an organisation in the form of peer review but the fact that she knows people from CRFR and trusts them is part of this.

Again, a simple linear pathway for the impact from the research on this area of practice has been constructed.

Diagram 6.4 Pathway impact on sex education practice

F: Children and young people receive better education and support from parents, teachers and other workers on sexual health matters.



E: Parents, teachers, youth workers and others who receive training deliver better support and education on sexual health matters to children and young people.



D: Parents, teachers and other workers change their views about children's sexual health issues and their need for support. Knowledge, ability and skill levels developed.



C: Practitioners recognise usefulness of research for practice, discuss and rework it to use in training to achieve change in clients' behaviour. Work picked up by other practitioners in the field.



B: Practitioners engage with research through networks and knowledge exchange activities.



A: Co-production of research and associated activities to communicate and engage with relevant stakeholders.

As discussed in Chapter Five, the routes to impact through training are complex because change initially occurs in the practice of the professionals involved in delivering training, and later in the attitudes and practice of the training participants.

This double-loop has been simplified in the pathway above for clarity. Like the previous examples, the process of reworking the research in relation to the needs of the specific context where research is used emerges from this example. The deep understanding of the training situation and training needs of the clients in the sexual health field enabled these practitioners to utilise the research in a format that was not anticipated by the research producers, and in a specific setting which emerged after the research was conceptualised and funded. Research is used instrumentally here, to help change people's attitudes in order to create a behaviour change which will change practice. However, the research was not created for this purpose, rather the pattern of use emerges from the processing of the research within the networks of the research teams in specific contexts.

6.4 Conclusions

This Chapter has explored the research question about how impact occurs by drilling down into the processes in three examples from the PhD research; the impact on alcohol policy, on the partner organisation's practice, and on sex education practice in two local authority areas. In each of these a change in policy or practice was identified as an impact and could be linked with the research outputs from the CRFR/CLS partnership research. Whilst the examples differed in their complexity, focus, scale and time-frame there are some emerging conclusions which can be pulled out of this exploration.

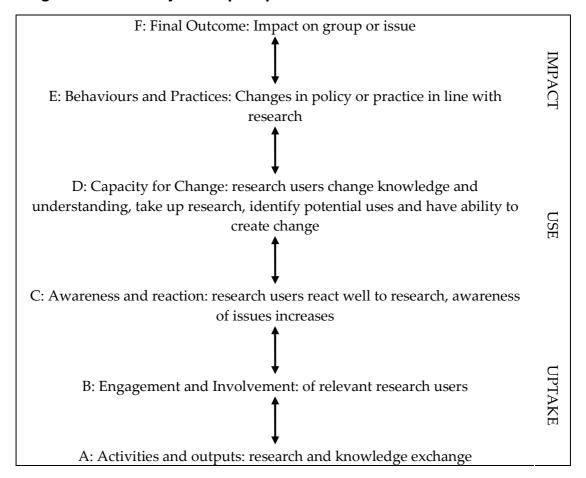
The first of these is about the pathways to impact, the roles of different actors along a pathway in creating impact, and the importance of the specific context for research use. The second relates to the role of the partnership in helping to create impact in a variety of ways. Finally, some further discussion of the issues of relationships, trust and commitment to change will conclude this Chapter.

Pathways to impact

The concept of a pathway to impact has been developed in this Chapter. Whilst the pathways are different in each example, there are some similarities in process across the three pathways which can be useful in developing this concept for use in

assessing the impact of research as discussed in the following Chapter. The generic steps in the pathways described in this Chapter are as follows:

Diagram 6.5 Pathways to impact processes



The pathway concept can be related to ideas that research goes through a process of uptake, use and impact. The activities and outputs of the research (A) need to create uptake: engage research users (B) (beyond the partners) so that they will be interested in what it has to say (C); and then they might then use it (D & E). Of course uptake is more likely where research is not challenging, chimes with research users' needs as seen in the examples here, and is timely and accessible, all of which were the case in the pathways in this Chapter.

The role of researchers in engaging with research users is the start of a process of research uptake and use but is removed by several steps in each pathway from the

creation of impact. In the case in this research, bringing research users into the partnership helps to short-circuit the engagement routes and create more immediate uptake. The pathway illustrates the role of research users in engaging with the research and using and re-using it in their specific contexts to create impact. This reflects models of the relationship between research and policy which emphasise complexity and interaction (Weiss 1979; Nutley et al. 2007). It illustrates that research users are not passive recipients of knowledge but that they engage with research from their own perspective, and that complex relationships and networks of researchers and research users are often channels through which research is communicated, debated, utilised and developed. Whilst pathways are linear in presentation they are tools for navigating complex contexts – this is elaborated on in the next Chapter.

This understanding of the research use process as complex raises issues about the role of research producers in creating impact. Current research funding bodies emphasise a notion of impact as changes in society, for example RCUK's notion of impact is:

"Our research achieves impact – the demonstrable contribution to society and the economy made by knowledge and skilled people. To deliver impact, researchers and funders need to engage and collaborate with the public, business, government and the third sector." (Research Councils UK 2011)

While the pathways described in this Chapter suggest that engagement and collaboration between research producers and research users are important elements in the way research gets used, it is those members of the public, business, government or the third sector who will take up the research, if timely and relevant, who are key to subsequent impact. Impact cannot be achieved from the supply side alone. It would be impossible to anticipate all of the context specific potential uses of research that might create impact, and interacting with all of the relevant stakeholders in a meaningful way may also be a challenge. In this Chapter the widely different activities that created impact (commissioning further research for a policy process, setting up an internal organisational practice review, and 'translating' the research into a quiz format) were all achieved through the work of research users with deep understanding of the contexts in which research could help forward their

work. Even in this partnership research programme, where academics are working closely with research users, it would not have been possible to predict all of these future uses of research. The role of academics in creating impact then can only be seen in the first part of this pathway, the second part is an unpredictable process of emerging use and impact, driven by different elements of the research user communities.

One of the interesting factors in the examples set out in this Chapter is that the key research users, ChildLine, SHAAP, the Health Improvement Officers and the Scottish government officials, all work in research-orientated settings. As discussed, ChildLine have a high level of commitment to research. SHAAP describe in their mission the aim to use research to influence policy. The Health Improvement Officers, whilst not having research use in their job descriptions, see using research to inform practice and policy development as a usual way of working. The government officials were both aware and tuned into the evidence based policy approach. This might suggest that the organisational orientation to research and the messages it gives to those involved about the value of research is also key to the subsequent impact of that work. Further exploration of ChildLine's role as partners in producing the research is an important element of this.

Partnership approaches to research production

Building on discussion about partnership in the last Chapter, again the role of working in partnership did much to ensure that the research in question here was likely to be timely and relevant to users' needs, that it was brought into the relevant networks and that therefore use and impact were increased. In the alcohol example, ChildLine's closeness to practice in dealing with children's calls in this area had been one of the reasons to pursue the topic of 'significant others' in the research in the first place. In the sexual health topic, ChildLine Policy Officer's activities in the relevant networks had led to the identification of this area of research as pertinent to policy and practice concerns in the sector. This confirms discussion of co-production elsewhere (Macduff and Netting 2000; Bartunek et al. 2003; Denis and Lomas 2003; Walter et al. 2003; Martin 2010). However, what emerges from the examination of

the processes of research utilisation in this Chapter is a combination of factors relating to partnership which are important in increasing the impact of research.

ChildLine have continued to feed the research into an emerging policy process that could not have been anticipated at the time the research was published, and in a way that is beyond the normal activities of research-producers, ensuring its continued relevance. In the sex education practice pathway, ChildLine brought knowledge of the sector and current issues to the research team, secured funding, and discussed the research process and topics in the relevant networks meaning that the research was utilised immediately it was published. ChildLine Policy Officer's understanding of the issues facing the sector at the time, and matching this with what she knew was in the calls to ChildLine on the topic, meant that the research had particular relevance and salience to the issues policy-makers and practitioners were most concerned with at the time. Her thorough understanding of the context for research use here was key to its subsequent impacts. The sustaining of the partnership over its nine years has enabled the research to remain relevant to the emerging agenda.

Several research users' comments that they knew the research was coming out before it was published and were immediately ready to use it reflect this closeness to the practice and policy agendas. What also emerged from the data were the combined reputations of ChildLine and CRFR as an important factor in the credibility of the research findings and the confidence of research users in taking up and promoting the messages in the research. ChildLine was a widely known and trusted organisation, particularly amongst practitioners. CRFR was seen as giving a quality assurance to the research which several interviewees suggest gave it authority that would not have been achieved by ChildLine publishing their own data. It is not just the state of partnership which has led to impact but the particular configuration of well-known and trusted organisations from both practice and academia, with policy influence and existing networks.

Relationships, commitment and networks

Relationships have also been key to creating impact in the examples set out in this Chapter. At the heart of this sits the relationship between CRFR and ChildLine as

discussed in Chapter Five. Relationships with research users, existing and newly developed, were also important to the creation of channels through which the research was communicated and used. As discussed above, prior knowledge of both ChildLine and CRFR was important to research users and in some cases this was personal knowledge of the people involved in the research.

There are some specific configurations of people that form part of this on the research production and research user sides. The ChildLine Policy Officer was well known in the sexual health networks and this was important in creating a climate of expectation of the research results. The Director of ChildLine has been working in these areas for many years and knew many people in the policy and practice organisations relevant to the research, and has since gone on to another organisation where the research continues to be relevant. CRFR's Director had previously worked in a health sector organisation in a research capacity and was known amongst some practitioners. My role as in knowledge exchange was to build networks of policymakers and practitioners with an interest in families and relationships research, along with a background of working in the voluntary sector meant that some research users were known to me and vice versa.

In addition, both CRFR and ChildLine had been in the business of networking to promote their organisations which meant that relationships with potential research users existed prior to new research being published. This included existing relationships with key individuals, the Scottish Executive and the Director of SHAAP. Hepburn (2009) suggests that Scotland's relatively small population means that it may have the right scale, social capital and communities of trust for effective knowledge exchange. In this case study the fact that both the organisations and individuals involved were known prior to research publication seems to have been important in generating levels of credibility important to creating impact (Walter et al. 2005).

In the previous Chapter the research partnership's commitment to making a difference for children and young people was clear. This Chapter mirrors this from the research user's side. The Scottish government actors and policy influencers in the

alcohol policy example were keen to move forward an agenda that they were committed to, where young people should not be seen as solely the cause of alcohol problems but should framed more supportively in relation to their parents' alcohol use. In sexual health practitioners were concerned that children and young people were not getting the information and support they needed and were using the research as part of a commitment to changing these circumstances. This high level of commitment to the issues meant that the messages from research were well-received and that research was seen as a tool to develop these agendas.

This Chapter has shown that research has been used and reused within specific relevant contexts. The importance of the very specific context and the particular needs of the players within that context at that specific time emerges. This fits with an understanding of research use as complex as set out in Chapter Five and further explored in Chapters Seven and Eight.

Part III: Assessing Research Impact

Chapter Seven: How can impact be assessed? Exploring ideas of contribution

The previous two Chapters have set out the main findings about what research impact is and how it occurs from the case study in this PhD project. They illustrated that the main challenges in understanding research impact are that it is complex, timescales are hard to predict and understand, and that research on its own may influence outcomes but does not directly cause them. Because research is discussed and adapted to fit the context in which it can be useful, how it influences outcomes may not be easy to identify. Any follow-up relies heavily on the recall of actors involved in using research, and trying to trace back from policy to research is time-consuming and difficult. As discussed, developing a nuanced understanding of research uptake, use and impact, and using a 'pathways to impact' approach offer promising ways of navigating these difficulties. By drawing on the findings set out in the previous two Chapters, alongside the insights about tracing impact gained from conducting this PhD research, a framework for assessing impact was developed and explored with researchers and KE professionals in order to address research question 3A: Can research impact be captured in robust ways?

Ideas to help inform the evaluation of complex issues are introduced and discussed in this Chapter, drawing on the literature. This includes ideas from contribution analysis (Mayne 2008) which seem particularly useful in addressing some of the issues of evaluating research impact identified previously. The idea of contribution has been used by other research assessment processes (Spaapen and van Drooge 2011). Contribution analysis has informed the development of the framework for assessing research impact introduced in this Chapter, named the Research Contribution Framework. Further development of this approach through workshops with researchers and KE professionals is included in the discussion followed by an outline of some of the strengths and weaknesses of this approach.

7.1 The limits of existing approaches to impact evaluation: a practitioner perspective

In Chapter Three existing approaches to assessing research impact were explored demonstrating broad agreement that key challenges for impact assessment are timing, sampling and additionality. Whilst helping to identify the key challenges to assessing impact, and providing some essential pointers in terms of key elements and methods for any impact assessment, it concluded that none of the existing frameworks provided a method appropriate for practitioner-led approaches. In particular, all of the frameworks presented were designed primarily as independent evaluations. The most widely utilised frameworks: RAPID (Court and Young 2004) and Payback (Hanney et al 2004) are both of this nature.

Whilst there is clearly an important role for this type of approach, KE professionals or researchers seeking to increase the utilisation of their own work and provide evidence of impact might find these methods limited and time consuming. Kuruvilla et al (2006) developed a descriptive model aimed at assisting researchers describe the impact of their work, but much of this model relates to academic impacts which are not of interest here. Aspects of their work looking at non-academic impacts help to think through potential areas of impact, but is category rather than process focussed, in common with the Payback Framework. For practitioners undertaking impact analysis a process focus is important because it highlights the effectiveness of practices of knowledge exchange by examining on both what was achieved in terms of impact, and how it was achieved. Focussing on the processes of research uptake, research use and research impact can help to create ways of categorising and assessing these processes.

Additionally, none of the existing frameworks suggested a method that could be used as a planning and reflection tool as well as an evaluative one, although both Lyall et al (2004) and Bell et al (2011) acknowledge that this could be a useful addition rather than focusing solely on one-off assessment.

The method presented in this Chapter aims to offer a practitioner-oriented evaluation tool that can draw on the understandings of how research is used from this thesis to

inform better KE processes as well as create channels for evaluating them. It offers a pragmatic approach to assessing research impact that can be built into KE activities on a scale manageable within practitioners workloads. It can create channels for better data collection to support impact analysis and tighten up thinking about how activities might lead to impact as well as evidencing them. It seeks to address the complexity of research use processes as part of the approach.

7.2 Research impact and complexity

The previous Chapters have illustrated that assessing non-academic research impact is complex and the need to consider changes in policy and practice, changes in people's knowledge and understanding of an issue, and the way people engage with and react to research. The context for research use along with the broad range of potential other influences on change contribute to this complexity. As a theoretical perspective complexity approaches suggest that social systems are inherently complex in nature, characterised by instability and disorder, and emerging into previously unpredictable patterns, creating challenges for the ideas of tracking the impact of research (Sanderson 2006). Complexity theory emphasises the importance of relationships and networks, and acknowledges the role of context which resonates with the findings so far in this project.

Taking a complex systems approach has highlighted the need to address the context for research use, and to understand the interaction between context and the nature of research use and user engagement activities. It also points to the need to understand the potential users of research as not just audiences but to take into account their reactions to research and what they might do as a result of learning from research. It encourages thinking about where research fits within the systems within which impact and end outcomes might occur.

Any framework for assessing impact therefore needs to be based on an understanding of the complexity of research-policy or research-practice, relationships and interactions, and be able to deal with this nature in conceptualising the processes of impact. Phase Two of the PhD project utilised contribution analysis as a tool which engaged with complex issues but provided a way of linking actions

to outcomes (Mayne 2008). Contribution Analysis approaches were adapted from work by Mayne (2008) and Montague (2008) who used them to assess social programme implementation; to apply to the processes of research utilisation. It is helpful to place this approach within broader developments of social programme evaluation.

7.3 Approaches to Evaluation

A common method for the evaluation of programmes is theory based evaluation, also referred to as theory of change, programme theory or programme logic, results-chain, logic modelling or impact pathway analysis (Rogers 2008). This approach requires articulation of the intentions of a programme by those involved in delivering and planning it – the setting out of a 'theory of change' – how they expect the programme to work- against which programme activities could be measured. There are some immediate resonances with the Research Council UK's approaches to developing work on research utilisation, where a 'pathways to impact' terminology is often used (Research Councils UK). These approaches require the development of a linear picture of how resources and inputs might be linked to outputs, outcomes or impact. A simple version of a logic modelling approach is set out in Diagram 7.1:

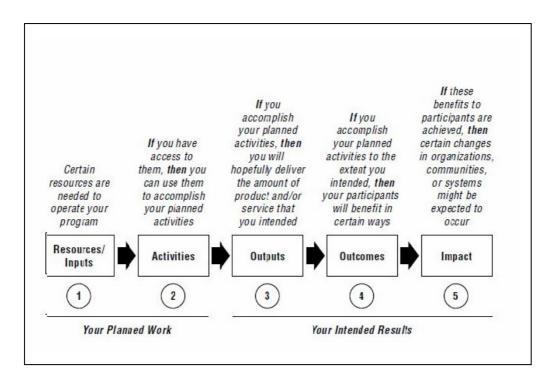


Diagram 7.1 A simple logic model

From (W. K. Kellogg Foundation 2004:p1)

This diagram aims to make clear logical links from the kind of resources and activities undertaken in a work programme, to how the intended outputs might influence participants towards change. Whilst this kind of approach has been utilised in many evaluation studies, it has come under criticism for being oversimplified and leaving out many factors which contribute towards outcomes: especially ignoring the context for implementation; only presenting one view of an intervention rather than multiple stakeholder views; and for oversimplifying the factors leading to change in any situation (Montague 2008; Rogers 2008). Chiming with the discussion in Chapter Two about the nature of policy-making, this approach was criticised for emphasising a linear and rational cause-effect approach to programme implementation.

As described in the previous two Chapters, research utilisation is a complex interactive process involving many actors and in which research is used in unanticipated ways. However, it is clear that in order to connect research and knowledge exchange activities with wider outcomes, that this kind of logic-modelling approach might be useful. In the previous Chapters the idea of pathways

to impact was used to set out how research had been taken up and used, and how this might be linked to subsequent impacts. Many practitioners and theorists involved in evaluation have recently developed approaches which seek to address complexity (for example Douthwaite et al. 2003; Rogers 2008; Hawe et al. 2009; Montague 2009; Forss et al. 2011; Patton 2011). Some of these approaches have developed the idea of logic modelling in order to apply it to these more complex systems.

Patton (2011) set out the key elements of complex systems which he thinks need to be considered when developing approaches to evaluation. In particular he drew attention to the need to recognise the many elements of a system interacting with each other in unpredictable ways. He suggested a more developmental approach to evaluation, which takes on board an evaluation of strategy, where the evaluator is part of the team helping organisations to learn. This chimes with ideas about third generation knowledge to action developed by Best and Holmes (2010) as set out in Chapter Two, where researchers are embedded within organisations to aid learning. Both Montague (2008) and Rogers (2008) suggested that logic modelling can still be useful as a tool to evaluate change in complex systems. Rodgers cautioned against assuming complexity, where for some evaluations or aspects of evaluations the issue may be that evaluation is complicated rather than truly complex. She argues for a developmental approach to creating logic-models and indicators of their effectiveness, allowing for the generation of performance measures as a programme evolves and emerges in ways that had not been anticipated. The framework presented in this chapter allows for such adaptation.

Montague (2008) argues that to build complex systems thinking approaches into evaluation it is important to acknowledge the context for programmes, and include an emphasis on the actors within a system and their capacity for change. By doing this logic modelling can be incorporated without over-reliance on linearity. He particularly emphasises a planning and evaluating cycle for programme evaluation, which addresses some of the concerns outlined above by allowing for learning to be built into evaluation, and for the adaptation of performance indicators as a

programme unfolds. This kind of approach also lends itself to use by practitioners in a learning and evaluating cycle as suggested at the start of this chapter. Montague in particular builds on work by Mayne (2011) in developing an approach called 'Contribution Analysis' which has also been developed by Winbush and Beeston (2010). This approach has been utilised and adapted in this PhD project as a basis for evaluating research impact for the reasons described below.

7.4 Contribution analysis as a systems tool

Contribution analysis offers a pragmatic approach which links activities to outcomes through the development of logic models, then aligning evidence to these logic models to demonstrate the effectiveness of a project or programme (Mayne 2008), whilst emphasising the context for implementation. There is only a small amount of literature on this emerging approach which was developed in order to assist with the evaluation of government programmes in health or social care settings. It suggests a process where programme planners, evaluators and managers work together to clarify a program's logic and identify relevant data for evaluation. This process aims to address complexity through setting out the proposed workings of a programme, assessing risks and assumptions, identifying indicators, and reviewing and reworking. There is an inherent tension between the linearity of creating pathways for action and the ideas of complexity, however, as discussed in Chapter Six, pathways are not necessarily linear and they aim to act as navigation tools through complex systems.

