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Volunteering for the Commonwealth Games: what can realist synthesis contribute to health policy making?

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Abstract

The aim of this thesis was to investigate, using the real-time test case of the 2014 Commonwealth Games, whether the realist synthesis methodology could contribute to the making of health policy in a meaningful way. This was done by looking at two distinct research questions: first, whether realist synthesis could contribute new insights to the health policymaking process, and second, whether the 2014 Commonwealth Games volunteer programme was likely to have any significant, measurable, impact on health inequalities experienced by large sections of the host population.

The 2014 Commonwealth Games legacy laid out ambitious plans for the event, in which it was anticipated that it would provide explicit opportunities to impact positively on health inequalities. By using realist synthesis to unpick the theories underpinning the volunteer programme, the review identifies the population sub-groups for whom the programme was likely to be successful, how this could be achieved and in what contexts.

In answer to the first research question, the review found that while realist methods were able to provide a more nuanced exposition of the impacts of the Games volunteer programme on health inequalities than previous traditional reviews had been able to provide, there were several drawbacks to using the method. It was found to be resource-intensive and complex, encouraging the exploration of a much wider set of literatures at the expense of an in-depth grasp of the complexities of those literatures.

In answer to the second research question, the review found that the Games were, if anything, likely to exacerbate health inequalities because the programme was designed in such a way that individuals recruited to it were most likely to be those in least need of the additional mental and physical health benefits that Games volunteering was designed to provide. The following thesis details the approach taken to investigate both the realist approach to evidence synthesis and the likelihood that the 2014 Games volunteer programme would yield the expected results.

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Acknowledgements

Declaration

I declare that, except where explicit reference is made to the contribution of others, that this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Signature   _____

Printed name   Anna Peddie Cunningham

Introduction

On 23rd July 2014, amid pomp, ceremony and showmanship, the XX Commonwealth Games were officially opened at Celtic Park in Glasgow's East End. The opening ceremony marked not just the commencement of eleven days of top class international sporting competition, but also the culmination of seven years of planning, investment and construction aimed at getting the most out of the Commonwealth Games for the host population. The staging of the event was not without controversy; against a background of increasing austerity and cuts to public services, questions were asked about how Glasgow and the people of Glasgow could afford it. The high profile case of a local family evicted from their home to allow the Council to create a car park for the event and the controversial plan to demolish a block of flats as part of the opening ceremony (scrapped after a sustained campaign on social media) contrasted starkly with the upbeat, positive rhetoric of the Organising Committee and the City Council about the huge benefits which the Games would bring to Glasgow.

Given this contrast, and the increasing emphasis on events such as the Commonwealth Games providing a lasting positive legacy for their host populations, this review was conceived as a means of investigating whether the claims made about that legacy were likely to be realised. Against a background of health policy committed (at least rhetorically) to the reduction of health inequalities and the gap in the knowledge base around the actual legacy impacts of major sports and cultural events, the 2014 Games provided an ideal test case for the review to investigate. Given that two previous reviews had indicated that the sparse evidence base (very few studies were found which addressed the question) around the health impacts of such events indicated that positive health impacts were unlikely, it was decided that the disconnect should be investigated more closely. The legacy volunteer programme presented itself as an ideal focal point for this investigation, given the suggestion that participants would be drawn from all sectors of the community and would provide them with the skills and expertise needed to mitigate the impacts of health inequalities on their lives.

In order to do this, a methodology was needed which would allow the review to look beyond whether volunteering for the 2014 Games would (or would not) work as a contribution to combating health inequalities. Realist synthesis was chosen because of its focus on the 'who' and the 'how' - using this methodology would allow the review to unpack which population groups would benefit from the Games (and components thereof) and under what circumstances.

What follows is both a consideration of the evidence around the implicit theoretical bases of the 2014 Games volunteer programme, and a critique of the synthesis method itself; the former to foreground learning from this programme which could be applied to future event legacy programmes, and the latter to discern the utility of realist synthesis as an evidence gathering tool for the policy community. This is done by first drilling down to look at the similarities and differences between different types of approach to evidence synthesis (Chapter 1). Chapter 2 looks at the rise of major event legacy programmes, and why it is now taken for granted that an event such as the Commonwealth Games would provide a lasting legacy for it's host population; Chapter 3 considers what the policy community understands health inequalities to mean and explores the evidence around how they should be tackled. Chapters 4 and 5 detail the process of conducting the realist review, with Chapters 6 and 7 exploring the findings at each stage. Chapter 8 concludes by summing up the evidence for the ability of the 2014 Commonwealth Games volunteer programme to have a meaningful impact on health inequalities and by considering the ongoing value of the realist review to the policy community in planning future social programmes and interventions.