Contribution Analysis is based on a six step process which aims to set out and evaluate the way that a programme intends to work against evidence that it did achieve its outcomes, as detailed below:

Table 7.1 Six steps in contribution analysis

Step 1: Set out the attribution problem to be addressed

Step 2 Develop a theory of change and risks to it

Step 3: Gather the existing evidence on the theory of change

Step 4: Assemble and assess the contribution story, and challenges to it

Step 5: Seek out additional evidence

Step 6: Revise and strengthen the contribution story

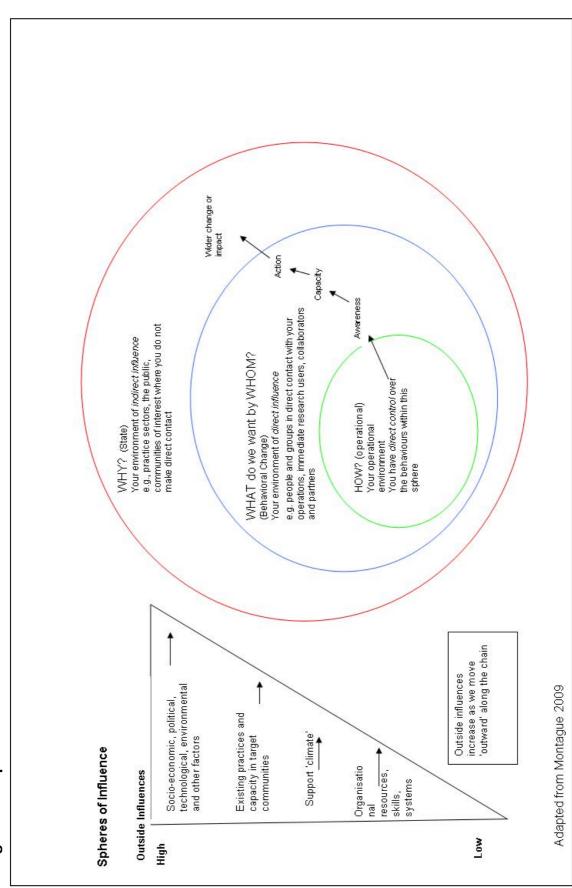
From Mayne (2001; 2008) (using Mayne's language of attribution)

The process starts when the problem that the programme seeks to address is set out which includes an analysis of context, and a theory of how it might work (theory of change or logic model) is developed and assessed for risks. The process of risk assessment creates obvious categories for data collection which are sought and a contribution story assembled.

Contribution analysis offers an approach that acknowledges complexity but makes dealing with complex systems more manageable and practical. It emphasises the idea of a 'contribution' to an outcome rather than direct control over outcomes, and acknowledges outside influences over any issue that will have an effect on the same outcomes. This is illustrated particularly well by Montague (2008) in Diagram 7.2 overleaf.

Diagram 7.2 Spheres of Influence

Part III: Assessing Research Impact



The diagram shows the link from an organisation's operational environment, through the actors with whom they interact to the outcomes or changes desired in the wider environment. The influence of external factors increases the further away from the operational environment, creating the idea of influence rather than control in these external environments. Whilst any planned intervention may aim to have an effect on the wider context, it is likely to be one influence amongst many, hence the idea of contribution rather than cause and effect. There will be many influences, social, political, environmental and economic, interacting within the same area, and these increase as you move away from the operational evironment. The arrows show the potential pathway through the complex system.

Mayne's approach to developing a results chain requires a consideration of activities (outputs), how these activities engage with (audience), how they react (does it change their awareness), what capacity they have for change (can they do something), changes in behaviour or practice, leading to a final outcome or wider impact. There are some immediate resonances between these contribution analysis concepts as set out above with some of the work on research utilisation (Nutley et al. 2007) which has been built on in this PhD project, and suggests that changes in awareness, knowledge and understanding, attitudes, perceptions and ideas, and policy and practice are part of a spectrum of knowledge use (See diagram 2.1). Using contribution analysis concepts and tools to assess research impact allows for clear consideration of the processes of engagement (uptake), and use of research that potential research users in policy or practice contexts need to go through in order for impact to be achieved. It encourages a focus on these processes in monitoring or evaluation of user engagement activities which help uncover the pathways from engagement activities to impact.

But contribution analysis has been developed to evaluate social programmes and there are some clear differences between this and using it to evaluate research. Social programmes by their nature aim to affect change. Research and social scientists might have wide societal aims in mind when conducting research or engaging with policy or practice but this is only one role they might play. Van de Ven and Johnson (2006) and Best and Holmes (2010) argue for an engaged scholar model where social

scientists are partners with other actors within the system, and where aims might be clearly agreed or might evolve as learning from research is integrated within the system. Alternatively researchers might aim to help policy or practice but see themselves as improving the efficiency and effectiveness of policy or services, taking a neutral stance to specific changes (Weiss 1995). They might place themselves on the sidelines of public policy in order to maintain a critical stance in relation to developing agendas (Rein 1976), or work specifically to challenge or change dominant agendas either through championing voices seen as outside policymaking, or creating debate around the nature of policy trends (Rein 1976; Weiss 1995). These different orientations to the nature of social science research have different effects on the ability to identify links between research and wider outcomes. Some researchers will struggle to identify what changes might be linked to their research whilst others may have very specific aims in mind.

Whilst knowledge exchange activities aim to increase the utilisation of research they do not always have a specific aim in mind in terms of a societal or end outcome either. However, it can be difficult to identify outcomes where there have been no activities to increase the uptake of research (Meagher et al. 2008). A sensible starting point may be to look at knowledge exchange activities as a basis for an assessment of research impact, rather than the research itself, as these have a clearer link to ideas of research uptake and use. Knowledge exchange activities might not aim to create change, but they do at least aim to create audiences for research to help them learn from research with implicit aims of at least increasing awareness, knowledge or understanding, if not specific policy or practice change. It is therefore less difficult to then start to articulate why those audiences are important and what consequences result from engaging with them.

So it is with some reservations about links between research and knowledge exchange and wider social change that the contribution analysis framework has been used and adapted as a framework for assessing research impact. However, the resonances between it and the process of research use and impact were strong enough to warrant its further exploration as a tool to assess impact.

Both Montague (2011) and Mayne (2008) have been interested in developing contribution analysis as a systems tool for evaluation. In order to integrate systems thinking into a logic modelling approach Montague acknowledged that developing complex versions of logic models, which acknowledge the wider environment and include representations of the multiple flows and feedback loops, means that such models become too complex to be helpful for evaluators (Montague 2011). The diagram below shows this more complex picture for the pathway to impact presented in Chapter Six in relation to alcohol policy. As discussed at the time, the pathway offered a simplified version of the processes through which research was used, with feedback loops and ways in which different actors were involved at different times removed. In Diagram 7.3 below, an annotated version of this pathway is presented in order to illustrate some of the more complex pathways through which research was used.

Diagram 7.3 Annotated pathway to impact for alcohol policy

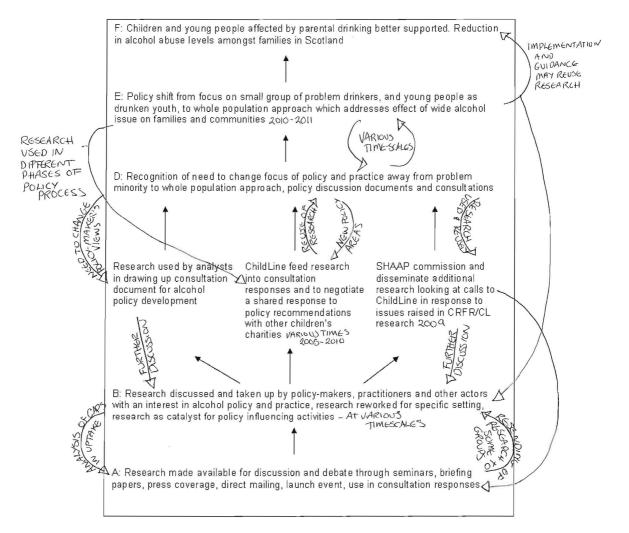


Diagram 7.3 shows how research might be used by different actors at different times and that the processes set out on the pathway are often cyclical. For example, analysis of targeting of research between A and B led to further activities as described in A to increase the uptake of research. The policy shift described in E involves different processes, consultation stages, bills, and debates before it becomes a new policy direction. During this process research might be used and reused and the context may change, creating new opportunities for research users to engage with it.

However, following Montague (2011), a pragmatic approach to assessing the context in which programmes operate is needed. He suggests that logic-models (in his terms 'results-chains') which acknowledge and build on the ideas about spheres of influence presented above can acknowledge complexity. These focus on the role of

networks or communities of practice who engage with programmes in order to achieve wider outcomes and acknowledge the context in which this occurs.

7.5 Adapting contribution analysis to assess research impact

Contribution analysis was adapted to be utilised to develop the Research Contribution Framework to assess research impact in this PhD project (see appendix J).

In the first instance the kind of questions needed to guide the development of a pathway (results chain in Montague's terms) for research impact as opposed to programme impact were developed as set out below. These required a shift away from the programme planning questions identified by Montague, towards questions orientated to research utilisation. Montague's approach is a prospective one, whilst this project sought to develop a version which could be used either to prospectively plan an evaluation of user engagement activities and evaluate consequential research impact, or to retrospectively identify and collect evidence about links between research and wider outcomes.

Table 7.2 Questions to guide pathway development

	Questions to guide results chain in Contribution Analysis (Montague 2008)	Questions to guide pathway creation for research impact assessment
Final outcomes	Conditions What is the current 'state' of wellbeing/quality of life in the Community? (e.g. trends in health, illness, mortality, quality of life; social, technological, economic, environmental, political trends)? Is there a broad need or gap that needs to be filled?	Context From contextual analysis, where might research be/have been used? Are/were there clear needs for evidence? What change might it/has it contribute/d to? What other factors were influencing the agenda (social, political, environmental, and economic)?
Intermediate	Behaviours and Practices What are the current underlying problems or risk-related behaviours in the target communities of interest? What are the coping difficulties? What is the prevailing professional practice or service response?	Behaviours and Practices What were the practices and behaviours of individuals and groups? How might/did research influence these?
Immediate outcomes	Capacity/Knowledge/skills What gaps exist in the target communities of interest in terms of knowledge, abilities, skills and aspirations? Are there gaps in service delivery and support?	Capacity/knowledge/skills What are/were the policy/practice implications of the research and how do/did these relate to the potential for change? Can clear needs be identified? What capacity do the target audiences have for using research?
Immediate impact	Awareness / Reaction Are there gaps in terms of community awareness of and/or satisfaction with current information, services, support, laws and regulations, or other initiatives to support needs? What are the perceived community strengths and weaknesses?	Awareness / Reaction What was the aim in terms of the users awareness of the issues addressed? How will/did they react to the work?

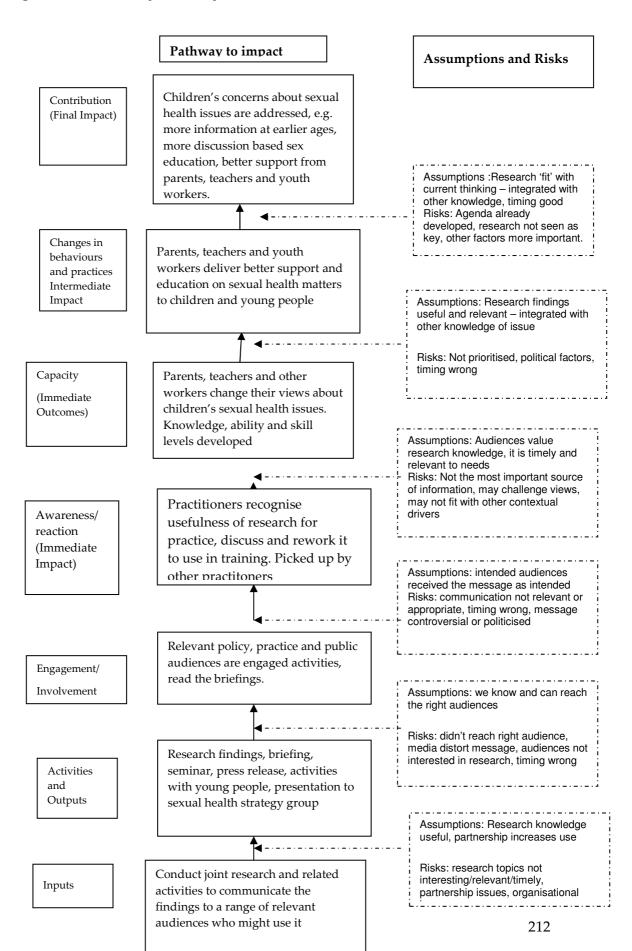
	Questions to guide results chain in Contribution Analysis (Montague 2008)	Questions to guide pathway creation for research impact assessment
	Engagement/ Involvement	Engagement/ Involvement
	Are there problems or gaps in the participation, engagement or involvement of community groups or local practitioners who are key to improving well-being/QoL in Community Y?	Are/were there problems or gaps in the participation, engagement or involvement of research users who are key to the area of interest? How will this be assessed?
Outputs	Activities / Outputs What are the current activities or outputs addressing the problem?	Activities / Outputs What KE activities will be/were carried out and how do these address the issues identified in the research and contextual analysis?
Inputs	Resource Inputs What level of financial, human and technical resources are available. What is achievable within these?	Resource Inputs What level of financial, human and technical resources are/was available? What is/was achievable within these?

Shifting the kinds of questions asked about programmes to address research use aims to give guidance on the issues that need to be considered in order to develop a theory of change for research impact. It focuses on the processes of research use rather than a social problem to be addressed. Utilising this kind of approach to the generation of a results chain or pathway for research and knowledge exchange activities allows for some identification of whom relevant audiences for research are, how they would be or have been reached, and what other factors are influencing their behaviours and practices. It creates clear links between inputs, outputs and outcomes which are logical and tenable. There is a good fit with previous ideas about research uptake, use and impact in that research uptake is clearly identified within the categories of engagement, involvement, awareness and reaction; research use in the categories relating to behaviour and practices; and impact in the final outcome. A blank pathway tool was developed for use by others and is presented in Appendix J.3. It has been developed through several trial versions to help KE

practitioners or researchers further develop the underpinning aims of their work in relation to research uptake use and impact. Using the questions set out in Table 7.2 above, a process of describing the activities aimed to increase the uptake of research, and then linking them with the wider issues they hope to address can be articulated. This process is linked to an assessment of the context for research use, because an understanding of the context where research users might be able to act on knowledge from research is essential to effective knowledge exchange, but is also helps to frame any assessment of impact. This involves a consideration of the policy, practice and wider context for research use for any specific research area as set out in Appendix J2. This not only builds an acknowledgement of the complexity of the system in which research may have an impact into the assessment process, but also helps to frame the potential areas for impact, and allows for acknowledgement of the other factors that are influencing the same system and an assessment of their relative influence. For example, in Project Two 'sexual health' in this PhD, the policy and practice context was set out in Diagram 5.1 in Chapter Five. The very conducive context for research utilisation, with a newly formed and recently funded sexual health strategy, research users with a commitment to evidence-based practice, and networks of relationships were important factors in understanding the impact in that case. They are also important factors when assessing attribution as they allowed for analysis of the distinct contribution of the research within that context as discussed later in this chapter.

The example below is developed from the pathway set out in Chapter Six and was shared with others in the workshops as a worked example:

Diagram 7.4 Pathway for Project Two: 'sexual health'



In this example in Diagram 7.4 the processes through which the research from Project Two: 'sexual health' was disseminated, users were engaged, they used the research, and wider impacts could be identified, has been simplified in order to contain it within a fairly simple pathway model. It provides a framework through which to create indicators of the activities described and their outcomes.

Often the pathway development process starts with an identification of activities and outputs, and changes in behaviour and practices that researchers or KE professionals hope to target. For example in the case presented in Diagram 7.4 the inputs, activities and outputs were known: they were the research and associated KE activities. The research had identified the concerns that children and young people had about sexual health issues: that they did not have the information they needed at the right age and were often confused, misinformed, and unsure where to seek help. This clearly identified the areas of change the project might contribute to. The impact evaluation carried out for this PhD then identified the steps in the pathway between these two processes: identifying researcher users, understanding their actions and identifying changes in behaviours and practices. The process of developing the pathway consists of linking each step in-between activities and outputs which are often planed as part of the KE process, and the contribution of the research identified through the contextual analysis and research findings. Particularly important are a consideration of who was engaged, including analysis of gaps in engagement, as uptake is the cornerstone of any further use or impact.

One of the distinct additions of contribution analysis reflected in this approach, and important from a complex systems perspective, is acknowledgment of the key role of networks and relationships. This is included in the model in two ways. Firstly in the step that asks for consideration of research-users reaction to the activities and findings. If it does not chime with current issues and practices, research is unlikely to be used. Secondly, in the step that considers the capacity for change. For example, it may be possible to find enthusiastic research users who are keen to take up and use research, however, if they have limited capacity to change practice or to influence others then further utilisation and potential impact will be limited. In the example of impact on the partner organisation's practice set out in Chapter Six, an important

element of the process of impact was that the organisation created a working group to address the ways in which the research findings might be used across the organisation. In this example capacity for change was created by this multi-level group which had the capacity to embed change in organisational practice (Diagram 6.3).

Having developed a pathway as above, the risks and assumptions for each step in the chain can be analysed in order to start to identify indicators for the steps in the logic model. Here some of the existing research on what helps and hinders research utilisation can be included to inform the analysis (Walter et al. 2003). For example, we know that research is more likely to be used if it is timely and relevant to user's needs, if it fits with their current thinking as discussed in Chapter Two. The risks and assumptions are set out in the column on the right.

This process of identifying risks and assumptions is important in several ways. It allows for an assessment of the robustness of the pathway which will feed into the evaluation process. It immediately creates categories for data collection: for example in terms of engagement and involvement an assessment of the potential research users who were or were not engaged and any gaps in participation is an essential building block of the rest of the pathway. If using the process prospectively, identifying risks and assumptions sets up monitoring criteria that can be used to ensure impact. For example if enthusiastic research users have no capacity to influence the system, further activities to engage their supervisors, managers or others who have more influence can be devised. When using the process retrospectively or prospectively, analysing risks and assumptions can help frame suitable questions for any follow-up activity by focussing beyond the expected change set out in the pathway. For example, when analysing change at the top end of the pathway, questions about 'fit' with current thinking, the analysis of he importance of research, and the influence of other factors can be explored with research users.

Appendix J:5 sets out a working document that could be used for this type of impact assessment. Here the pathway to impact is presented in tabular form, with

assumptions and risks identified for each step (note the top box is blank because risk and assumptions analysis is from one stage to the next one as shown in Diagram 7.4 above). Indicators for each step of the pathway can be set out and evidence collated. This can be the basis for assembling a contribution story as discussed below.

Further drilling down into the activities included in the broad results chain presented above is required to provide evidence for the contribution of the research. This allows not only for the identification of what evidence is suitable for different elements of the research project or knowledge exchange activities but also for analysis of how successful they are allowing for a change in direction, if targeted audiences are not reached or reaction to the research is not as expected. For example, as set out in Appendix I, initial invitations to local authorities to attend the launch of the research did not result in many attending. Follow-up letters were then sent to the people who had been invited to draw their attention to the findings of the research. This process of planning, evaluating and acting makes the logic model approach more dynamic and can accommodate some of the complexity of interactions allowing for the creation of feedback loops within the system, in order to have a more likely chance of getting research to be utilised in places where it is most likely to have an effect. Similar adjustments could be made if external factors changed or had unanticipated consequences, for example, a change in policy direction or a new policy initiative. Although logic models appear linear, this approach creates a cycle of planning, evaluating and learning helping to acknowledge the complexity of the research-use process and work with it as suggested by Rodgers (2008).

Indicators for assessing the impact of research can be generalised to some extent using the literature on what helps and hinders research uptake set out in Chapter Two (Mitton et al. 2007; Nutley et al. 2007; Ward et al. 2009). Typical indicators can then be generated to help guide impact assessment. The table presented below has developed these typical indicators in response to the feedback described later in this Chapter, building on more recent work by Montague (2011).

Table 7.3 Indicators and Evidence for assessing research impact

Logic Model	Evaluation Criteria	Typical indicators	Possible sources/methods
End	Measures of impact on overall	National or local level indications of change in issues	National or local level indicators
Outcomes	problem, ultimate goals, side	addressed	Research user views on policy or practice
	effects, social and economic	Changes in areas of policy or practice	change
	consequences	Contextual analysis	Policy analysis, contextual analysis and
			relevance of research
Policy or	Measures of adoption of new	Levels of research used by participants	Content analysis
Practice	practices and behaviour over time	Levels of research cited in policy/practice documents	Tracking activities
Change			Backward tracking techniques Internet based searches
Capacity,	Measures of individual and group	Levels of understanding of key concepts	Review of target groups
Knowledge,	changes in knowledge, abilities,	Levels of self-expressed commitment to specific related	Tracking further use of research
Skill	skills	areas and related actions identified	Press coverage
		Levels of new knowledge about issues addressed	
Awareness,	What participants say about the	Reaction to research and KE from different stakeholder	Evaluation of user engagement activities
Reaction	research, fit with current thinking,	groups	Surveys
	timeliness, research valued	Comments about research	Tracking participants over different time-
		Evidence about context for research use at practice and	frames
		policy levels	Contextual analysis
Engagement,	Who engaged with the research,	Level of engagement of research users from relevant	Web use tracking
Participation	numbers, nature of involvement,	sectors	Meeting attendance records
	background	Identification of gaps in participation	Seminar/conference evaluations
		Levels of retention of research users involved in longer	Observation and reflection of interactions
		term activities (e.g. advisory groups)	with research users
Activities	Research and knowledge	Standard of research conducted	Project reports
and Outputs	exchange activities	Extent to which knowledge exchange activities were	Peer or funders review
		delivered as per expectations	Operating reviews and other internal
			documents
Inputs	Resources expended, number and type of staff involved, time spent	Financial and human resources	Budget analysis Alignment of activities to resources

Table 7.3 illustrates some of the ways in which data to support a pathway might be collected. It allows for assembly of evidence and identification of gaps in evidence. The possible sources are further explored in the next Chapter which assesses methods for collecting data for impact assessment.

As set out above for project 2 'sexual health', the first three steps of the contribution analysis process have been undertaken: analysing the issues and the context for research use, developing a pathway to impact, assembling evidence and identifying gaps in that evidence. The materials developed to support this process are presented in Appendix J:

- **J.1** outlines the overall research contribution analysis process
- **J.2** illustrates the contextual analysis process used in the workshops (which needs further development as discussed in section 6.4).
- J.3 and J.4 are blank versions of a pathway and pathway analysis
- **J.5** presenting a worked example from the data in this thesis on Project Two: 'sexual health'
- J.6 outlines potential methods and indicators for impact assessment (also in need of further development as discussed in the next Chapter).

The final steps in using this approach are to assemble a contribution story and assess and strengthen it. In the case used in this Chapter, the contribution of the research to policy and practice and the limitations of the claims made have been presented in previous Chapters. The framework suggests that the format for this final stage would vary depending on the audience for the impact assessment. A contribution story should present the pathway to impact and the risk analysis. It includes some assessment of the available data to support the pathway, with an assessment of this data. In the pathway used as an example in this chapter, the evidence to support the pathway is set out in Appendix J5. Often it is hardest to identify evidence to support the links between changes in behaviour and practices and final changes in outcomes, in this case, between the use of the research to change sex education programmes and policy and better outcomes for children and young people in relation to

their concerns about sexual health issues. In this example, there was evidence of parents' behaviour change from a service level evaluation from the practice organisation, but other evidence is in the form of research user's opinion. It will often be beyond the scope of this kind of evaluation to identify end beneficiaries and get feedback from them, in this example from the children or young people themselves. In most impact assessments of this kind it is likely that it will be hard to evidence population-level change or changes in target recipients behaviour as discussed in more detail in Chapter Eight. A contribution analysis approach suggests that any pathway will be judged on its own logic and the data that is assembled to support that logic. In this case it seems reasonable that if respondents report a change in behaviour it can be included in the pathway.

In some cases a pathway will only be evidenced partially, or it may be decided that the short-term aim is a change in attitudes or awareness that will only play out into behavioural, policy or practice changes later. Referring back to ideas about what impact is presented in Chapter Two, for some research or knowledge exchange impact may be changes in awareness, knowledge and understanding, attitudes perceptions or ideas (See Diagram 2.1). This will be particularly important in new areas of research where ideas challenge the status quo, identify the unmet needs of particular groups outside the current policy process, or identify new ideas which are outwith current ways of doing things. As discussed in Chapter Eight, any impact assessment needs to be context specific in order to be realistic. This method allows for pathways to impact to be developed that suit the specific context of any social research area by recognising these contextual factors and allowing for an identification of context specific potential or actual impacts and presenting the logic that underpins them.

7.6 Wider applicability and limitations

The Research Contribution Framework has been a useful tool in assessing the contribution of the research from the CRFR/ChildLine partnership. The pathways set out in Chapter Six have utilised the basic ideas from contribution analysis, in separating out the ideas of uptake, use and impact, as well as demonstrating pathways from activities to outcomes.

Contribution analysis, as adapted here, helps to give shape and form to logic models with useful categories for thinking about routes to impact (engagement, reaction, capacity, policy and practice changes, eventual impacts).

In order to assess its wider applicability the Research Contribution Framework was discussed and feedback was sought from a range of practitioners and researchers. As part of the PhD project a group including six knowledge exchange (KE) professionals, two researchers, a government analyst, and one person with a hybrid knowledge exchange/research role agreed to review the framework in relation to their own work. One of the researchers was only able to participate in an initial workshop and did not subsequently utilise the framework. The KE professionals were from research centres based at the University of Edinburgh, one researcher was also based there, and the other researcher was a PhD student carrying out some freelance research for a local voluntary organisation. One of the KE professionals was from my own team at CRFR, and a further member of that team used the framework subsequently. Further discussion and feedback has since been generated from two training events, one with researchers and KE professionals in Edinburgh, and another with KE professionals in Canada.

The process set out in the Research Contribution Framework was:

- a) to conduct contextual analysis;
- b) to develop a logic model for the unit of assessment identified by the participants (project, programme or centre);
- c) assess assumptions and risks;
- d) identify possible evidence and evidence gaps; and
- e) assemble a case study based on the work.

Overall those involved in generating feedback on the Research Contribution Framework found the general framwork very useful and it helped them to think about their approach to knowledge exchange and to identifying and claiming outcomes from research they were involved with. In particular the logic modelling approach was seen as helpful, particularly

the process of making explicit the logical links between research and KE activities and wider outcomes. Being more explicit about which users are engaged with for what purposes and to what ends 'forc(ed) you to think about these things and why you are doing them'. The framework provided a way of breaking down activities into the steps of the pathway.

Contextual Analysis

All of the participants had found it challenging to analyse context in the way suggested in the framework, although one had found it really useful. An example of contextual analysis had been supplied (see Appendix J.2) and suggested a process of identifying audiences, analysing the policy, practice contexts and the social, cultural, and political context. Building on the factors seen as important in the investigation of impact carried out for this PhD project, this included an assessment of how receptive the policy context was to research at the time of publication, or subsequently, and thinking through the groups of practitioners who might use the research and their existing orientation to research use.

These difficulties reflect discussion about context elsewhere in the findings from this PhD project in that the specific context for research use had such an influence on the impact of research which had also been identified in the literature (Best and Holmes 2010; Molas-Gallart and Tang 2011)

Defining the scope for contextual analysis seems important based on the feedback. For very focussed projects (like the ones in this PhD project) it is potentially much easier than for a programme or centre. The tools might look different for these different kinds of units. They might also change according to the timescale on which research impact is being assessed. One participant, a knowledge exchange practitioner, found the timing issue confusing: what timescale should the contextual analysis be based on and how does it deal with changes in context over time?

Those with an understanding of the policy context for research as part of their day-to-day work unsurprisingly found it easier than others to think this through the context for research use. Feedback suggested that a group approach, particularly when people in different roles could be involved (e.g. researcher and KE practitioner or research user), made

the process of analysing the context easier. This chimes with my own experience of asking a multi-stakeholder advisory group to set out the context for research on work-life balance which was seen as a fairly easy group task by the participants.

However, contextual analysis was seen as important and sometimes helpful when assessing research impact. It could help identify audiences and create clarity about suitable research users and activities. The process set out here has similarities with work developed to assess context elsewhere. Elements of the RAPID framework approach in assessing context could be usefully incorporated into this approach (Court and Young 2004). In the RAPID framework, a retrospective analysis of the political context is carried out as part of an assessment approach to research impact that considers policy context, evidence and links. The policy context is examined to see what extent it influenced key decision-makers. In addition information about the influences on their actions are analysed:

How did assumptions influence policy-making, to what extent were decisions routine, incremental, fundamental or emergent, and who supported or resisted change?

Information about:

- existing knowledge and values and the various actors
- the old and new ideas underlying decisions
- how much new policies threaten the status quo
- who supported and resisted the changes and how (Court and Young 2004): Appendix [not numbered]

This approach differs from a contribution analysis approach to context in that it is a retrospective analysis whereas it has been suggested that contribution analysis could be used prospectively or retrospectively. However, some of these questions could be usefully adapted for prospective analysis and for other research users outside policy, particularly practitioners. Combined with the ideas about assessing opportunities and identifying audiences for research trialled in this PhD research, a useful method for assessing context could be assembled and will be taken on board in future use of this approach.

It is clear context can feel overwhelming and the tools to analyse context in Appendix J.2 need more development. Two participants had carried out context analysis with other members of their teams and this seems to have made the process easier and more useful as

was generally agreed in the feedback workshop. The interlinked issues about the role of context, timing and stakeholders are recurrent throughout this PhD project and will be revisited in the conclusions.

Issues of scale and focus

Issues of the scale and focus of using the Research Contribution Framework to assessing the impact of the research were brought into focus by the feedback. The participants tried out the framework on a number of different scales, including programmes of research over multiple sites, research centres, individual research projects, and knowledge exchange activities. Unsurprisingly, the tasks of analysing context and creating a results chain became easier as focus narrowed. It was more challenging for wider programmes or centres where only a broad brush approach was possible and there were difficulties with creating clear boundaries around what to include. This issue also related to what impact might be claimed, with it being seen to be harder to evidence impact of a wider programme and easier with an individual project focus.

The issue of scalability remains a problem in terms of creating a practical tool for use by researchers and knowledge exchange professionals to assess the impact of their own work. Whilst the approach presented here seems to work well with a narrow focus it is harder to scale up, and more piloting and development may be needed before that can be done. Alternatively, larger units, like programmes and centres, might take a broad approach to creating a logic model for the overall programme but drill down to theme or project level and create parallel logic models, to exemplify and evidence impact of particular aspects of their work. It is also important to think about the trade-off between the potential impact of individual projects compared with centres or programmes where impact is more likely when defining the scale of an impact assessment.

Identifying the most appropriate person to carry out impact assessment is linked to these issues of scale and focus. Most of the feedback was from people with a knowledge exchange role, and they generally felt that they would find the process easier than researchers as they were more interested and motivated to evaluate their activities. They were also more in

tune with knowledge exchange activities and so would find it easier to carry out some of the tasks. My subsequent experience in talking about this approach with researchers, would seem to support this view. The issue of who should evaluate impact, and how this sits with other roles is taken up in further discussion in the conclusions to this Chapter.

This links to the issue of the purposes of an impact assessment and to the earlier discussion about what role social scientists see themselves playing in relation to wider uses of research, and the role of research in policy and practice. At the time of writing there is a flurry of activity in universities in the UK about the wider impact of research created by the impending government audit, the Research Excellence Framework, where a measure of impact is being included for the first time (Higher Education Funding Council 2011). This approach sets of types of impact and defines broad timescales, but allows for each case study to define both specific scope and timescale as appropriate. As well as carrying out an assessment of impact for funders, other reasons might be for management purposes, or part of a learning and planning cycle. These different orientations would create different drivers for carrying out assessment and also help define the timescales and scale of any work.

Attribution and the counterfactual

Mayne (2008) in his description and development of contribution analysis suggests that, once an process has been developed into a logic model, data assembled and a 'contribution story' written, there should be an assessment of the challenges to this. Some acknowledgement of other factors that might have caused the change is required, acknowledging the outside influences on the process. The story should be strengthened to address issues of counterfactual – what would have happened without the contribution of the research? In practice Mayne gives this little further attention in his explanation of the method, and through researching the literature and conversations with other practitioners utilising a contribution analysis approach I have not found a robust way of carrying out this task. Recent work by CIGAR as analysed by Bell and colleagues (2011) does start to develop ways of addressing this through respondents reflections on what would have happened without the research. The approach of contribution analysis suggesting that we can only contribute to outcomes, rather than cause them, goes some way to address the challenges of

attribution raised in impact assessment (Grant et al. 2000; Boaz et al. 2009; Spaapen and van Drooge 2011). However, using this approach leaves assessors open to the criticism that the part played by research was insignificant.

Patton (2011) argues that complexity sensitive developmental evaluation approaches make ideas about the counterfactual meaningless because there are far too many variables in a complex system, and the nature of dynamic interactions emerging into various patterns of activity means that it is difficult to conceptualise counterfactuals in a useful way. Indeed the previous discussion about the ways in which research is taken up by interested users, used and reworked within specific contexts, leading to previously unforeseen outcomes; means that the idea of a counterfactual becomes difficult. Approaches that have been developed, as discussed in Chapter Three, rely on asking actors for their assessment of what would have happened without the contribution of research. If research is one factor which leads to specific actions but only within contexts where other drivers mean it is useful and relevant, then the idea of being able to assess what would have happened without the research becomes less meaningful and more speculative. Research is also produced within the system, with funders and drivers for topics for research coming from government, research users, and academics within a system, meaning that topics funded will often be linked to existing defined issues and problems.

In the example in this PhD research, a close relationship with research users meant that the research was funded on the basis of its links with the system and identified problems and issues. Untangling this from the ways in which research is used is also difficult and complex. However, an analysis of the context does help to start to identify the other factors influencing the system and be able to explain the role of research within this. In the case of Project two 'sexual health' a conducive context was key in the uptake and use of the research and there were many positive drivers influencing the agenda in the same direction. However, understanding this context helps in identifying the contribution of the research, particularly in understanding the ways that research-users have processed it within that specific context and how this contributed to change as set out in Chapters Five and Six. For example in Project Two 'sexual health' the research was used as a catalyst for changing

practitioner and parent's attitudes to their role in sex education. This would not have been possible without the networks and policy drivers in this area, but the distinct contribution of the research is clear. In the example from Project One 'significant others' in relation to alcohol policy a more conducive policy context emerged after the research had been published and this new context was important in framing the potential for research use. This PhD argues that the research in this case both helped to create this new context and then influenced outcomes.

So the complexity arguments suggest that we can sidestep issues of the counterfactual by arguing that it is irrelevant in a complex system, and by setting up an evaluation process that seeks to acknowledge the contribution of research within a complex system. However, that does not mean that this issue disappears in everyone's eyes. Mayne's (2001) approach is to utilise the logic models to create a reasonable claim about the influence or contribution of the research, with the robustness of the evidence of the steps in each logic model being used to judge the validity of the claim. Certainly the language of contribution is helpful in that it acknowledges research as having a role rather than a causal effect. However, the starting point is very much to show how research contributed rather than an assessment of whether it contributed or not.

However, this approach to research assessment could also usefully illustrate why research had not achieved expected uptake, use or impact through the same approach. If research users found research challenging, if it was counter to current policy trends, this approach could utilise contextual analysis and feedback from research users to show that lack of impact was not related to the research itself but to the context for research use. This approach might also be used to suggest impact over a longer time-frame or to re-align activities to address the contextual factors, e.g. through working with the media to raise debate about an issue or to create a challenge to a dominant policy direction.

7.7 Further issues and conclusions

This approach to assessing the impact of research focuses on processes and acknowledges complexity. It highlights the importance of networks of research users and the importance

of successful engagement with them. It allows for contextual analysis over different timeframes and creates a logical argument for the contribution of research to policy or practice in a way that acknowledges all of the other factors influencing wider outcomes.

However, the feedback so far for this Research Contribution Framework has been small and limited, with few participants, and even fewer with a researcher perspective. There were several suggestions for detailed revisions to the framework, to clarify some of the language, and to rework the framework to include images, and to adapt some of the tables included to be more user-friendly. There was general agreement in the feedback that the framework would not stand alone without the workshops in the form presented, and that much more explanation of the elements and concepts would be needed before the tools could be used without support and explanation.

However, a logic modelling based approach has been well received and seems to provide a way of linking activities to outcomes which is useful and practical and can provide a reasonable contribution story. It has been particularly well received by KE practitioners in both the UK and Canada, suggesting its suitability as a practitioner evaluation tool. It can be used as a planning tool or to assemble evidence about what has already happened, as in the cases in this PhD project. One of the limitations of feedback so far is that none of the workshop participants have gone on to build up a full version of contribution analysis, but have rather used it mainly as a planning tool. Further development work and training is being undertaken by CRFR in late 2011 and 2012 using the framework.

The recommendation from feedback on the Research Contribution Framework is that contextual analysis for research use be carried out in teams, preferably with input from potential research user or other stakeholder representatives, for example, at research advisory groups or research centre management teams.

The approach set out here using contribution analysis complements the HERG payback model by providing a way of drilling down into processes which are set out in that model and offering a way of assessing and evidencing them (Hanney et al. 2004).

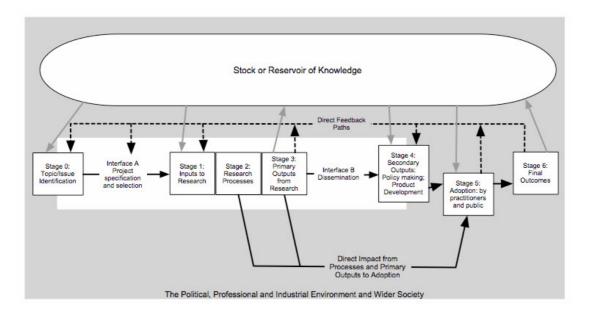


Diagram 7.5 Payback framework model of research impact

(Hanney et al. 2004)

There are some clear links between this model and the categories in the adapted version of contribution analysis, for example, the idea of inputs (Stage 1) and outputs (Stage 3) and a series of stages from outputs through to outcomes. The Payback model offers some explanations of the movement of knowledge and feedback that are less explicit in the framework set out here. However the Research Contribution Framework approach allows for examination of the interface B of dissemination in this model, and into the processes between each of the categories presented, e.g. from stage 4 to stage 5 or 5 to 6. Here a closer look at the ways in which outputs from research are engaged with, and user perspectives on how useful they are and what they subsequently do with them, shines a light on how they come to be used in policy or practice contexts (Stage 4 above). The Research Contribution Framework places greater emphasis on the networks of research users in policy and practice context who use, re-use, adapt, and discuss research ideas and products.

However there are, of course, limitations of the approach presented in this Chapter. It is based on a logic modelling approach and implies an understanding and willingness to engage with such an approach. It can be overwhelming to ask researchers or knowledge exchange professionals to articulate a pathway to impact in order to create a logic model,

and there are issues about where to draw the boundaries around what should be included or excluded in such an approach. How the relevant context is defined and analysed remains a challenge. The approach can be used prospectively or retrospectively, although there is a danger of retrospectively claiming impact or over claiming outcomes, especially if the alternative explanations are not adequately explored.

The Research Contribution Framework overcomes some of the problems with the categorisation of types of impact often suggested in other approaches to impact by emphasising process. So rather than looking for example at the types of outputs or benefits to specific sectors, it focuses on the ways research is taken-up and used, and allows them to define the contributions it has made. The language of contribution overcomes some of the problems with attribution and provides a more practical way of looking at how research interacts with other drivers to create change. The idea of a contribution to outcomes has been very well received by those engaging with the framework so far. Although unable to solve all of the challenges of assessing research impact, it does go some way to addressing the main ones in a practical way that can be taken up by researchers or knowledge exchange professionals. Importantly, although it could be utilised by external evaluators, it has the adaptability to be utilised by those involved in research production or knowledge exchange activities to plan, reflect, learn, and evaluate the impact of research. When used in this way it is more likely to be able to address issues of timing between research production and impact.