Chapter 1

Different approaches to research evidence synthesis

1.1   Introduction

Decisions affecting public policy are not made in a vacuum (Bambra, 2005, p. 244). The decision, for example, that Glasgow should pursue the opportunity to host the Commonwealth Games in 2014 was not taken on the spur of the moment; the pros and cons of hosting the event would have had to be considered, as well as the potential benefits for the City of Glasgow and for Scotland as a whole. Of interest here is the decision making process itself, and specifically the manner in which evidence is collated and synthesised to inform the policy making process. The accession of a New Labour Government in 1997 signalled a turning point in the rhetoric concerning the use of evidence to inform policy making (Boaz, et al., 2002; Grayson & Gomersall, 2003; Sanderson, 2002; Smith, 2007) with a clearly stated commitment to ascertain *"what works and why and what types of initiative are likely to be most effective"* (Blunkett, 2000 cited in Boaz et al, 2002, p.1). If the role of research in the policy-making process is to be expanded, however, the research has to be well conducted and lead to reliable conclusions; among the research community, the debate about exactly how to provide such research remains contested, with the role that can be played in evidence synthesis by qualitative research proving particularly problematic (Cooper & Rosenthal, 1980; Light & Pillemer, 1984; Denyer & Tranfield, 2006; Pawson & Bellamy, 2006). Just as there are a variety of ways in which primary data can be collated and analysed, there are different ways of synthesising large collections of primary research ro provide an overview of the extant evidence on any particular topic (Gough et al., 2012). Reviewers can choose to synthesise their evidence using statistical, quantitative tools (which may, or may not, rely on meta-analysis); they can take a narrative approach or, more recently, employ the techniques of realist synthesis (Anderson et al., 2013; Gough et al., 2012).

Techniques for the synthesis of evidence from primary research have evolved significantly over time, with a more systematic approach being foregrounded across all review methodologies. From traditional reviews (McCartney et al., 2010) which

mine heterogeneous literatures for evidence of success or failure, to narrative reviews which seek to build the story of the success or failure of any given course of action (Popay, 2005) to meta-analytic reviews which apply statistical techniques to sufficiently homogeneous primary studies to provide evidence of efficacy (Lau et al., 1992), reviewers have moved steadily towards more systematic and transparent approaches. Narrative synthesis in particular has evolved greatly in recent years, as its proponents have endeavoured to develop more transparent and robust synthesis processes in response to widespread criticism that the methodology lacked sufficient objectivity to withstand rigorous external scrutiny (Popay, 2005; Popay et al., 2006). Realist synthesis (Pawson, 2006; Wong, 2013), the relatively new kid on the methodological block, approaches the task of collating and synthesising evidence from a slightly different standpoint in an effort to provide a robust perspective of the ways in which policies might, or might not, work and why this might be.

The purpose of this chapter is to introduce realist synthesis and consider where it is situated in relation to the existing review methodologies mentioned above, and commonly used to inform the policy making process. The intention is not to discover which methodology is 'best' at answering the complex questions thrown up by the policy making process; rather, to consider which method might be appropriately used to answer which type of question. By looking at the strengths and weaknesses of each, the circumstances under which each method might prove most useful to the policy process will be identified, and a case made for testing the realist methodology in the context of a live policy challenge.

1.2   The evolution of evidence synthesis

The idea of reviewing available evidence on a given topic in a systematic fashion is not new. Chalmers (2003a) cites the well known example of James Lind's eighteenth century discovery of an effective cure for scurvy, arrived at after rigorously testing all the extant theories on useful treatments which were available at the time; Claridge & Fabian (2005) go even further back, citing an example from the Bible[1]. In more recent times, however, review methodologies have evolved

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[1] Claridge and Fabian cite the story of Daniel who challenged the Master of Eunuchs to test the diet of his captives against the diet given to the eunuchs by the King to ascertain which might prove the

significantly, and the focus of debate has come to centre around finding the best methodology with which to conduct the review in order to ensure that it answers the question of interest, in a way that it is relevant to the real world circumstances of the review commissioners. Conceptualisations of relevance, and how best to capture it, are varied in the literature, with different authors developing different adaptations of techniques in an effort to include as much evidence as possible and ensure that nothing relevant is missed. For the early career methodologist, it represents a path strewn with twists, turns and blind alleys as an effort is made to navigate through the dense undergrowth of synthesis techniques, to determine what has evolved from where and to understand the differences in the approaches. The terminology utilised by each technique is also similar, although broad definitions vary between methodologies, seemingly only adding to the confusion. What follows represents an attempt to navigate through this, finding points of similarity and departure to assess the utility of each technique.