Chapter Eight: Methodological challenges of assessing impact

8.1 Introduction

Part of the aim of this PhD research has been to address some of the methodological challenges of assessing impact. In Chapter Four some of these challenges were identified and the overall rationale for the approaches taken was outlined. This included: having modest expectations about identifying impact; linking an understanding of research use to impact studies; recognising the complexities of research use; working with projects where there has been effort to facilitate research uptake; trying to identify direct policy and practice impacts but also to explore processes; and recognising the importance of context.

Key challenges in assessing impact as discussed in Chapter Two include issues of timing, attribution, and the complex nature of research use (Nutley et al. 2007; Boaz et al. 2009; Best and Holmes 2010; Bell et al. 2011). Impacts can occur over short or longer timescales, and are subject to huge variation depending on the context in which they might be used. As we move from research into the complex interactions between research and research users in policy and practice settings, it becomes harder to be clear about the extent to which research compared with other factors can be seen to influence or cause outcomes. This attribution challenge as identified by Boaz (2009) is set out in Diagram 4.2 in Chapter Four. A further challenge is to assess all of the processes through which any specific research is utilised. The PhD research so far has established that research use takes place in context-specific interactions which may not be easily foreseen when research is conducted. This adds to the challenge of assessing it.

Given these challenges, this PhD research set out to explore different methods for assessing impact in order to comment on appropriate methodologies. Both forward and backward tracking methods have been employed as discussed in the previous Chapters. Different approaches to contacting people and following them up have been used over different timescales. A framework for assessing impact using a logic modelling approach has been

developed and set out in the previous Chapter. Together with Chapter Seven this Chapter explores questions about the challenges of assessing research impact, addressing the final set of research questions:

3. How can research impact be assessed?

- A: Can research impact be captured in robust ways?
- B: What are the appropriate methods for assessing impact in local and devolved policy contexts?
- C: What data should be collected to assess research impact?
- D: How and when should data be collected?
- E: What is the effect of assessing impact at different times?
- F: Are different methods required for assessing short-term and long-term impact?
- G: Who might be the appropriate person to assess impact?

Chapter Seven addressed the issue of developing robust approaches to capturing research impact, in this Chapter, questions B to G will be addressed using the findings about impact, timing and using different methods within this study. In addition to the questions above, this Chapter will explore the issue of understanding context in order to assess impact effectively.

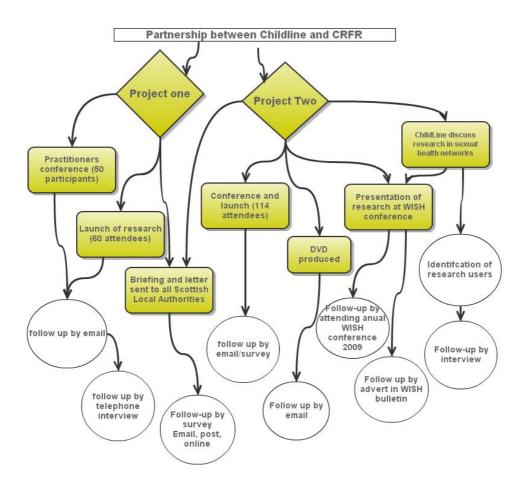
8.2 Methods for assessing impact

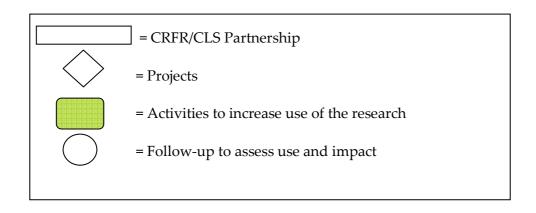
In this PhD project, two main approaches have been taken to assessing impact, forward and backward tracking. These approaches have led to experimentation with methods in different ways. Both have involved tracing methods, where one lead or source of data have led to other sources but the starting points are different and they raise different issues in terms of scope and scale. In this section these are discussed, starting with an exploration of forward tracking.

The initial phase of the research involved forward tracking. The basic premise for forward tracking, in addition to interviewing project partners, was to identify people who had been

involved in some of the activities and discussion following the research publication and find out if they had used the research in any way, and if this could be linked to wider impacts. This involved following up contacts of the partners, people who attended specific conferences or seminars about the research or other events where the research was presented, as well as following up local authorities who had been specifically targeted by the partnership as potential research users.

Diagram 8.1 Forward tracking process.





What the diagram above shows is different elements of the project and user-engagement process that led to different tracking activities. It shows the basic steps of tracking potential impact and the range of methods employed. There are different timescales involved in this process as Project One was launched in May 2005 and Project Two in November 2007 (see Diagram 7.3). While it would be impossible to claim that this forward tracking process is exhaustive in terms of potential impact it is likely to identify key research users, given that research is more likely to be used with activities to help increase use (Nutley et al. 2007). Whether or not it is possible to then find research users, and the extent to which they are able to identify impact, are further complications in the tracking process which are discussed below. The levels of success with these different methods are presented in section 7.3.

The backward tracking process was presented in Chapter Six, Diagram 6.1, and shows the tracking from a policy process backwards to identify research use. Research users were subsequently interviewed in order to better understand the processes through which the research had been used. For the backward tracking element of the study a process of refining the potential policy areas for consideration had been undertaken, based on a full list of potential policy impacts from the research as set out in Appendix E. The task of investigating all of the areas where research might have had an impact on policy would not have been feasible, for example, a search for 'Child Protection' returned 7890 hits on the Scottish Parliament website and 8425 on the Scottish government's one. These include parliamentary questions, bills, committee and cross-party group minutes, news releases, web pages and publications. Alcohol policy was chosen for investigation for the reasons outlined in Chapter Four as a way of narrowing down potential sources of impact. However, this narrowing down process might be more difficult for other topics or in other policy settings if the area was less well-defined or the setting was less accessible (most Scottish policy documents are freely available and as a recently established body the Scottish government seeks to make documents accessible through their website and open access policy).

Whilst backward tracking did identify the movement of ideas from the CRFR/CLS research into policy, it was a time-consuming process even within the well-defined policy area of alcohol policy where the relevant documents were obvious, publicly available, and relatively few (11 main documents). If this had to be carried out for all relevant policy areas it would be a daunting task. Indeed, Smith (2008) discusses the six months of intensive documentary analysis involved in investigating the use of research in health inequalities policy using a backward tracking method. Policy documents do not systematically reference sources and even if research has been used it may not be easy to uncover this use from documentary sources alone. It would seem then that backward tracking is most appropriate where there is already some knowledge that research has influenced a policy process rather than as a general method.

Whilst both forward and backward tracking methods have their problems, both have been useful in assessing the impact of the research in this PhD study. Neither method can easily claim to capture all of the impacts from any research project or programme, and in this case both investigated research which had been connected to policy or practice settings through knowledge exchange activities. In many impact assessments it would seem prudent to employ both approaches. Backward tracking from practice to research has not been attempted in this PhD research but might be a useful technique for some settings.

8.3 Challenges of assessing impact at different levels

Backward tracking methods focussed mainly on the devolved policy context of Scotland. Forward tracking identified impacts at devolved, local government, and local practice levels. This section presents some further discussion of the specific challenges of assessing impact at these different levels; this does not include the UK government level. Some efforts were made to identify the use of the research at this level through desk based searches using search engines and the UK Parliament web resources but these did not identify any references to the research. Given that all of the activities to increase the uptake of research had focussed on Scotland, partly because the partner was ChildLine Scotland (rather than ChildLine UK which is responsible for the rest of the UK), this is not surprising. Other work

comparing the Scottish devolved context to the UK context would be useful to better understand the differences, especially as researchers often reflect that the Scottish context seems more manageable (Hepburn 2009; Jung et al. 2010).

Assessing impact at Scottish Parliament and Scottish Government levels

It was possible to identify that research from Project One: 'significant others' had contributed to the development of alcohol policy; that research from Project Two: 'sexual health' had been used by the Cross Party Group on Sexual Health and both projects had been used by ChildLine in responding to policy consultations. These impacts were identified through both forward and backward tracking methods. The main research users at the national policy level were government analysts and those seeking to influence the policy process (ChildLine and SHAAP) who provided the most useful data for assessing impact.

There are many arenas at which policy-making takes place within devolved government. The focus can be the Parliament, debates, committees, the government (formerly Executive) where civil servants work behind the scenes on the government's agenda, meetings, crossparty groups and networks. For both forward and backward tracking elements of this PhD research topics and leads were followed through these different levels as appropriate.

For Project One: 'significant others' no policy-makers were identified through the forward-tracking element of the research, as the meeting held within the then Scottish Executive had been organised internally by civil servants and no records were available. Initial attempts to engage policy-makers in discussion of the research impact in the forward tracking element of the research for Project Two: 'sexual health' were unsuccessful, with the main MSP involved in Project Two only willing to provide very short answers via email, and the main civil servant connected to Project Two not responding to email or telephone contact. Reasons for this might include that the pace of policy-making is so fast that asking policy actors to recall events from several years earlier is unrealistic.

The main source of data on research impact at Scottish government and parliament level was through the backward tracking process for Project One: 'significant others', and the three main policy interviews for Project One. Those interviewed used research regularly and so were happy to be questioned, and the policy process in question was recent and ongoing so easier for policy-makers to engage with and recall. Posts like government analysts and actors from policy-influencing organisations where using research is an explicit part of their role are more likely to be interested in taking part in follow-up activities. Documents being publicly available also helped with the feasibility of tracking the research at this level.

Appropriate timescales for tracking policy impact are also difficult to identify. In this case research carried out and published in 2005 was having an impact in 2010 and 2011. It would be hard to predict this. The research in Project Two, published in 2007, was also was being used in policy in response to consultations in 2009 which might not have been predicted at the outset.

Assessing impact at local authority level

The impact of the research on local authorities was explored through the forward tracking elements of this PhD project, through contact with some individual research users from local authority settings and through a survey of local authorities. Specific impacts of the research were identified through both of these methods, although there were several problems with the survey approach.

As set out in Chapter Four, the survey had two main aims: to identify impacts from the CRFR/CLS research, and to explore research use more generally, with an emphasis on the use of external research, within local authorities. Following a pilot with two LA staff changes were made to the questionnaire prior to wider circulation. These included improvements in design for a web version, improved attachments, and the inclusion of a fax number for the "dinosaurs" (which did in fact yield two faxed responses). A total of 56 questionnaires were sent out: two to each council where there were separate social work and education departments, and one where these were combined. Half were emailed and half

posted which followed almost exactly the available email addresses for the local authorities rather than any randomised option, although the intention was to trial different survey approach methods so a virtue was made out of necessity.

A total of 19 responses were received out of 56 initially sent out by the methods as detailed in Table 8.1. 12 respondents gave contact details; 7 were from social work, and 5 from education, representing 10 different local authorities. The methods for sending receiving responses is set out below.

Table 8.1 Overall response rate and distribution from local authority follow-up survey

Department Method of sending and response	Social work/services	Education	Combined	Unknown (left department question blank)	Total
Total no. of questionnaires sent	22	28	6		56
By email	12	12	2		26
By post	16	12	2		30
Replies					
On-line questionnaire	2	1	0	7	10
By post	4	3	0		7
By fax	1	1	0		2
Total no of replies	7 (31%)	5 (18%)	0 (0%)	7(31%)	19 (34%)

In general asking local authority staff about the specific use of the CRFR/CLS research which had been distributed to them was not very successful. Just over half (10) had no recollection

of the briefings and of those who said they could remember, none agreed to follow-up which may suggest a lack of clear recollection, although some of the data was useful in the analysis presented in Chapter Five. The comments reflected that there was a long time lapse since publication, and in that time staff had changed in several authorities, so that some respondents were not in their current posts when the briefings were distributed. One respondent thought that the findings were presented to the Child Protection Committee but again recollection was an issue, and lack of consent for follow-up means this is difficult to explore further. Two respondents did suggest that the briefings had led to a change in policy or practice but provided no details.

As with other aspects of this project an exploratory approach was taken to follow-up interviews from this survey for those who consented to further contact. Four follow-up interviews were conducted, two with the same authority as the initial respondent referred on to someone whose role was to deal with this. The interviews were with a Head of Children's Services, Assistant Director of Community Social Services, a Policy Officer, and an Education Support Officer. None of the interviews identified specific uses of the CRFR/CLS research.

It is perhaps not surprising that it has been difficult to trace impact within local authority settings. Although there was specific targeting of activities to increase the uptake of the research, those involved in the CRFR/CLS partnership were not as successful at actively engaging with local authorities in the way they did with other research users at local and national levels. Given the findings about pathways to impact as set out in Chapter Six, where research was reworked and discussed in order to be used, along with the large size and complex nature of the local authority sector in Scotland, tracing impact is again less likely as it would be difficult to find and follow the processes of impact within multiple different local authority settings. Perhaps immediate follow-up from the invitations to events and sending of the research briefing might have yielded more information in relation to if and how research was used, and whether it had an impact in the short term. However, some of the findings from the survey and follow-up about the way research is used in local government settings could help to inform future impact studies

Overall this questionnaire approach was not successful at identifying specific uses of the research in this study. However, some research impact within local authority settings was identified through following up individual research users through other methods. One of these was a member of local authority staff who had participated in the conference from research Project One and had used the research to influence service development. The other was one of the attendees at a sexual health network conference who remembered and had used the research. There are further impacts at local authority level identified through interviews with Health Improvement Officers who have a role in sex education in schools. It seems that follow-up of known research users was more successful in uncovering impacts than attempts to locate research users at a sector level.

Addressing local practice level

The previous sections have mainly focussed on assessing impact at devolved policy and local government levels. Whilst local government impact may include policy or practice, much of the discussion has been given to policy impact. There is further data about assessing impact at local practice levels in this PhD study which deserves additional discussion.

Forward tracking uncovered a number of local practice impacts through interviews, survey and email methods. The main impacts on practice are set out in Table 8.2 showing the method through which they were identified.

Table 8.2 Local practice impacts

Project	Impact	Identified through
1	Voluntary organisation developed services	Conference participant followed up by email and telephone
1	More funding for families affected by alcohol	Conference participant followed up by email and telephone
1	Inclusion of mothers within children's service in local authority	Conference participant followed up by email and telephone
1	Change in policy of funding agency to include alcohol	Interview with project partner
1	Findings circulated to Child Protection Committee	Local authority survey
2	Used in sex education (9 cases)	Follow up from WISH conference, conference participants followed up by web survey,
2	Used to change practice in ChildLine	Interview with project partner
2	Used to develop quiz for training	Interview with research user
2	Used in sexual health networks	Interview with research user
2	Used to develop strategy in local authority	Interview with research user

As can been seen in Table 8.2 above, interviews have been the main way of uncovering impacts from the CRFR/CLS research. The challenge therefore is to identify the relevant research users at a time which relates to any research-informed action. For example, there are many more and wider impacts at this level from Project Two than Project One but it is hard to assess whether this reflects timing, i.e. follow-up being closer to the publication of the research or a greater relevance of the research leading to these impacts. People being able to recall the research unsurprisingly seemed to be less of an issue for Project Two than Project One due to the relative time lapses since publication of the two projects.

Many of the practice impacts identified here are within the same local health board area, where the ChildLine Policy Officer had the most contacts and was an active network player. It has been harder to identify impact of Project Two outwith this area despite specific attempts to do so. These included an announcement in the national sex education network bulletin and specific follow-up of similar staff in other areas. The importance of networks and personal contacts emerges here as elsewhere in this study.

The pathway concept is relevant in assessing practice impact. Where there seemed to be significant impact research users have been followed up through interview (usually by phone). This has allowed for an exploration of the processes leading to impact and an understanding of the pathway through which impact occurred, although this might not be necessary if an impact study's aim was simply to identify impacts rather than explore processes.

However, relying on research users reporting impact through methods that do not involve discussion could present challenges as they may be more likely to report research use and find it harder to address impact as discussed in the next section. The practice impacts identified here have all been uncovered using forward tracking methods which seem the most successful for leading to key research users. Networks of research users were important in sharing the research and research-based activities further. Here the approach to identifying impact wherever it can be found has been fruitful. The rich data generated from this is discussed further below.

8.4 Appropriate data for assessing impact

This project has utilised a range of methods in order to explore the kinds of data that are useful for assessing impact. In this section the kinds of data available in this case study are discussed, reflecting on what provides the most useful information about impact. Both quantitative and qualitative approaches; the role of independent service evaluations and other organisational data; and tools for assessing context form the main discussion here. The effectiveness of generating data by different methods is discussed in the next section

Different kinds of data within study

Most of the quantitative data available in this study relates to research uptake and use rather than research impact. Some indication of research uptake can be assessed through the number of people who came to events, read research summaries or took part in other dissemination activities, although it is clear that attendance and activity does not necessarily mean uptake given the issues about relevance and timing already aired. Measures of research use might be through the number of citations to the research in non-academic documents or the number of individual separate uses of research identified, although clearly from the preceding discussion both of these measures would be quite crude. Quantifying impacts is more problematic as the nature of impact varies hugely in terms of scope and significance and may increase over time whilst also becoming less attributable to a specific research project, programme or centre. These data have been collated for the PhD study in Table 8.3.

Table 8.3 Quantifying impact

	Project 1 'significant	Project 2 'sexual health'		
	others'			
Research users engaged	Practitioner conference	Launch conference (114)		
	(41)	Letters to Directors of		
	Launch of research (46)	Social Work local		
	Letters to Directors of	authorities (32)		
	Social Work local	Letters to Directors of		
	authorities (32)	Education local authorities		
	Letters to Directors of	(32)		
	Education local authorities	Presentation to network		
	(32)	conference (WISH) (over		
	Presentation to Scottish	100 – unknown)		
	Executive (around 15 – no			
	data)			
	Total: 166	Total over 164		
Citations in non-	1	3		
academic publications				
(web search)				
Briefing distributed	500 printed copies	Given to 6-800 teachers		
	Web downloads unknown	500 printed copies		
		Web downloads unknown		
Media articles	13 press articles, radio, TV	3 press articles, 1 TV		
People identified as	Not available	All primary school age		
affected by impacts		children and young		
		people in one local		
		authority area		
		150 parents		

This kind of data give us an impression of how wide the scope of the research was but is fairly meaningless on its own. If research projects regularly collected and collated data some basis of comparison of user engagement would be possible across projects although the scale of impact has the potential to vary hugely across different kinds of projects. Some impact assessments have attempted to do this using bibliometric data, e.g. (Grant et al. 2000) or through creating scales on which to place the impact of research, albeit informed by qualitative data, e.g. (Jacob and McGregor 1997; Hanney et al. 1999; Lavis et al. 2003).

However, there are some fundamental problems with a quantitative approach. As discussed elsewhere in this project it is easier to identify research use than research impact. Most of the numbers presented above at best indicate research use. It is necessary to find out about who research users were: not just that they came to an event but the extent to which they engaged with the event, how successful it was in communicating research, and what learning they gained. It is necessary to understand what research users took away from any engagement with research, and how it subsequently affected their attitudes and actions. This kind of information is difficult to obtain or convey through quantitative approaches.

In common with the findings of other impact studies the most useful information was through interview (Hanney et al. 2003). As seen in Table 8.4, it was the most productive method of generating data on use and impact. What interviews offered was the opportunity to discuss the links between use and impact. The concept of impact, of making a difference, is one step removed from the actions of most research users. In several cases it was necessary to draw out of interviewees what impact their actions had resulted in. This extract from an interview with Health Improvement Officer 2 illustrates the need to probe in order to get beyond discussion of research use:

"Health Improvement Officer 4: It's [the research briefing project 2] given to every teacher basically at their training course so I would say in [] city alone... there's probably something like 6-800 teachers who have had the briefing. And not to the same degree but we have used it in the other local authorities... Basically if they are coming on training they are going to end up with the 'It's my Body' summary sheet. A lot of people have been given it and have seen it. ...it's really well used in terms of staff training, not just in schools but in other settings.

SM: And what kind of effect do you think it has on the training?

Health Improvement Officer 4: I think it has a really strong effect partly because that thing about it being unsolicited but also I think you can't really separate this out is that ChildLine come as a really credible organisation [further discussion about credibility of the research].

SM: So do you think it then changes those teachers' minds about the ages that things are appropriate or...

Health Improvement Officer 4: Or what to say, or language to use, yes. I think it does, I do think it does. In my experience with primary school teachers particularly they really struggle with the idea of using proper names for body parts.... but actually one of the things that's really powerful is to say, well, this is what children say when they phone up, this is how not having the language

and not knowing what this means makes them feel so, it [the research] doesn't make it any easier for them but it lets them see why it's important."

Initially the Health Improvement Officer here is keen to share how much the research is used, how many teachers the briefing has been given to, and the kind of settings it is used in. I ask a further question about what the impact of this use of the research is but a further probing question is needed to get to some idea of impact. In this case, as with much of the similar data collected in this PhD project, the data about impact are anecdotal – the Health Improvement Officer gives his opinion about why he thinks the research is useful in this setting and how it changes people's attitudes. However, there is one instance in the project where data were available which provided more robust evidence of impact as described below.

Service level evaluation as data

As discussed in Chapter Six in section 6.3, there were data from the practice organisation which developed the CRFR/ChildLine research from Project Two 'sexual health' into a quiz to use in training in terms of the organisation's own evaluations. The data from these evaluations illustrated how the CRFR/CLS research had influenced those attending the training courses. Serendipity and luck were involved in the creation and availability of this data. This data was available only because it was possible to identify and track the relevant research users (Health Improvement Officer 1 left for maternity leave a few days after I interviewed her). It was lucky that the project using the research had been subject to the scrutiny of both in-house and commissioned independent evaluation.

Perhaps it would be possible for projects assessing the impact of research to include end users in the process but the cost and permissions for something on the scale of these project evaluations would not usually be feasible or practical. The availability of research users' own internal evaluation documents is more likely, although these are not always freely available outwith the organisation.

Understanding context

Throughout the discussion in this thesis a link between research uptake, use and impact and the context for that use has been established. The context for research uptake and use may be enabling, i.e. research has a good fit with current trends in policy or practice context or more difficult, i.e. it goes against or challenges current understandings of issues and problems. Clearly an understanding of context is important to frame research impact assessments but generating data to inform such understanding may not be simple. The links between context and timing mean that context changes over time. This was illustrated in the pathway to impact on alcohol policy in Chapter Six, where a change in government led to a new context for research use. This kind of scenario presents difficulties in linking contextual analysis with different time-frames.

Some methods for analysing the context for research use have been piloted in this PhD research. In Diagram 5.3 in Chapter Five the context for sexual health research use was set out. In this case the research was used within a specific policy and practice context and so the data for understanding were fairly simple. Creating a picture of the policy context can help identify positive drivers for research uptake and use. It provides a snapshot of an enabling context for research utilisation. Where policy areas are less well-defined or research is cross-cutting, or where research challenges current thinking such analysis may be harder to carry out and less useful.

Some tools for describing the context for research use were included in the development of a framework for assessing research impact set out in Chapter Seven. These involved the identification of potential research users, their orientation to research, the policy and practice contexts of research and the wider influences on potential research use.

A team approach to assessing the context for research use was suggested in the previous Chapter and this links to the issue of who is appropriate to conduct impact studies which will be picked up later in this Chapter. The need to collect data on context seems clear but the conclusions about how and when to do this are quite tentative from the findings of this study. Using a complexity theory approach to research use would imply that the potential range of contexts is large, meaning that each research impact study would need to define its

own parameters and subsequent methods for any contextual analysis. This might be based on where targeted KE activities took place, with an eye to changes in context that might create new opportunities for research uptake. Identifying appropriate timeframes and timing will be important but challenging tasks in this process.

8.5 How and when should data be collected?

As described earlier in this Chapter, the impact of research from the ChildLine/CRFR partnership has been identified through forward and backward tracking processes over different timescales. Research uptake, use and research impact were successfully uncovered through various approaches including interview, survey, email and documentary analysis. In this section the relative effectiveness of different approaches to identify impact is presented, and the findings from trialling different methods is discussed.

In the forward tracking element of the project different methods were tried. In some cases these created opportunities for comparison, in others they represented trial and error in following up research use and impact. The overall methods used and their relative effectiveness is discussed in Table 8.4.

Table 8.4 Effectiveness of different methods of follow-up

	Method of contact and response	Identified research use or impact
Conference participant		
follow-up		
Project One follow-up		
Time since event = 4 years		
By telephone	Phone numbers were searched for the first 10 people on the delegate list of 41. One contact was obtained in this way and it was abandoned as a method. A further two delegates were contacted as they were still in the CRFR network.	All three interviews identified uses and impacts of the research.
By email	All of the email addresses from the delegate list were used, 17 were returned immediately as undeliverable. None of these resulted in further contact.	No further contact was obtained through this method.
Project Two conference		
Time since event = 2 years		
By email	All 102 email addresses were used, and 22 of these (21%) returned as undeliverable. Of the remainder, the following follow-up by web and phone was achieved.	See below
Completed web survey	10 (10%) responded to the webbased survey as a result of email contact.	10 (10%) indicated they had used the research and a further 6 (6%) that this had resulted in some impact.
Sent phone number	No one responded to the email with their phone number for a follow-up interview.	None
Follow-up through sexual		
health workers' network ⁱ		
Follow up at network conference	16 people were approached opportunistically at this network conference. 6 (38%) of these had no recollection of the research whilst 10(62%) claimed to remember the research. 3 of these were vague about this use.	5 (31%) of those approached identified a use of the research and 2(12.5%) of those some kind of impact.

	Method of contact and response	Identified research use or impact
Newsletter appeal	An advert was placed in the sexual health workers' newsletter which elicited one response.	This respondent identified use and impact of the research.
Local Authority survey	56 questionnaires were sent eliciting 19 (34%) responses.	One respondent identified a use of the research and two an impact.
Follow-up local authority interviews	4 respondents agreed to follow up, although one of these had no recollection of the research. The other 3 claimed to remember the research.	No evidence of use or impact was uncovered using this method.
Interviews with partners	Attempts were made to interview 5 people involved in the partnership research. The 2 research officers who had worked on the projects were unavailable but the CRFR and CLS partners were interviewed.	Uses and impacts of the research were identified from all of the successful partner interviews.
Interviews with known research users (identified through interviews)	5 known research users were identified through partner interviews. It was not possible to interview a ChildLine volunteer and 2 policy-makers. The other two research users were health improvement officers and both were interviewed.	Both health improvement officers identified uses and wide impacts of the research.

As can be seen in Table 8.4 above, following up conference delegates four years after the event by phone was very time-consuming and resulted in few responses, email was unsuccessful. For the conference two years before email elicited 10 responses to a web survey and was much more time efficient. The relative effectiveness of following up participants in Project Two conference compared with Project One could be explained by a number of factors. The differential in time lag affected the reliability of email addresses and the increased number of people who were no longer at the address listed for them when they first engaged with the project. Follow-up identified more use and impact for Project Two which may reflect an issue of timing or that Project Two had more impact than Project One.

Perhaps what is most interesting about the forward tracking data is that the interviews were the most successful at identifying impact and a clear link from research use to impact. Once research users had been identified it was much easier to get information about use and impact. The key interview for identifying further research users in this case was with the Policy Officer at ChildLine, so the partnership was important within this process, however, attending the network conference also had a reasonable success rate. Both of these methods are discussed in more detail below.

Although participants from the user engagement activities from Project One proved harder to contact than participants from conference two, one of them had used the research extensively to develop services, influence policy, and had then changed her career to focus more on the issues in the research and became much more closely involved with CRFR. For her the conference was her first contact with CRFR and the research from this first project had huge relevance for her work at the time and was immediately taken up and used.

Identifying one individual who had used the research extensively amongst the 41 participants of a seminar held several years previously underlines the serendipitous nature of research follow-up as discussed elsewhere in this study. However, it seems that people who have used the research may be easier to contact as they have continuing and live links with the relevant networks. In terms of responses to the different methods within this study, often those who have used and remember the research seem to come forward or are available because of a continuing interest. In this example the user engagement activities of the partnership had drawn this research user closer into the networks within which both CRFR and ChildLine were operating.

As described in Table 8.4 above, potential research users were followed up at an event of the sexual health workers' network (WISH) because the research had been presented at the conference the previous year. They were approached during the coffee and lunch breaks at the conference and asked whether they knew the research or used it. This method of follow-up seems relatively successful although it was not easy for various reasons. This is an extract from my fieldwork diary after the event:

"Managed to talk to about 20 people during a very rushed lunch break. Some knowledge of the research but seems like little outwith the relationships and networks I had already identified. Difficulties in managing the researcher/participant boundaries and roles, especially the need to network - it was easier in this conference where I only knew a few people but could have been much more difficult if I had known lots. Easier to be an 'unknown' researcher asking questions than have to negotiate two roles with folk. Need to be brave! Timing, system, opportunities to ask (the time ran over, lunch was short, people were eating)."

Extract from fieldwork diary 28 October 2009

I often attend these kind of events to represent CRFR but my role here was different, some people wanted to chat more generally about the CRFR/CLS research or the Centre. The need to be brave refers to the need just to go up to people and interrupt their lunch or conversation with colleagues to ask about specific research. In addition, I was unsure about many of the answers people gave at this conference when claiming they remembered the research - whether they really remembered or were exhibiting social desirability bias because they felt they should remember or wanted to give the 'right' answer. However, there would seem to be some potential in this kind of follow-up and it does have some advantages. It is fairly time efficient as there is a concentration of potential research users in one place. I heard lots of other mentions of CRFR research during the conference proceedings which reinforced the message from some of my interviewees that the research was well-known amongst this network. The method could be developed, for example, arriving early and interviewing people as they register for the conference might have been better timing than during breaks in terms of people be available to be interviewed. Being more integrated into the conference, for example, getting an announcement made during the proceedings so that those who knew the research would be more likely to come forward and identify themselves, or having a stand in the exhibition area might also be useful approaches. An evaluator independent of the research team would avoid the role confusion described in my fieldwork diary entry above but embedded researchers would also be able to pick up on other uses of the research and assess the usefulness of research they knew well within the network setting. Of course, all of these methods are only relevant at this kind of regular (in this case annual) conference where the same or similar group of people gather each time.

Overall it is clear that the greatest success in terms of methods has been following up where it was known there had been research use. More robust and integrated methods of collecting data could easily be incorporated into events and other user engagement activities, creating channels for further follow-up (e.g. seeking permission for further follow-up after a suitable time lapse). There was some limited data available from conference evaluation forms for both projects but as these were not orientated to research use questions, there were a few relevant comments about people's reaction to the research but no data on use or impact.

The discussion about collecting data so far has focussed on the forward-tracking element of the project. The backward tracking element also identified research use but, as discussed earlier, this would be difficult to utilise as a general method and needs individual project level assessment of suitability in terms of the relevant policy arenas, time lag and feasibility for tracking within resources available. What is interesting about the backward tracking element of the project is that it identified long-term impacts from Project One which were not picked up through the forward tracking element. These impacts, as discussed in Chapter Six, could not have been anticipated at the start of the project. Here the intertwined issues of timing and context emerge again: predicting when research may have an impact can be difficult, and is related to the context in which research use takes place.

8.6 What is the effect of assessing impact at different times?

Within the PhD project there are several timescales over which research was used and this creates some data on the effects of assessing impact at different times. The interaction of time and context makes it difficult to isolate factors associated solely with time, however, as others have iterated (e.g. (Weiss 1979), there may be a difference in immediate uptake, use and impact where instrumental uses are more likely, and long-term impact which implies changing ideas and agendas ('enlightenment' in Weiss's terms). Diagram 8.2 presents the timeline for the project and identifies the main timeframes for impact.

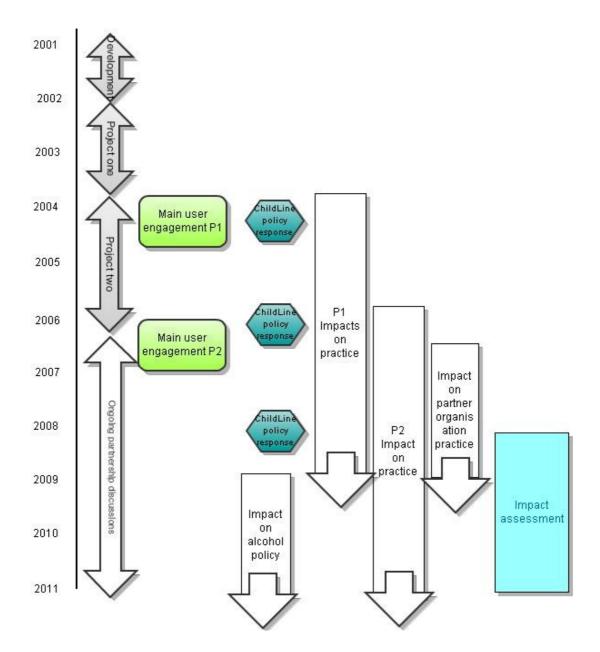


Diagram 8.2 Timeline of research project activities and impacts

As illustrated above the issue of assessing the timescales of research uptake, use and impact are further complicated by the continuing use of the research within policy work by the partner organisation and other research users. If ChildLine had not continued to use the research in policy responses to the Scottish Parliament would it have had the eventual impact it did on alcohol and other policies? This impact assessment was limited in

capturing the immediate impact of Project One due to the time lapse but did capture the long-term impact which would have not been obvious in an earlier impact study. For Project Two, where uptake was immediate and the time lapse before assessment was less, it has been easier to trace the kinds of instrumental uses of the research that we would associate with shorter-term impact.

This might imply that the forward tracking methods are most appropriate for assessing shorter-term impact, where the memory of any user engagement would be more fresh in people's minds, their self-reported data be more reliable, and their willingness to engage with an assessment more likely. Conversely, backward tracking may be more useful when trying to assess longer-term shifts in thinking, although it may still be difficult for a number of reasons, like lack of systematic referencing in policy documents or that ideas rather than evidence might be more apparent in shifts in policy thinking (Smith 2008).

In summary, it would seem that combined immediate and periodic assessment of research impact would be most effective but would need to be considered for different projects, taking into account their nature and context. Continued relationships with research users, through partnership or other configurations means that it is more likely that research impact can be assessed after a time lapse.

8.7 Who should assess research impact?

In this project research impact has been assessed using a practitioner-researcher approach, with knowledge of the research, user-engagement activities, networks and issues embedded within the practitioner-researcher role. The benefits and risks involved in this have been set out in Chapter Four. The current agenda to increase the focus on user engagement and impact by the research funding councils and university funding bodies (Economic and Social Research Council; Economic and Social Research Council 2005; Higher Education Funding Council 2009) begs the questions about who should assess research impact given that it is not currently part of any official role.

My role in this project as a practitioner-researcher has various advantages and disadvantages as discussed previously. It would seem likely that being able to make claims

about the impact from research will fall to researchers themselves, research managers or knowledge exchange practitioners. As a process of self-evaluation impact studies make sense in terms of learning about user engagement activities and research use, as well as claiming impact. Self-assessment is also much less expensive than external impact studies.

The main disadvantages of my role as a practitioner-researcher in relation to the challenges set out in this Chapter are in terms of role confusion and social desirability bias (Fisher and Katz 2000). In some elements of this study I was interviewing some people I knew well and worked with, as discussed in the Methods Chapter. This could be uncomfortable but also meant we were able to piece together past events, as illustrated by this extract from my fieldwork diary:

"It went quite well - felt a bit nervous and false at first – [CRFR Co-Director] and I do many things together but I do not normally interview her! I didn't feel strange about my role as researcher and player in the project we were discussing because I tried to set it up as a conversation, although it was more like a conventional interview than I had anticipated in some ways - more of [CRFR Co-Director] talking than me. Will need to listen back and decide on how effective my strategy was." (Fieldwork Diary June 2009)

In some interviews I felt people were more honest than they would have been with more neutral interviewers. Managing my role and getting this kind of information are both issues from my fieldwork diary in relation to one of the policy interviews with someone who was a colleague, friend, and informant in this study:

"We know each other well and that affected the interaction - some of it is much more like a conversation that other interviews I have done, although [she] talks a lot so 95% of the data is her views. It was reasonably comfortable managing the boundary between colleague/friend/interviewer in this case as we know each other from work first, and often talk about these issues when we meet informally. I think the balance of interaction and interview worked well here, although I probably was less formal than I would be with other interviewees.

Some of the comments she made about the role of academics were probably much more honest in this setting as she knows I would not be offended, whereas if I were an unknown researcher she may have been much more guarded." (Fieldwork diary November 2010)

The only time I felt less comfortable about my dual role was in the conference follow-up at the sexual health workers' conference described above. Overall managing the researcher, practitioner, partner role was relatively easy and in many interactions I did not already know the interviewees, so they resembled a conventional researcher-interviewee interaction to a great extent.

However, there were several examples of social desirability bias, where I felt respondents were giving the answer they should give, i.e. that they had heard of the research (sexual health network conference), used the research (web surveys) or usually used research in their work. However, whilst my role in CRFR might have meant they wanted to be seen to use research that I was obviously attached to, this kind of bias may be linked to wanting to be seen as competent in their professional role which would include using research. That element of the bias would probably have been evident whoever was assessing impact.

Those giving feedback on the research assessment framework set out in the Chapter Seven were knowledge exchange practitioners of some sort. There were two researchers due to participate but both pulled out at the last minute. I attempted to follow up with both of these and one other researcher but all of these attempts were unsuccessful. It seems that knowledge exchange practitioners are more able to prioritise impact assessment in relation to other work. However, the framework presented in the previous Chapter would be suitable for researchers, knowledge exchange practitioners or independent evaluators.

There are strengths and weaknesses of external or internal evaluations, including the questions of resources. One of the key insights from the feedback on assessment framework was that a group approach to planning and evaluating knowledge exchange activities is helpful. This resonates with the understanding of research use as interactive, involving networks of researchers and research users. It would seem that an embedded approach will often be the way forward given the current climate of increased interest in the impacts of research along with declining public spending. Groups of researchers, knowledge exchange professionals, and research users may well be best placed to identify the impacts of research.

8.8 Conclusions

This Chapter has set out some of the findings from this exploratory study, and brought together issues which it raises for other impact assessment studies. Whilst there have been

many challenges, many impacts of the research from the CRFR/ChildLine partnership have also been uncovered. To some extent then it has been possible to overcome these challenges.

The findings here reinforce that it is sensible to focus impact assessment where there has been effort to increase the impact of research. The pattern of impact here follows the pattern of engagement activities and it was hard to find any impact outwith the networks where the partnership operated (e.g. sexual health practice impacts), beyond research users directly engaged (e.g. local authorities) or beyond the policy arenas the partnership operated within (e.g. search for UK Parliament references returned no hits). This would reinforce the importance of networks in facilitating research impact. However more work could be done to follow-up user engagement activities and to create standard ways of collecting and collating impact data to allow for better understanding of the most effective activities, and to enable comparison across projects. More comparison work on the different policy settings in devolved and UK levels of government would allow for further exploration of anecdotes about devolved government being more networked with academics than Westminster, and therefore a more likely arena for the impact of research.

As illustrated in this Chapter, sometimes it can seem haphazard tracing impact but we also find rich seams of data. Taking a complexity informed approach to understanding impact means that a comprehensive picture overall of the complex ways in which research might be used in different settings is unlikely. However, complexity also draws attention to networks and relationships. It seems that key research users are often drawn into networks relevant to the topics of research, and as a result may be easier to locate in impact studies as long as an active networking approach is taken. This would point to the role of knowledge exchange practitioners and researchers in carrying out their own impact studies. Indeed, researchers are often specialists on topics where networking could easily be an expected part of their role. Indeed, networking of this nature has been included in RCUK's recent review of the expectations of the roles of academics (Research Councils UK 2011).

Issues of time and timing remain a challenge and will vary in different settings. to some extent more immediate use is associated with practice. If research resonates with practitioners they may take it up and use it immediately, and in the case of Project Two in

this study, were anticipating its publication and planning use. However, in the case of the quiz outlined in Chapter Six, it continues to be used and taken up by new agencies, so although some impacts were immediate others have continued over a long time. Again, here the relationships and networks are important, with this quiz being discussed and passed on. Policy impacts have been focused over a long time-frame, although the research was used within the Scottish devolved setting over short and longer-term.

Understanding the relationship between research, the wider social, political and practice context over time is also challenging, especially if academics are to be judged on the impact of their research. The changing and often unpredictable nature of political and practice contexts means that research impact is often beyond the control of research producers. Being in partnership with a research-user organisation helps to align research with relevant contexts and may create opportunities for longer-term impact.

Whether researchers themselves, knowledge exchange practitioners, or external evaluators should assess research impact is intrinsically related to cost and scope of impact assessments. A pragmatic way forward is to see impact assessment as part of a culture of planning and learning about the nature of research use, and the framework set out in the previous Chapter suggested this approach. There is the potential to develop methods which are time efficient and would allow for researchers or knowledge exchange practitioners to collect data which would be useful for simple impact assessments, which aim to give a sense of the wider contribution of research to society. Things like smarter feedback at events, web based questions when downloading documents, and asking research users to engage with the feedback agenda as part of their role in research are all simple and achievable at low cost. This could be built into research or other roles in order to start developing more robust data for impact assessment.