1.2.1 Choice of synthesis techniques

Traditional (including meta-analytic reviews where the primary research is sufficiently homogeneous), narrative and realist synthesis techniques have been chosen as the focus of this chapter because they appear to represent the broad foundations from which a myriad other synthetic techniques have been constructed or combinations developed. Each methodology approaches the task of evidence synthesis in a way that is at once unique yet similar. There are degrees of overlap between these approaches; for example, all are concerned with rigorous technique, quality appraisal of studies to be included in the review, tranparency of method and the ways in which review findings can be generalised to other, similar, situations. The ways in which each methodology approaches these tasks, however, is quite distinct and depends on the type of primary research to be included in the review.

1.2.2 Meta-analysis and the traditional review

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healthiest fare. Further detail on the early origins of evidence-based medicine can be found in Krieger (2011) and Graham (2000) who both delineate the Graeco-Roman origins of the need to evidence decisions about health care practices.

The initial emergence of the meta-analytic systematic review as a trustworthy means of providing evidence on the effectiveness of interventions is largely credited to the renowned Scottish epidemiologist Archie Cochrane (1909-1988) and his oft-quoted 1971 publication *Effectiveness and Efficiency: Random Reflections on Health Services* (Chalmers, et al., 1992; Chalmers, 1993; Clarke, 2001; Shah & Chung, 2008;Winkelstein, 2009). Cochrane held firmly to the belief that, as publicly funded health care resources would always be finite, it was incumbent upon healthcare providers to promote only such interventions and treatments as had been shown to be both effective and equitable (Cochrane, 1971; Chalmers, et al., 1992; Chalmers, 1993; Robinson, 1995; Shah & Chung, 2008). He was highly critical of the lack of an accumulated canon of reliable evidence to support the majority of the health interventions of his time, and of the failure of the medical profession to put its house in order in terms of collating the available evidence in order to facilitate better clinical decision making (Cochrane, 1971). The urgency with which collated sources of evidence had come to be needed by clinical medicine is vividly illustrated by the work of Lau, Antman and colleagues in the early 1990s; their review of advice on the treatment of myocardial infarction extant since the 1960s provided unexpected results. They found that many treatments in common usage were unsupported by the evidence to the extent that some were harmful, while potentially life-saving treatments (such as the administration of streptokinase to combat blood clots) were either ignored or actively discouraged (Lau et al., 1992 cited in Chalmers, 2003b and Sheldon, 2005). The point of this example is that it was only by purposefully setting out to conduct a review of studies of the various treatments for myocardial infarction, and by combining the quantitative findings of similar studies, that accurate evidence was obtained to indicate which treatments were effective in terms of saving lives and which were not.

Cochrane's belief, which now permeates the field of clinical medicine, was that the best evidence for 'what worked' would be derived from the randomised, controlled trial (RCT) – a rigorous, experimental study design which is used to detect what does, and does not, work in terms of clinical practice or interventions (Cochrane, 1971)[2]. In order to obtain an accurate picture of treatment effects, the

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[2] Greater detail on Cochrane's influence on the healthcare research community and the fundamental role he played in the emergence of the EBM movement can be found in Chalmers, 1992, 1993 &

results of numerous RCTs of a particular treatment are gathered together and, assuming a sufficient degree of homogeneity, subjected to meta-analysis - a statistical pooling techinique which combines data from several studies to produce more accurate estimates of effect sizes than can be achieved by a single study. The Cochrane Collaboration (www.cochrane.org) is viewed by many as encapsulating Archie Cochrane's lasting legacy to medicine, and was set up to promote the regular, systematic review of existing evidence on clinical treatments and interventions to ensure that only those which are effective are routinely used, while those which are either ineffective or harmful are abandoned. The Collaboration works across international and institutional boundaries to encourage researchers with similar interests to work together to produce reviews incorporating the best evidence available which are then widely disseminated via the Cochrane Systematic Review Database, making them widely available to clinical decision makers at all levels. Such reviews are regularly updated to ensure that new data are incorporated into review estimates.

The meta-analytic systematic review methodology, although developed for use in the empirical, experimental environment of clinical science, is not confined solely to this type of research review; these methods are not unknown in the social sciences, though the background to the migration of meta-analytic methods from the clinical paradigm is complex. Oakley (1998) discusses the long history of experimental methods in the social sciences and social policy research, illustrating the point that policy makers have long exhibited the desire to be able to evidence the effectiveness of expensive policy interventions.