The issue of attribution – the extent to which impacts can be associated with research or other factors - is not easily solved. In this case study it seems that many impacts are directly associated with the research as identified in the pathways in Chapter Six whilst others, like the impact on alcohol policy, may raise questions about attribution. In the previous Chapter the idea of 'contribution' rather than attribution attempts to circumnavigate this problem.

Overall then there are some lessons from this PhD research which might inform other impact studies. Whilst the key challenges remain, taking an approach that acknowledges complexity allows us to recognise the role of relationships and networks and to understand the importance of context. These issues are further discussed in the concluding Chapter.

Part IV: Conclusions

Chapter Nine: Exploring and assessing social research impact

9.1 An overview of the thesis

This thesis began by asking what research impact in the social sciences was, how it occurred, and how it might be assessed. After setting out the context for this topic and my interest in it as both a practitioner and researcher, Chapter Two explored the relevant literature that informs this field. This included the development of ideas about research utilisation from simple linear ones (Economic and Social Research Council 2005), through a focus on relationship based and linkage models (Lomas 2000) to ideas acknowledging complexity which resonated with my own experience of knowledge exchange (Sanderson 2009; Best and Holmes 2010). Complexity based approaches had further resonance with research utilisation through some of the approaches to understanding policy-making (Kingdon 1995; Baumgartner and Jones 2009), and with recent approaches to evaluation (Rogers 2008; Patton 2011) which were useful for developing a framework for evaluating the impact of research.

A nuanced approach to the concept of research impact and a focus on the processes of research utilisation was built on from the literature, arguing that understanding different kinds of research use on a conceptual to instrumental scale could help to inform impact assessment (Nutley et al. 2007). The idea then of research uptake, leading to research use, which may or may not result in wider research impact was taken forward to address the questions of what impact is and how it can be assessed.

Other issues raised by the literature have been important in framing the thesis. Taking a complexity based approach highlighted the need to stress the context for research use, a theme developed in the empirical Chapters. The issues of timing and attribution raised in other impact studies, e.g. (Molas-Gallart et al. 2000; Hanney et al. 2004) and in a systematic

review (Boaz et al. 2009) were important in discussing the findings in this study. The fact that this PhD research investigated a research partnership between a voluntary sector and academic agency meant that the literature on partnership approaches to research production had some interesting insights about how impact occurs. Whilst this offered some ways of conceptualising research partnerships, it was light on empirical offerings. Ways in which the partnership has been a lever for impact have been further explored in this thesis, and are the subject of further discussion as part of this conclusion.

Methods to address the research questions set out the exploratory approach that this study took to the understanding of research impact and how it might be assessed in Chapter Four. Whilst many challenges to understanding and assessing impact were acknowledged, the approach has been a 'can do' one: tracking and seeking to understand the processes of impact where they did occur. The case study in this thesis was identified as suitable for the topic because there had been activities to promote research utilisation, the partnership approach provided an interesting case, and the task was feasible in the scope of this PhD research. My role as a practitioner-researcher brought both benefits and challenges to the study. Challenges included the effects this might have on the data gathering process in particular social desirability bias, and benefits included the insights this approach might give as to who might be the appropriate person to assess research impact.

Analysis of the research question 'What is research impact?' was initially set out in Chapter Five. This established the findings from the PhD research in relation to the three subquestions. Firstly, about the activities, actions and consequences of a research partnership which might be identified as having instrumental or conceptual impacts. Secondly, it explored what research impact meant for different actors in different settings, establishing links between conceptual and instrumental approaches to using research, as well as the role of the evidence based policy and practice agenda in influencing some actors' orientation towards research use. Thirdly, it identified uptake, use and impact of the research from the CRFR/CLS partnership and started to explore the contexts for research use that had contributed to these impacts. Whilst it was easy to identify many and varied uses of the

research it was harder to identify impact, and the need to further explore the processes of research use was clear.

To address the research question 'How does impact occur?', Chapter Six picked up the issue of processes of research use, and took a more detailed look at the processes leading to impact in three cases where wider impact of the CRFR/CLS research had been identified. In each of these cases the processes through which research users had engaged with and used the research were explored, identifying routes to impact. A key finding from this exploration was that in each case the research-users' knowledge and understanding of the context in which research was used had facilitated impact. They had transformed the research in some way to make it relevant to the context where it would be used in each case: commissioning more research in alcohol policy; setting up a working group to bring research understanding alongside other knowledge in the partner organisation; and reworking the research into a quiz format for training in sex education. The concept of pathways to impact was established in this Chapter, allowing for navigation of the complex processes through which research is used by focussing on how research users engage with research, and their subsequent actions and contexts.

This pathway concept was further developed in Part III of the PhD which focussed on the research question 'how impact might be assessed?'. In Chapter Seven an approach to assessing impact using a theory base which acknowledges complexity was explained. The idea that research contributes to outcomes rather than causes them, borrowed from contribution analysis (Mayne 2008), was the basis for developing a framework for assessing impact. The framework built on the idea of pathways to impact to develop logic models as a basis for impact assessment which could be particularly useful to practitioners and could be used both as an evaluation framework but also as a planning and learning tool. Feedback from other practitioners on this framework were presented in this Chapter. It explored whether research impact can be assessed in robust ways, concluding that a contribution based approach is a useful basis for moving forward, whilst acknowledging that allowing for variations in context remains a challenge.

Chapter Eight concluded the section on how impact might be assessed by looking at the methodological lessons and challenges from the PhD research as a whole. It drew together some of the findings about methods for assessing impact in terms of what data should be collected, how and when, as well as who might be appropriate to assess impact. Whilst tracing impact may seem difficult and haphazard at times, key research users can be easy to identify if they have been drawn into networks around research topics where researchers or partners are still active. It argued that there are some relatively simple ways of improving data for impact assessment, through better tracking and evaluation of user engagement activities. It also recognised that challenges of timing and attribution are not easily solved. It suggested that an insider approach to assessing impact, where researchers and knowledge exchange professionals develop ways of thinking about data on impact as they plan and carry out user engagement activities, would provide cost-effective ways of improving evidence on and indicators for uptake, use and impact of research.

Limitations of the study

The study presented in this thesis was a small exploratory one, based on a case study of an unusual partnership between two agencies. Whilst it has elicited useful insights into the processes of research utilisation in different contexts, the particular configuration of the partner agencies, their reputations and orientations means that, like other single case studies, it is hard to generalise.

The focus has been on identifying impacts on policy and practice settings wherever they occurred. As a social policy PhD the focus was to draw on the research utilisation literature in relation to understanding research use in policy and practice, and existing studies of research impact assessment. It was not possible within the scope of this project to include a detailed look at the organisational learning literature but this could be a useful way forward to understanding elements of the practice context affecting research uptake, and in particular the impacts on the non-academic partner organisation. In particular some ideas of 'absorptive capacity' (Harvey et al 2010; Williams 2011) have been incorporated into the discussion in this conclusion and could be further utilised in the development of impact assessment, particularly in analysing context.

Whilst many research users were contacted, the study was unsuccessful in contacting some potential users of the research, including some key policy-makers: a volunteer at ChildLine, and the two research associates responsible for the main work within each research project. It would have been interesting to try to follow-up research use further, for example, to try to contact the service users where impact was felt to have occurred to assess this, although that was not possible in the resources of this project.

The feedback and use of the framework to assess impact developed in this study has been limited so far. Those who have used it so far framework have done so to varying degrees, and there is still some work to do on further refining and trialling the approach.

As a practitioner-researcher project, this study has to some extent taken an insider's look at elements of the processes leading to impact in the case examined in this research. Some of these insights have been useful, for example, a deep understanding of the issues in the research and a knowledge of the actors and contexts for research utilisation. It has been important to pay attention to the issues of potential bias in this approach, particularly cooperational bias (Gomm 2008) of interviewees. The variety of approaches taken to incorporate this into the study have included training in reflexivity, the use of a fieldwork diary for both reflection and data analysis, consideration of interview techniques which fit with this approach, and analysis of evidence of cooperational bias in the data. The aim has been to present a robust methodological and analytical framework into which the practitioner-research stance fits, as well as to be transparent about how the method has influenced the project. Overall being a practitioner-researcher has brought more benefits than disadvantages, however it would be interesting to develop the assessment approach presented in this thesis to look at projects where the researcher was in a more traditional, external role. Indeed this is planned as part of my on-going work.

9.2 Complex understandings of research uptake, use and impact

The thesis took an exploratory approach investigating research impact in the social sciences and how it might be assessed, aiming to contribute to a small, existing empirical literature on this topic (Boaz et al. 2009; Donovan 2011). The argument has been that a focus on the

processes of impact could help to increase our understanding of both how impact occurs and how it might be assessed. Using approaches which acknowledge complexity have helped with this process focus, including acknowledging the importance of the context for research use and the role of relationships in facilitating impact. This section develops further discussion of key areas of these findings in three linked sections: firstly looking at the implications of a complexity approach; secondly, what a process based orientation to impact evaluation implies; and, finally, exploring the effect of partnership on the relationship between research production and research impact. In each section recommendations for further research are made.

Complexity: context, actors and transformation

Understanding the processes of research as complex has evolved during this project. Initially, an exploratory approach taking an interactive model of research use (Weiss 1979) was the starting point of this PhD research. This interactive model of research use chimed with CRFR's approach to knowledge exchange, emphasising research users discussing, using, and re-using research within complex networks of relationships. My own experience as a KE practitioner had led me to believe that relationships were key to research uptake, and use. Setting this within complexity theory, as established through discussion of the literature in Chapter Two, implied the need to understand the context for research use, the role of actors in inhabiting that specific context, and how research might be adapted in order to be useful in that setting.

The importance of context has emerged throughout the findings of this PhD research, in terms of the specific ways that the CRFR/CLS research resonated with policy and practice contexts; in the orientation to research utilisation seen by some actors in this study; in the uptake and use of the research in different settings as set out in Chapter Five; in the key impacts identified in Chapter Six; and in the ways impact might be assessed in Chapters Six and Seven. The organisational context for research use, the specific policy and practice needs at any given time, and the ways in which research was adapted to suit contexts all deserve further discussion here.

It was established in Chapter Five that some actors in the health and government settings had an orientation to research impact that saw it partly as a requirement to take an evidence based policy or practice approach to their work. This orientation to research, as a basis for service development, policy development and change, meant that they were highly receptive to engaging with research and using it. Some of the more significant impacts were facilitated through these particular research users. These professional requirements to use research meant that these research users were 'research savvy' in terms of being used to judging and using research. They did not have some of the traditional barriers to research use that other user's might exhibit, like finding it hard to understand and access (Walter et al. 2003). Their organisational contexts also supported research use in terms of providing access, helping to process and assimilate it, and expecting work to reflect the evidence base. These personal and organisation factors combined to mean that the research findings from the CRFR/CLS partnership were easily picked up and used. Being able to understand these personal and organisational factors in investigating research impact seems important. It would be interesting to further explore this phenomenon through a comparison of research uptake and use of professionals with different orientations to the evidence based policy and practice agenda.

In Chapter Six ChildLine's own use of the research findings to develop their service was explored. There are two interesting aspects to this in terms of a complex systems approach to understanding research utilisation. Firstly, the research created a feedback loop to ChildLine that had not been anticipated by the research partnership. The aims of the research had been to influence policy and practice outwith the organisation, however the findings raised issues for within the service. Secondly, ChildLine's response to the findings was to facilitate organisational learning from this. The ideas of Absorptive Capacity are interesting here (Harvey et al. 2010; Williams 2011). Building on work orientated to the private sector (Lane et al. 2006) they suggest that some organisations are more likely to learn and change if they have the ability to recognise and understand new knowledge, assimilate and combine it with existing knowledge, and translate it into actions that will benefit the organisation. This seems a good description of the way that ChildLine addressed the issues

raised in the research as described in the pathway in Chapter Six. The categories of knowledge acquisition, assimilation and application; along with other ideas from this concept about the external and internal antecedents of absorptive capacity could provide useful pointers for the development of this work. It is clear that the practice context for research uptake has a large bearing on the subsequent use and impact of research. The findings from this PhD outline an organisational learning model that could be useful for the development of thinking in this area. The idea of absorptive capacity along with the orientation to research are important pointers to understanding the context for research use for any impact assessment. These could be further developed as concepts for analysis within impact assessment.

What was uncovered in Chapter Six in examining pathways to impact was that researchusers adapted or translated research to fit the very specific contexts in which they used it in order for it to have an impact. This occurred in different settings as stated above: commissioning further research for alcohol policy; working with an internal review process within ChildLine; or translating the research into a quiz for sexual health training. The implication of this process of context-specific adaptation is that research impact cannot be achieved from the supply side alone. It would be impossible to anticipate all of the potential uses of research in these varied contexts. A complexity approach would suggest understanding this as a process of emergence: patterns of relationships and interactions leading to outcomes that were not anticipated or controlled for at the outset. The implications of this for impact assessment and knowledge exchange are explored in more detail in the final section of this conclusion. This adds to existing work which highlights that societal impact is beyond the scope of most researchers' activities, even if they are engaged with research users. However, further research to explore the process of adaptation of research in order to achieve impact would be useful to develop and explore the robustness of this finding.

Process based approaches to research impact

One of the bases of this thesis has been to argue for a nuanced approach to the idea of research impact, that it cannot be seen in absolute terms. This takes attention away from the

idea that research either has an impact or does not, and focuses instead on a process based understanding of how impact occurs. In Chapter Two the concepts of a continuum of research use were introduced (Nutley et al. 2007) with changing awareness, attitudes and ideas, knowledge and understanding, alongside policy and practice changes all being acknowledged as kinds of uses and impacts of research. Separating the components of this process into research uptake, research use and research impact had been helpful in unpacking the journey of research into policy or practice and in creating a focus on processes which chimed with a complex systems approach. It has also been useful in developing and framing an approach to assess impact which acknowledges complexity.

This nuanced approach was developed through the thesis, using a pathway concept to examine the processes of research uptake, use and impact in Chapter Six. The pathways concept provided a navigation tool through the complexities of research utilisation, balancing an acknowledgement of complexity with the practical requirements of impact assessment. In terms of developing a robust approach to assessing impact these building blocks contributed to a theory of change based approach. Contribution analysis (Mayne 2008; Montague 2009) has provided some pointers to developing a framework for assessing impact. It uses a theory based approach but acknowledges the importance of context and relationships and is based on an understanding of complex systems. Some of the categories in a contribution analysis lent themselves particularly well to understanding research impact, drawing attention to how potential research users are engaged, and how they react and take up research. This approach allows for consideration of the contextual factors that might help or hinder research uptake, use and impact, in a way that was missing from other research impact frameworks. It allowed for an interactive approach to research use and also helped to create categories for collecting data to assess impact.

Importantly the framework developed suggests the idea of contribution of research towards outcomes rather than attribution. Research interacts through relationships with other factors in context-specific settings, with research users working and reworking the ideas to suit their needs. The idea that any change in a system could be attributed solely to research is untenable within this process, instead a theory based approach can allow the

identification of ways in which research contributed towards change which can be evidenced in a reasonable way.

The project presented in this thesis is unique in terms of a practitioner-researcher approach to the assessment of research impact. This stance has informed the concepts and methods developed, emphasising the role of those who plan and develop knowledge exchange activities in assessing impact. The framework for assessing impact presented in this thesis, whilst usable for summative evaluations by KE practitioners or researchers themselves or external evaluators, is particularly effective as a planning, reflecting and evaluating tool to be used by researchers and knowledge exchange professionals as they carry out engagement activities with research users and other potential stakeholders. It sets out a process where the context for research-use is analysed, a pathway to impact is developed and risks and assumptions explored in order to create monitoring and evaluation criteria. Through a consideration of the contextual factors, the issues of attribution can be considered. The approach can be used over differing timeframes, and creates a framework for conceptualising and then measuring the specific uptaje, use and impact of a research project or programme, or of KE activities. This approach focuses on an understanding of the research-utilisation process as complex by incorporating the role of networks and relationships, as well as an analysis of system capacities into the evaluation framework. These features and the tools developed and presented in Appendix J provide additional resources for the field. Initial feedback from KE professionals both in the UK and Canada has been encouraging about its potential usefulness. Further exploration of its effectiveness in different settings and through internal and external perspectives is being planned as part of my ongoing work in this field.

Partnership, research production and research impact

The discussion of partnership approaches to producing research was set up in Chapter Two, where an exploration of the existing literature demonstrated much enthusiasm for the role of joint research in increasing impact but less evidence on how this occurred, and what kinds of partnership might exist within a broad definition of 'integral partner' (Ross et al. 2003) or 'co-researcher' (Martin 2010). What has emerged through the findings of this

project is that a partnership approach to research production in this case has levered impact in many ways.

Working in partnership was key to identifying relevant and timely topics for research, with the non-academic partners bringing a thorough understanding of the contexts for research use into the partnership. In this partnership both academic and non-academic partners were involved in developing funding proposals for research, and in Project Two: 'sexual health' the non-academic partner secured funding for the project. Through their continued active networking the non-academic partners increased knowledge about research amongst relevant stakeholders, and particularly in Project Two: 'sexual health' created anticipation of the research findings leading to their immediate uptake and use. Partners worked together in the knowledge exchange activities for the research, and academic partners were drawn into a wider range of activities than would have been traditional for them. In both projects ongoing work using the research has contributed to its continued utilisation and impact, and the non-academic partners can be seen to utilise the research as part of a stock of knowledge perhaps more usually associated with an academic approach. This idea of a stock or reservoir of knowledge is part of Hanney et al's (2002) conceptual framework from their payback model presented in Diagram 2.3. As set out in the model of the partnership in Diagram 5.1, the partnership did pull relevant users into dialogue and help develop further research agendas.

What emerges from studying this partnership is both academic and non-academic partners sharing tasks and roles which might be more traditionally separate, even in a partnership approach to research production. Both Ross et al (2003) and Martin's (2010) models, presented in Chapter Two, identified partnership categories from distant partners (formal supporters or informants) to full partners (integral partners or co-researchers). What this project develops is the elements of co-researcher or integral partnership that are important in relation to impact. It has been helpful to break down the elements of the research process to explore this further. Table 9.1 illustrates the activities engaged in and the extent to which they have been shared.

Table 9.1 Dimensions of integrated partnership research

Traditional Research and KE tasks CRFR/CLS p			partners	partnership	
Role		Mainly	Shared	Mainly	
division		academic		non-	
				academic	
			X		
	Development of research				
*s	agenda				
Varies*			x		
>	Acquisition of funding				
	Development of project		х		
	parameters				
و		x			
Mainly academic	Data collection				
ain ade			х		
Z o	Data analysis				
			x		
占	Engagement with				
Mainly non- academic	stakeholders				
			х		
	Knowledge exchange				
	activities				
_				х	
Both	On-going use of research				

^{*}Can be defined by either party (non-academics with clear research needs and/or funding; academics looking for non-academic partners to fulfil funding requirements or provide access to informants; or negotiated as a joint agenda).

Table 9.1 shows how both partners were pulled together into sharing roles that in more traditional arrangements might be seen as the responsibility of one or other partner. The table unpicks elements of the research and knowledge exchange activities that made up this partnership, showing a high level of shared activities. These have been important in relation to the subsequent impact of the research in a number of ways. Joint negotiation of research agendas and funding meant that the research was highly relevant to policy and practice contexts. Shared work on developing the project and data analysis ensured that themes emerging from the research continued to be relevant to policy and practice and did not become dominated by the academic agenda. Shared engagement with stakeholders and

knowledge exchange activities gave the research findings credibility through the reputation and perceived motivation of both agencies by research users.

Understanding these dimensions of partnership in relation to the impact of non-academic research could help in developing further work about the nature of research partnerships. It could also be used to frame partnerships and negotiate roles. Further detailed studies of research partnerships between academic and non-academic partners would be useful in developing understanding about the relationship between joint work and subsequent impact.

The credibility of the partnership was clearly a factor affecting the use and impact of the research across the findings from this PhD research. Both the reputation of CRFR as an academic organisation with high research standards, and the reputation of ChildLine Scotland as a charity with children and young people's needs and concerns at its heart were important here. The fact that one or both agencies were known to research users was important, and in some instances the particular conceptualisation of CRFR or CLS by research users was a lever for research use. It would seem reasonable to conclude that it is not just partnership per se that increases research impact but the particular configuration of this partnership with well-known and relevant agencies as partners. Whilst most partnership approaches would mean that research is closer to research user's needs and so perhaps increase its usability, the impact from partnership research might be susceptible to context specific partnership configurations which would affect the extent to which this was the case. The thesis has provided some insights into close research partnerships which add to the literature on this topic. More research into partnerships, in particular exploration of varied partnerships, for example, between academics and community based organisations or in practice settings where using research is more of a challenge, would increase the available data about how they work and which components of partnership working are important in relation to research impact.

Contribution to theory, evidence and methods

This thesis then makes several contributions to theory and empirical evidence in the area of research utilisation and impact assessment. By adding to a small body of empirical work on how research is used it offers insights especially to the processes of research uptake, use and impact. Taking a complex systems approach means attention to context and relationships is important. This exploratory study concludes that complexity theory can aid our understanding of this area, although further studies taking this as a starting point and using methods which help analyse complex systems would be useful. Complexity informed approaches highlight the need to focus on processes, emphasise the role of networks of researchers and research-users using research interactively, and of producing context specific and emergent outcomes. Approaches using social network analysis look particularly promising in gaining better understanding of the relationship elements of research uptake and use.

Complexity theory also draws attention to the importance of the context for research use and its influence on research uptake, use and impact. One of the key findings in relation to the context for research use is the adaptation of research to fit with the specific needs of a policy or practice context. The evidence that research users own actions in adapting research to suit the context where they work has clear implications for ways in which research can have an impact on policy or practice. Further work exploring this, particularly observing research utilisation within organisations, would aid understanding about how this occurs, and the organisational factors which support this kind of deep engagement with research.

In assessing research impact, along with a nuanced approach to how impact is conceptualised, this thesis suggests that the idea of contribution to outcomes is helpful, and that contribution analysis can be adapted to offer a way forward for more robust impact assessment, particularly for practitioners. In addition, the research in this thesis points the way towards more complexity and theoretically informed studies of research impact, and has developed and sought feedback on tools to aid this process. Whilst these are still in development, the Research Contribution Framework is a useful addition to the existing

methods used by those conducting impact assessments. In particular, the framework focuses on the actors involved in the uptake and use of research, on the context in which impact may occur, and on the processes of emergence which characterised the main impacts presented in this PhD. As a planning, learning and evaluative tool, it can be adapted to incorporate new emerging areas of impact, or changes in context for research use. In these ways it is distinct from other frameworks for assessing the impact of social research.

This study of a research partnership illustrates the many and complex ways in which this partnership created research and facilitated its uptake and use. It contributes to the partnership literature in looking more closely at how close partnership working contributes to research impact, particularly in understanding the way partnership research is perceived by external research users, and the channels for impact created by a partnership approach. By bringing research users into the heart of a system for producing and using research potential for research use was increased, and whilst this particular partnership facilitated use in specific ways, it seems that the basic learning from this would be transferable to other partnerships. The nature of partnership relationships – in this case open and with an expectation of equal participation – will affect the extent to which partnership approaches facilitate impact and deserves further investigation, for example, of different kinds of partnerships and how these link to research utilisation in different settings.

Scottish policy and practice has been the setting for the investigation in this PhD research. The close networks and proximity to the Scottish Parliament have facilitated impact in terms of both researcher and practitioner access to decision makers. More research comparing policy contexts, particularly devolved and UK policy settings, would provide an interesting addition to the research in this area.

9.3 Policy and Practice recommendations

The policy and practice recommendations from this thesis fall into two main categories. Firstly, implications for knowledge exchange and for improving the impact of research, including how such improvement might be judged through impact assessment. Secondly,

recommendations about the role of research in informing policy and practice, and the relationship between the academy and wider society are explored.

Part of the rationale for exploring the theme of research impact for me, as a practitioner of knowledge exchange, was to step back from the business of doing the work of getting research into policy or practice. Whilst our practice at CRFR followed and echoed the research about what helps and hinders research uptake, it was an opportunity to explore this further to assess whether our approaches did result in research use as the anecdotal reports suggested. Uncovering the many and varied ways the research has been taken up and used, and exploring its contribution has been an interesting process, and has led me to reflect on how it might inform my own practice as well and knowledge exchange practice more widely.

In terms of evaluating work to get research out into wider society, more theoretically driven and complexity informed approaches have already been argued for in the preceding section. The move towards assessment by outcomes is affecting not only academia (Research Councils UK 2011) but local authorities and other organisations (The Scottish Government 2009). It seems that the requirement to be more reflective about the link between activities and outcomes means that we all need to be smarter about developing approaches to work that aim to plan, reflect and learn about how we do things, as well as providing a degree of self-evaluation. The framework developed in this thesis suggests some tools for starting to do this, albeit ones which require further testing and development.

As stated above, it would seem fairly simple for those engaged in knowledge exchange activities to create better channels for evidence collection about the uptake and use of their research. At CRFR we have routinely evaluated events and other user engagement activities and whilst we are focused on learning about what made the specific interaction a success, we have only recently started to think about how we include questions about users' engagement with and reaction to research, and set up procedures for follow up from this, e.g. by asking about intended use of research and for permission for follow-up after a suitable time period. From this PhD research it emerged that the briefing from Project Two: 'sexual health' was continually downloaded and dispersed to a large number of research

users, especially teachers and others involved in sex education. Whilst CRFR makes short, accessible summaries of research freely available via a website, we do not ask those who download for any information about intended use which would fairly simply and easily create data to help inform further exploration of impact.

Perhaps one of the more challenging findings in this thesis in terms of its implications for research and knowledge exchange practice is that in the cases where impact was most obvious, research users had such an important role in working with research, usually separate from academics, to make it useful and relevant for the context in which they needed to use it. As stated earlier, this means that impact cannot be created from the supply side alone, and it is not possible to predict all of the potential uses of any research. Close working relationships with research users would seem an obvious way of improving the likelihood of capturing impacts but at the very least it will be necessary to have clear channels of communication, sometimes over long time periods, to understand and assess research impact. Perhaps joint work between academics and non-academic agencies on understanding outcomes would help meet the outcomes agenda for both partners. In particular, identifying and creating dialogue with key research users who champion and promote research within their networks as seen in this study would help. Often these key research users seem to be drawn into relevant networks around the research topics so may be relatively easy to identify. The current research impact assessment agenda in the Research Excellence Framework could take note of the importance of non-academics in creating impact, acknowledging the limitations of the roles of academics within this. However, creating rewards for working on the research utilisation agenda for academics is a welcome addition to a process that previously only rewarded academic outputs from research.

Understanding the context for research use and how this might change over time remains an important challenge for KE practice. It is important not only as a way of identifying where research is most likely to have an impact, and how different arenas for impact might emerge over time but also in acknowledging that sometimes research is not immediately used because it is challenging to current thinking or practices. Methods for doing this need

further refinement but the ideas from contribution analysis, particularly as developed by Montague (2008), those developed in the RAPID framework (Court and Young 2004), and the concept of absorptive capacity (Harvey et al. 2010), are promising starting points.

Both Van de Ven and Johnson (2006) and Best et al (2008; 2010) suggest that in order to deal with complexity the role of the academic needs to change to one of 'engaged scholar'. This is a model of academics working alongside research users in relevant settings, helping to channel research and apply academic skills to understanding the complex policy and practice problems faced in contemporary societies. Personally I see this as a useful and pragmatic way forward, and one which addresses some of the issues raised in this project. However, this is a long way from current academic practice and would create challenges to the current idea and practice of the university as an institution, and is something that might appeal to some scholars more than others. Rather than proscribing this specific role, and bearing in mind the other important tasks for academics, teaching being one but also the potential role as critic of policy agendas, perhaps it is better to allow a flourishing of different roles for academics and knowledge exchange practitioners from within the academy, to link with different research users outwith.

This PhD project has provided me with the opportunity to explore the issues on which I have been working for the last 10 years. The learning from the research has already informed my work in a number of ways and will continue to provide the basis for further research and practice development. In particular I am involved in further exploring the usefulness of the Research Contribution Framework within other settings, at another institution where I have no prior knowledge of the researchers or research topics, and with other colleagues from different disciplines. As a knowledge exchange practitioner of course I am keen to ensure that learning from my own research gets taken up and used, and has its own impact. Hopefully as a practitioner-researcher I am in a useful position to ensure that this can happen.

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Appendix A: Choice of Case Studies

work Risks	1, 2, 5, 8, 9	1, 2, 5, 6, 7, 8,	4, 5, 6, 7,	6	1, 2, 6, 8	3, 4, 6, 7, 8, 9	1, 2, 3, 4, 5, 8
KE work carried out	>-	>	>	Not yet	>	>	>
Forward- backward*	Both	Forward	Both	Forward	Both	Both	Forward
Distinction	Co-production	Co-production	Very close to government	Multi-site project	Policy process	Co-production	1
Policy Arena	LA, TSG, SP	SP, TSG	TSG	Π	SE, SP	P, TSG, LA	P, SE
Timing	2003 →	2004-07	5006 →	2007 →	2002 - 06	5006 →	2002-04
Research Production Mode	Partnership	Partnership	Commissioned	Independent	Various	Partnership	independent
Project/programme	ChildLine	Cool with change	Growing up in Scotland (GUS)	Timescapes	Family Policy Bill	Health in Mind	Children of drug-users

Policy Arenas:	Risks	
LA: Local Authority (Scotland)	-	Time lag since work
P: Practice	۲i	Election since work
SP: Scottish Parliament	რ	Lack of access to data
TSG: The Scottish Government	4	Lack of access to informants
SE: Scottish Executive (now the Scottish Government)	5.	Change of personnel
O: Other (e.g. UK Parliament, Cabinet Office etc)	9	Politicisation
U:unknown or not yet decided	7.	Blurred boundaries between re
•	,	

U:unknown or not yet decided

8. Lack of identifiable impact
9. Timing for phase 3

* Potential for either forward tracking: from research to policy, backward: from policy or practice to research or both.

Appendix B: Abbreviated ethical checklist

Abbreviated version of SPSS research committee Self-Audit Checklist for Level 1 Ethical Review



1. Protection of research subject confidentiality

Are there any issues of CONFIDENTIALITY which are not ADEQUATELY HANDLED by normal tenets of ac ademic confidentiality?

YES/NO

2. Data protection and consent

Are there any issues of DATA HANDLING and CONSENT which are not ADEQUATELY DEALT WITH and compliant with established procedures?

YES/NO

3. Moral issues and Researcher/Institutional Conflicts of Interest

Are there any SPECIAL MORAL ISSUES/CONFLICTS OF INTEREST? /NO

YES

4. Potential physical or psychological harm, discomfort or stress

(a) Is the re a SIGNIFICANT FOR SEEABLE POTENTIAL FOR PSYCHOLOGICAL HARM OR STRESS?

YES

/NO

(b) Is there a SIGNIFICANT FORSEEABLE POTENTIAL FOR PHYSICAL HARM OR DISCOMFORT?

/NO

(c) Is there a SIGNIFICANT FORSEEABLE RISK TO THE RESEARCHER?

/NO

5. Bringing the University into disrepute

Is there any aspect of the proposed research which might bring the University into disrepute?

YES/NO

6. Vulnerable participants

Are any of the participants or interviewees in the research vulnerable, e.g. children and YES/NO

young people?

Overall assessment

 If all the answers are NO, the self audit has been conducted and confirms the ABSENCE OF REASONABLY FORESEEABLE ETHICAL RISKS.

http://www.sps.ed.ac.uk/admin/info research/ethics for full details.

200 words

Appendix C: Questions for case study data collection

1. What is research impact?

- A: At an individual level, expectations of research use
- B: At an organisational level, organisation expectations/cultures of research use
- C: Partnership level what effect did the partnership aim/actually have research use p

2. Networks

- A: Existing relationships which were utilised in research use process (map)
- B: Relationships with policy/practice users brought into partnership (map)^p

3. Partnership activities p

- A: Development of case study description and timeline p
- B: Context for partnership activities: policy, funding, organisational

4. Was research used?

- A. Discuss instrumental and conceptual uses of research
- B. Who were the main research users and how do they link to the network
- C. Explore the contexts of research use, individual organisational, policy
- D. Explore timeframes for research use
- E. Identify external research users (for follow-up) p

5. What facilitated/hindered the use of research?

- A. Specific actions that are believed to have facilitated/hindered use
- B. Specific actors that are believed to have facilitated/hindered use
- C. Specific contexts that are believed to have facilitated/hindered use (and link to 4.C)

6. Was research use monitored/recorded?

- A. By whom (individual/organisational/partnership)
- B. What records exist
- C. What effect did monitoring/non-monitoring have on the use of research

p: denotes questions for partners only

Appendix D: Data collection instruments

D.1. Topic Guide for follow-up interviews with research users

- a) Research use by individual and organisation
 - a. Current use of research
 - b. Value of research by organisation
 - c. Access to research
 - d. Access to this particular piece of research
- b) Context for research use
 - a. How did they hear about the research?
 - b. Did they read report, hear presentation, etc?
 - c. What was the context for research use how typical of other research?
 - d. Did they already have links with CLS/CRFR, etc?
- c) Document research use + impact
 - a. How did they use research with whom, in what settings?
 - b. Why did they use this particular piece of research?
 - c. What were the consequences of using this research did it lead to any obvious change or implied change in policy or practice?
 - i. For each 'impact', what was the context, why did it have an impact in that context?
 - ii. How do they know that it was the research that achieved that impact
 - iii. What were the facilitating factors?

- what else in the mix?

D.2. Questions for telephone interviews with participants in Project One: 'significant others' conference

Na	ime:
Or	ganisation:
Ro	le:
1.	I know it is a long time ago but do you remember the conference and the research presented (Glasgow Caledonian University, March 2005)? Conference
	Research No
2.	Did the research have an impact on you or your professional practice, in what way?
3.	Did you do anything else with the research, or as a result of it?
	Presented research to colleagues
	Talked about research to colleagues
	Sent briefing on to others
	Used research to inform practice or policy development (please specify)
	Other (please specify)
4.	Do you think the research had any wider impacts on the development of policy or
	practice?
5	Were there any contextual factors which made it easy/difficult to use the research, for
	example, existing work in this area, policy opportunities, etc?
6.	Any other comments?

D.3.Online survey questions for attendees of Project Two 'sexual health' research launch

- 1. In 2007 the Centre for Research on Families and Relationships launched some research carried out with ChildLine Scotland about children's calls on sexual health issues. It was called 'It's my Body' and launched at a conference on 14th November at Glasgow Caledonian University.
 - Do you remember the attending the conference?
- 2. The research highlighted the large numbers of young children calling about sexual issues. It showed that STI's were not a concern for most but that there was a lack of basic understanding about sexual issues and basic information about sex and relationships.
 - Some time has passed since the conference but if you can remember any issues that struck you on the day please mention them below.
- 3. Did the research have an impact on you or your professional practice, in what way?
- 4. Did you do anything else with the research, or as a result of it?

For example:

- Presented research to colleagues
- Talked about research to colleagues
- Sent briefing on to others
- Used research to inform practice or policy development
- Other
- 4. If you used the research to help inform a policy or practice change please can you explain what this was?
- 5. Do you think the research had any wider impacts on the development of policy or practice?
- 6. Were there any contextual factors which made it easy/difficult to use the research, for example, existing work in this area, policy opportunities, etc? If so, please specify.
 - It fitted in with my work at the time
 - It fitted into a policy concern
 - It was widely available
 - It was presented in easy to use forms
 - Other (please specify)
- 7. Please provide a few details to help the analysis of this survey. These will be anonymised.

Organisation:

Role:

Do you consider yourself to be a:

- Practitioner
- Policy-maker
- Academic
- Other (please specify)

Which sector do you work in?

- Health
- Social Work
- Education
- Voluntary Sector
- Higher Education
- Other (please specify)
- 8. Any other comments?

Thank you very much for your help. Please return to Sarah Morton: s.morton@ed.ac.uk.

D.4. Questions for policy interviews on alcohol policy

- 1. Background and consent
- 2. Your role in alcohol policy development:
 - a. Post
 - b. Timescales
 - c. Use of research in organisation and role
- 3. Do you think the development of alcohol policy has been underpinned by an evidence base?
 - a. What kind of evidence was used?
 - b. Any specific evidence seen as key?
 - c. What factors facilitates use?
 - d. Were there any key actors who have been important in promoting the evidence base for the alcohol strategy?
- 4. I am particularly interested in the way children were viewed in alcohol policy there seems to be a shift from children and young people as consumers of alcohol to seeing them as being harmed by parental drinking.
 - a. Do you agree?
 - b. If so, when did this shift happen?
 - c. Was this shift informed by research?
 - d. Which research?
- 5. Are you aware of the research carried out by CRFR and ChildLine on children's views of significant others which includes alcohol issues?
 - a. Was this used? How? Why?
- 6. Any other points you would like to raise?

Appendix E: Scoping for backward-tracking element of project

The briefings from both research projects in the case study contain clear policy and practice recommendations. These were analysed to identify lists of key ideas which might be possible to trace into policy. From this list a feasibility study of investigating some of these areas was conducted.

Project One

Research idea	Detail	Possible Policy areas	Time frame
Adult services	The role of adult services in providing support to families, and in identifying children at risk	Mental health Drug and Alcohol Child Protection	May 2005 onwards
Alcohol	Alcohol misuse amongst adults and its effect on children	Drug and Alcohol Child Protection	
Child Protection	Disclosure, change towards more supportive policies	Child Protection	
CP - breaking the silence	Need for easier ways for children to be able to get support on child protection	Child Protection Mental Health in Schools	
Family Support	Need for universal family support systems	Family Policy Early Years	
Fathers	Recognition of positive role of fathers in some families	Early Years Family Policy	
Friendship	Importance of children's friendships	Any policy relating to children?	
Listening to Children	Including children's perspectives, listening to children's views, taking children seriously.	Education policy Child protection	
More Resources	Call for better resourcing of family support	Finance	
Teachers' support	Role of teachers in supporting children	Education Mental Health in Schools	

Project Two

Research idea	Detail	Possible Policy areas	Time frame
Child Protection	Believing children, understanding abusers, etc	Child Protection	Nov 2007 onwards
Confidential Space	Need for children to have confidential space	Local policies? Education	
Sex education 1 – ongoing	Need for sex education to be provided throughout schooling	Sex Education	
Sex Education 2 - curriculum	Need for discussion- based curriculum	Sex Education	

Sex Education 3- context	To deliver sex education in the context of relationships	Sex Education	
Pregnancy and Parents	Need for safe spaces for young people	Local service delivery Health policy	
Rights based approach	Children and young people have the right to know about sex and relationships	Sex Education	
Sexual aggression/violence	Need to address aggression and violence in young people's intimate relationships	Domestic abuse Sex Offences	
Stigma/homosexuality	Need to challenge stigma around homosexuality to support young people	Sex Education Schools Policies Equalities	

Appendix F: Respondents

Respondents to all elements of the case study have been numbered from 1-50.

Method	Sector/post	Referred to as
Partner Interviews	Policy Officer, ChildLine	Policy Officer, ChildLine
	Director ChildLine	Director, ChildLine
	CRFR Co-Director	CRFR Co-Director
Follow-up interviews	Sexual Health Project Manager, Health Board	Health Improvement Officer 1
	Senior Health Improvement Officer, Health Board	Health Improvement Officer 2
	Training Development Worker, Health Improvement	Health Improvement Officer 3
	Senior Learning and Development Officer: Sex Education Programme	Health Improvement Officer 4
Local Authority Interviews	Head of Children's Services,	Local Authority 5
	Assistant Director Children's services	Local Authority 6
	Policy Officer for Children's Services	Local Authority 7
Conference follow-up Interviews	Housing Officer, Edinburgh	P1 conference participant 8
Interviews	Voluntary sector researcher	P1 conference participant 9
Policy-related	Head of Alcohol Policy	National policy-maker 10
interviews	former Director of SHAAP (Scottish Health Action on Alcohol Problems)	Director of SHAAP 11
	Principal Researcher, Alcohol, Scottish Government	Government Analyst 12

Local Authority Survey	Local authority online survey respondents	Local authority Numbered 13-30
Email follow up of	Health Scotland	DVD user 31
DVD users	Scottish Children's reporter's administration	DVD user 32
Survey follow-up of P2 conference attendees	7 health sector, 1 voluntary sector, 2 other (researcher, 1 cross sector)	P2 conference participants (sector) Numbered (33-43)
Follow-up of conference attendees at WISH conference	17	WISH conference attendees (sector) Numbered 43-50

Appendix G: Local Authority Survey

Letter to local authorities

Dear (name)

I am contacting you as part of a project exploring the use of research in local authorities. I am based at the Centre for Research on Families and Relationships at the University of Edinburgh. I am interested in exploring how research is used within your authority and I would be grateful if you could answer a few questions. Some of these are about research in general, some about a particular piece of research described below

I would be very grateful if you could help me by responding to the survey or by passing this to the most appropriate person.

In 2004 and 2007 research briefings were sent to the Director of Social Work and Education (or equivalents) highlighting findings from research into calls to ChildLine. I am attaching a copy of the original letters and policy recommendations. I am interested in finding out if any action was taken as a result of the research.

I realise some time has passed since the research was sent to you but I am interested in following it up as evidence suggests that it often takes many years for new research to have an impact on policy and practice settings. Even if you cannot recall these research briefings please respond as I would like to know this, and I am also interested in your views about research use more generally. If you are able to help, your response will aid a study which aims to develop ways in which academic researchers can make their research more relevant to local authorities.

Data collected will be anonymised and councils will not be identifiable. It will be used in a PhD thesis and may be published in other ways, e.g. short reports. If you would like to hear about the results of the survey please leave your contact details in the survey when requested.

I would be grateful if you could answer the survey on the web at http://tiny.cc/xf6ca. However, if this is not possible you can answer the attached paper version which can be posted or faxed back to me.

If you have any queries please get in touch.

Thanks very much.

Yours sincerely

Sarah Morton

Survey of local authorities

Local Authority Research Use Survey

Thanks you for agreeing to take part in this survey. Your response will aid a study which aims to develop ways in which academic researchers can make their research more relevant to local authorities. It is part of an ESRC funded PhD project at the University of Edinburgh.

1.	How is	s research organised in your local authority? (Double click boxes to check)
		Most research is undertaken within a specialist central unit
		Most research is undertaken in directorates comprising a number of services
		Most research is undertaken within individual service departments
		Some research is undertaken centrally; some research is devolved
		Other (please specify)
2.lr	n gener counc	ral, how do you respond to research findings that are sent by external agencies to the cil?
		don't respond
	•	forward to relevant officers
		present to relevant committee
		other (please explain)
3.	Relation studies	4 and 2006 briefings were sent from the centre for Research on Families and onships to the Directors of Social Work and Education highlighting findings from two so of calls to ChildLine Scotland. Do you have any records/recollection of actions ing the receipt of either of these research briefings?
Yes	s No	Children's concerns about the health and wellbeing of significant others (which raised concerns about child protection and alcohol use in families)
		Children's concerns about sexual health and wellbeing (which raised concerns about sex education and child protection)
If N	lo: Is th	nere anyone else who I could follow up about this?
Pos	oartmer	nt:

4.	Can you think of a piece of research over the last 12 months which has led to a significant change of policy within your department or division?
Ye	s 🗆
No	
4a.	Was this research :
	Internally generated
	Commissioned by the authority from external researchers
	External
	Don't know
4b.	Did this research (mark all that apply)
	Change thinking in a policy area?
	Lead to a change in policy?
	Lead to a change in practice?
	Other (please specify)
4c.	Why did this piece of research have an impact (mark all that apply)?
	It was received at the time that the department was reviewing this area of policy
	It met a specific need within the authority
	It was endorsed by a key external agency (e.g. COSLA, professional body)
	It provided evidence to support the policy change
	It contained clear recommendations
	It has immediate relevance for this department division
	It gave a clear indication of good practice
	It had been picked up by members
	It had been picked up by senior management
	Other (please specify)

5.	How effectively would you say resrelation to the following areas:	search finding	s are used in y	our department or division in
Dev	veloping new policy initiatives	Very effectively □	Effectively	Not at all effectively □
				_
Re	riewing existing policy initiatives			
lmp	proving service quality			
6.	In your department or division how aware of relevant research reports Rowntree Foundation, The Scottis	s produced by	external agen	cies (for example, Joseph
	Through the initiative of individual	officers		
	Information from departmental inf	ormation/resea	arch officers	
	Information from the Head of Sen	vice or another	senior manage	r
	Information from central research	/information of	ficers	
	They are not made aware of exte	rnal research		
	Other (please describe)			

Any other comments

Appendix H: List of policy documents included in analysis

Document	Publisher	Notes	Link
Getting our Priorities Right: Good Practice Guidance for working with Children and Families affected by Substance	Scottish Executive 2003		http://www.scotland.gov.uk/Publications/200 3/02/16469/18705
Misuse Hidden Harm	Advisory Council on the Misuse of Drugs 2003	This Report sets out the findings of an Inquiry carried out by the Advisory Council, focusing on children in the UK with a parent, parents or other guardian whose drug use has serious negative consequences for themselves and those around them.	http://drugs.homeoffice.gov.uk/publication-search/acmd/hidden-harm?view=Binary
Hidden Harm: Scottish Executive Response to the Report of the Inquiry by the Advisory Council on the Misuse of Drugs	Scottish Executive 2004		http://www.scotland.gov.uk/Resource/Doc/26 350/0012816.pdf
Hidden Harm Next Steps	Scottish Executive 2006	What the Scot Gov are doing to address needs of children in substance misusing.	http://www.scotland.gov.uk/Resource/Doc/11 4027/0027764.pdf
The road to recovery Chapter 5 'Getting it right for children in Substance misusing families'	Scottish Government May 2008	Outlines actions to support children affected by parental drugs and alcohol misuse.	http://www.scotland.gov.uk/Publications/200 8/05/22161610/7
Changing Scotland's Relationship with alcohol: A discussion on our strategic approach	Scottish Government June 2008	Proposals and ideas which went to consultation CRFR research listed as reference in Section J and mention in para 210.	http://www.scotland.gov.uk/Publications/200 8/06/16084348/0 http://www.scotland.gov.uk/Publications/200 8/06/16084348/19

Document	Publisher	Notes	Link
Analysis of Responses to the	Scottish	Analysis of responses to above	http://www.scotland.gov.uk/Publications/200
Government's Strategic	2009		0/07=0110=/11/0
Approach to Changing Scotland's			
Relationship with Alcohol			
Changing Scotland's Relationship	Scottish	Strategy following consultation via	http://www.scotland.gov.uk/Publications/200
with alcohol: a strategy for action	Government	discussion paper	9/03/04144703/0
	2009		
Youth commission evidence and	Young Scot 2010	Report from a youth commission about	http://www.youngscot.net/projects/index.asp?
recommendations	(on behalf of the	the Government's proposals	id=1441&SR=29&ssnb=5
	Scottish Government)		
ChildLine response to	ChildLine Scot	Mention of our research	http://www.polfest.org/s3/committees/hs/inqu
consultation	Gov		iries/AlcoholBill/documents/028ChildLineinSc
			otland.pdf
Alcohol Bill	Scottish		http://www.polfest.org/s3/bills/34-
	Parliament		AlcoholEtc/index.htm

Appendix I: Evidence collection to support contribution analysis approach

Activities/outputs/aim	Evidence of engagement and involvement	Evidence of awareness/reaction	Evidence of use	Evidence of change in behaviour or practice	Observed changes in social/community outcomes (contribution)
Partnership working: To make research useful through partnership approach	Successful partnership working, outcomes achieved	Own reflections and observations, interviews with partners	Policy responses, volunteer development, further research,	Ongoing staff development and organisational change Use by policy- makers	Improved service to ChildLine callers, contribution to policy formation
Research Briefing: To make research accessible to wide audience so that they can use the research	Analysis of targeting/ download rates: 500 printed, copied, distributed	None initially – follow-up survey	Given to teachers in training sessions, integrated into parents development programme, presented to colleagues at meetings	Evaluation of parenting programme, change in reactions of teachers and parents	Contribution to the development of teachers' sex education practice, parents understand age appropriate needs of children, children get better information and education.
Seminar: To allow opportunities to hear about, discuss and engage with research so that it can be used.	Attendance at seminar (120), analysis of groups present, analysis of gaps in attendance.	Feedback from seminar, anecdotal feedback from participants and partners, email from practitioner.	Follow-up survey with conference attendees: research used to inform policy and practice development	Follow-up survey – research used in sex education, teacher training, and parents' education programme	Teachers' approach to sex education, parents' approach to sex education
	to see row below)				

Activities/outputs/aim	Evidence of	Evidence of	Evidence of use	Evidence of	Observed changes in
	engagement and	awareness/reaction		change in	social/community
	involvement			behaviour or	outcomes (contribution)
				practice	
Target of briefing and	Attendance at launch	None initially – follow	Follow-up survey		
launch to Directors of		up survey and	identifies little clear		
Social Work and		interviews	evidence of use		
Education who were not					
at seminar					
Video by young people	Presented at launch,	Lots of comments			
of drama about research	requests for further use	about this in the			
findings		seminar evaluation.			
Press release: To get	Press coverage	Don't know reactions			
press coverage and		and whether this leads			
reach wide audience		to further engagement.			
Research input to policy Consultations include	Consultations include	No policy analysis			
consultations	research	carried out on sexual			
		health			

Appendix J: Materials for impact analysis using the Research Contribution Framework

work in progress. In particular, the contextual analysis tools need further development to include some of the work developed during the write-up of the thesis and feedback from participants in the workshops and training events. The methods for evidence gathering The materials presented have been further adapted since initial workshops to generate feedback as part of this PhD Study and are a also need further refinement

J.1 Research Contribution Analysis Process

Step 1	Identify your audience and potential stakeholders	Who is interested in the research?
2	What factors might help and hinder their research use?	What outcomes might they contribute to?
		What is the context for research use?
3	Identify methods of engagement	Where?When?How?
4	Map a pathway to impact	Make links between activities, immediate and longer-term outcomes
5	Identify assumptions and assess risks for each stage of the pathway	Build on what we know about research uptake and use
9	Identify indicators for research uptake, use and impact	Use the methods that have been trialled
7	Collect evidence	
8	Review pathway, identify	How far down the pathway can you

	gaps in evidence and try to fill	evidence? What other sources might help build your case?
6	Write a contribution story	Can be in different formats for different audiences

J.2 Contextual analysis approach in Research Contribution Framework

The following approach was used to get feedback about this approach to assessing impact but needs further development to include concepts of absorptive capacity and actors' orientation towards research use.

Analysing the context for research use

Policy context

- If the research is relevant to policy, what is the context for this?
- Does the research fit into a current stream of thinking on policy; does it feed directly into policy groups, and committees; or is it cross-cutting with no one obvious place where it might have an impact?
- Does it challenge current thinking on issues or reinforce a current policy trend?
- At what level is policy most relevant: local government, Scottish, UK, European?
- Is the timing right within this context?
- When might you want to re-assess the context in relation to your research? Is it stable or changing?
- Who is within your sphere of influence?

Practice context

- Is the research relevant to particular groups of practitioners and what is the context?
- Are they research savvy practitioners with routes to channel research or less geared to research?
- Does it help them deal with particular issues or is it challenging?
- What are the routes for reaching them?
- Is the timing right for them?
- Who is within your sphere of influence?

Social/Cultural/Political/Economic context

- Does the research address particular social, cultural, political or economic issues, or issues which have high media relevance?
- Is this context likely to help or hinder research use?

Overall analysis: positive and negative drivers

Overall what are the key positive and negative drivers in the context for the research?

Policy Context

Folicy Context					
Relevant policy area	Group/committee or crosscutting areas	Challenge/support Level (L, Timing Sc, UK, Euro)	Level (L, Sc, UK, Euro)	Timing	Review date

Practice Context

Tractice context					
Practitioners	Research savvy	Challenge/ support	Routes	Timing	Networks/ prof groups

Socio-cultural context

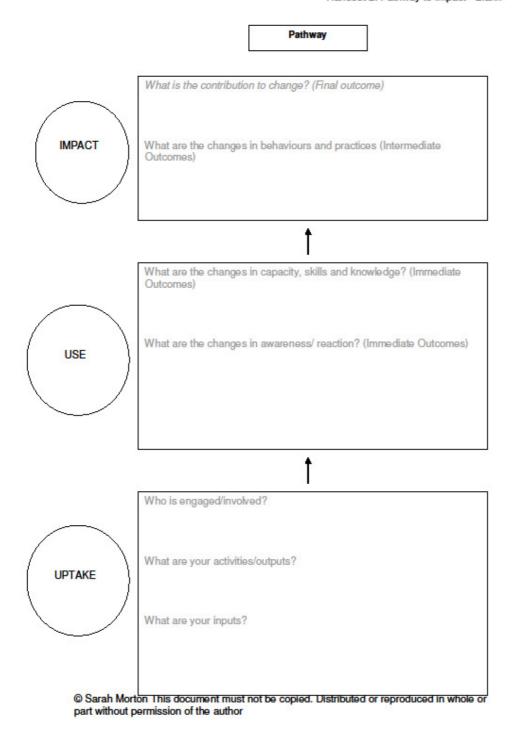
Issues	Media interest	Assessment

lrivers
σ
verall
()

Positive drivers	Negative drivers
Overall assessment	

J.3 Blank Pathway

Handout 2: Pathway to Impact - Blank



J.4 Identifying evidence - blank

Handout 4: Identifying Evidence - blank

Identifying Evidence: Blank template

		Assumptions and Risks	Indicators	Evidence
IMPACT	Contribution			
	Changes in behaviour and practices			
	Capacity, knowledge and understanding			
UPTAKE	Awareness/ Reaction			
	Engagement/ involvement			
USE	Activities and Outputs			
	Inputs			

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J.5 Pathway and evidence example

Identifying Evidence: Example from Project Two: 'sexual health'

		Pathway to impact	Assumptions and Risks	Indicators	Evidence
PACT	Contribution	Children's concerns about sexual health issues are addressed, e.g. more information at earlier ages, more discussion based sex education, better support from parents, teachers and youth workers			Parents' behaviour change as evidenced by service level evaluation (n=150). Research user's views on teachers' behaviour change (n=800)
MI	Changes in behaviour and practices	Parents teachers and youth workers deliver better support and education on sexual health matters to children and young people	Assumptions :Research 'fit' with current thinking – integrated with other knowledge, timing good Risks: Agenda already developed, research not seen as key, other factors more important	Assessment of policy and practice setting Evidence of research use in policy and practice	Fit with sexual health policy and practice agenda Use by practitioners in training courses Use of research in development of sexual health strategy at health board level Citation in policy document
	Capacity, knowledge and understanding	Parents, teachers and other workers change their views about children's sexual health issues. Knowledge, ability and skill levels developed	Assumptions: Research findings useful and relevant – integrated with other knowledge of issue Risks: Not prioritised, political factors, timing wrong	Research user's accounts and reflections on timing, relevance and usefulness	Evidence of research use by Health improvement professionals Partner agency Sexual health practitioners
∩SE	Awareness/ reaction	Practitioners recognise usefulness of research for practice, discuss and rework it to use in training. Picked up by other practitioners	Assumptions: Audiences value research knowledge, it is timely and relevant to needs Risks: Not the most important source of information, may challenge views, may not fit with other contextual drivers	Assessment of stakeholders' reaction and participation	Research user's self-reported uptake of the research Evaluation from launch conference Media interest: 3 press articles, 1 TV

Evidence	Launch conference (114) Letters to Directors of Social Work local authorities (32) Letters to Directors of Education local authorities (32) Presentation to network conference (WISH) (over 100 – unknown)	Briefing given to 6-800 teachers, 500 printed copies, Web downloads unknown Attendance at seminar high and cross sector. Uptake in media	Research report, planned activities
Indicators	Levels of engagement of research users from relevant sectors	Completed activities as described. Analysis of target audiences reached	Research project carried out as partnership through to end.
Assumptions and Risks	Assumptions: intended audiences received the message as intended Risks: communication not relevant or appropriate, timing wrong, message controversial or politicised	Assumptions: we know and can reach the right audiences Risks: didn't reach right audience, media distort message, audiences not interested in research, timing wrong	Assumptions: Research knowledge useful, partnership increases use Risks: research topics not interesting/relevant/timely,
Pathway to impact	Relevant policy, practice and public audiences are engaged activities, read the briefings.	Research findings, briefing, seminar, press release, activities with young people, presentation to sexual health strategy group	Conduct joint research and related activities to communicate the findings to a range of relevant audiences who might use it
	Engagement/ involvement	Activities and Outputs	Inputs

J.6 Methods and indicators for evidence gathering (DRAFT)

Handout 5: Methods for Evidence Gathering for impact assessment

Briefing papers

These aim to make research accessible and are targeted at relevant research users. They might be assessed in a variety of ways in relation to their targeting and use.

Method	Issues/Risks	Effectiveness
Annual review	Only suitable for briefing series	High response rate
Target review (to review if mailing reached targets)	Complicated to do more than mailing list review	Any information useful
Web download (ask for information when briefings downloaded)	May discourage download, may not be filled in, self-reporting	Easy method once established
F.II (1	Communication of the communica	
Follow-up of targeted recipients	Can assess use of briefing and impact but time-consuming. Memory and self-reporting issues	
By questionnaire	Easy way to reach larger numbers but response rates issues	Good way of reaching larger numbers but limits of responses and may need further follow-up
By telephone	Contact and permission issues but easier to assess use and impact Time consuming	Can be effective depending on respondent. Some luck involved in sampling – might miss the one person who was key
By face-to-face interview	Only suitable for people who have already been identified as using the research. Time-consuming	Excellent for unpacking use, impact and other contextual factors

Conferences/seminars/discussion groups (hosted meetings)

Method	Issues/risks	Effectiveness
Evaluation at finish of session	Need to ensure filled up, anonymity issues, what to ask	Only evaluates immediate impact and we expect impact to carry on after interactions. Need to include relevant questions about use
Follow-up after conference	Timing/permission/resources, memory issues	Can be very effective but based on self-reporting
By phone	Very time-consuming/ timescales	Can be very effective but based on self-reporting
By email	Low response rate, difficult to prompt on issues, timing, anonymity	Can be useful to collect sample for phone calls
By online questionnaire	Low response rate, timing	Very easy and time effective

Conference and Seminar Presentations (external meetings)

If research has been presented to external agencies at conference or seminars the evaluation options are more difficult. Possibilities include:

- Asking for a use/impact question to be included in the conference evaluation
- Following up participants by email 6 months later (low response)
- Attending a future conference to collect feedback (if regular event)
- Asking for immediate feedback at end of presentation

Press Work

It is easy to create a log of press coverage but less easy to assess the impact of the press coverage. Counting press coverage as impact is one option as it is following the discussion thread on online versions of any press received.

Advisory group feedback

Ask advisory groups to help with contextual analysis and give feedback on what impact they think the research has achieved. This can be done on an individual or group basis, face-to-face or via email, and on various timescales.

Partnership Working Feedback

If you are working with non-academic partners it can be important to include the impact of the partnership on their work and use of research.

Document Analysis

Research cited in policy documents, practitioner guidelines etc.

J.7 Indicators for research impact

		Evaluation Criteria	Typical indicators	Possible sources/methods
IMPACT	End Outcomes	Measures of impact on overall problem, ultimate goals, side effects, social and economic consequences	National or local level indications of change in issues addressed Changes in areas of policy or practice Contextual analysis	National or local level indicators Research-user views on policy or practice change Policy analysis Contextual analysis and relevance of research
USE	Policy or practice change	Measures of adoption of new practices and behaviour over time	Levels of research used by participants Levels of research cited in policy/practice documents	Content analysis Tracking activities Backward tracking techniques Internet-based searches
USE	Capacity, Knowledge, skill	Measures of individual and group changes in knowledge, abilities, skills	Levels of understanding of key concepts Levels of self-expressed commitment to specific related areas and related actions identified Levels of new knowledge about issues addressed	Review of target groups Tracking further use of research Press coverage
UPTAKE	Awareness, Reaction	What participants say about the research, fit with current thinking, timeliness, research valued	Reaction to research and KE from different stakeholder groups Comments about research Evidence about context for research use at practice and policy levels	Evaluation of user engagement activities Surveys Tracking participants over different timeframes Contextual analysis
UPTAKE	Engagement, Participation	Who engaged with the research, numbers, nature of involvement, background	Level of engagement of research users from relevant sectors Evidence of gaps in participation Levels of retention of research users involved in longer term activities (e.g. advisory groups)	Web use tracking Meeting attendance records Seminar/conference evaluations Observation and reflection of interactions with research users
	Activities and Outputs	Research and knowledge exchange activities	Standard of research conducted Extent to which knowledge exchange activities were delivered as per expectations	Project reports Peer or funders review Operating reviews and other internal documents
	Inputs	Resources expended, number and type of staff involved, time spent	Financial and human resources	Budget analysis Alignment of activities to resources