Some types of scientific evidence, in common with that produced by the social sciences, lack the high levels of homogeneity necessary to conduct a statistical meta-analysis. Recent, high profile, debates about the effectiveness of the 'Tamiflu' influenza treatment (Brown, 2012; Kmietowicz, 2014; Loder et al., 2014), for example, have highlighted problems with the evidence base itself, suggesting that even a rigorous meta-analytic review is likely to be subject to bias where study results are published selectively. The Cochrane Collaboration has supported this assertion, leading to calls for a re-evaluation of the ways in which primary

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2003b; Robinson, 1995; Chalmers, Hedges & Cooper, 2002; Claridge, 2005; Shah, 2008 and Winkelstein, 2009.

scientific data are presented and published (The Cochrane Collaboration, 2014); a call which has been actively pursued by the All Trials foundation, an organisation committed to pushing drug companies to publish full details of all their RCT results (All Trials, 2014). In the social sciences, too, while routine data on all aspects of social life have been collected, analysed and disseminated by UK governments for well over a century (Grayson & Gomersall, 2003), different methods, or changes to methods, of data collection over time (Townsend et al., 1992) mean that it is not always possible to pool effect sizes, leading reviewers to seek out alternative review methodologies. David Blunkett's (1999) assertion that *"we* [New Labour] *will improve our use of evidence and research so that we understand better the problems we are trying to address"* (Cabinet Office, 1999 cited in Boaz, et al., 2002, p.1) served to legitimise the drive to expand the use evidence-synthesis techniques as a means of underpinning the utility and effectiveness of social policy interventions. The implication for reviewers is that, however their reviews are conducted, they must be able to pull together the evidence in a way that is meaningful to the policy community. While this is not a new idea, the novelty of the concept lies in the underlying assumption that social policy should be based **explicitly** on good evidence (Grayson & Gomersall, 2003) rather than the gradual filtering through of academic ideas which seem to support the policy imperatives under consideration (Smith, 2007; Weiss, 1977, 1979). Indeed, increasingly pressure is being brought to bear on the government to apply the principles of RCTs to social policy, randomising individuals and institutions into intervention and control groups in order to acertain *"what really works"* in public policy (Haynes et al., 2012, p.6).

As methodologies for the transmission of knowledge within the medical paradigm and, to a certain extent, within the public policy sphere, meta-analytic and traditional methods of evidence synthesis are firmly situated within the positivist epistemological tradition, which in turn has been shown to have its origins in Enlightenment thinking (Crossan, 2003; Sanderson, 2011). Not to base either clinical decision making or policy interventions on sound evidence risks wasting money on ineffective interventions and (potentially) causing harm to those into whose lives the intervention(s) will intrude (Oakley, 1998; Chalmers, 2003b; Sanderson, 2011). What works well for evidence-based medicine – namely a rigorous methodical approach to the synthesis of evidence from largely homogenous primary studies which privilege scientific, experimental methodologies

- may be less appropriate in relation to the more diverse and heterogeneous range of methodologies found in social science research, from whence much of the primary research on public policy effectiveness originates (Smith J, 1984; Popay, 1997; Oakley, 1998 & 2005; Macintyre & Petticrew, 2000; Boaz et al, 2002; Petticrew, 2003; Grayson & Gomersall, 2003; Petticrew, 2009). As Petticrew (2003) demonstrates, within the wider healthcare and social policy fields, there are often few RCTs or other controlled studies to be reviewed, leading to a greater reliance on other sources of evidence.

Qualitative primary research may, of course, utilise measurement tools which rely on numeric values being assigned to participants' subjective judgements (for example, 1=good, 2=very good and so on) in an attempt to standardise the data and bring order to a potentially chaotic collection of viewpoints and understandings, allowing this type of evidence to be incorporated more easily into a traditional review. Such measurement tools would appear, however, to muddy rather than clarify the methodological waters; the decisions around which numeric values to assign to which judgements or responses can, themselves, be subjective and as such open to accusations of researcher bias, and there may not be a standardised outcome measure to facilitate either meta-analysis or any other kind of quantitative investigation where primary studies are not homogeneous. Herein lies one of the difficulties many social scientists have with utilising either traditional or meta-analytic systematic review methodologies (Oakley, 1998 & 2005; Macintyre & Petticrew, 2000). How can *objective* assessments of quality and rigour be achieved against primary studies which deal with *subjective* notions, opinions, ideas and understandings? A further layer of complexity is added to this conundrum by Phillips' (1990, in Guba (ed.) 1990) assertion that even empirical experimentalists have to start somewhere, and that 'somewhere' might easily be a hunch or a 'best guess' based on prior knowledge or experience. Empirical reliance on observation can never be entirely value-free (ibid, p34), being constantly – if subliminally – influenced by the observer's own knowledge and beliefs about what is being observed (ibid.); Wong (2013) agrees, arguing that *"[a]ll research is underpinned by a number of explicit or implicit assumptions"* (p.1199).

Meta-analytic evidence synthesis methodologies, then, were developed first and foremost to fulfil the requirements of clinical medicine; even with the subsequent

development and adaptation of aggregative review methods to account for more heterogeneous primary data, this remains the privileged influence on the systematic review and influences assumptions about the types of studies which are suitable for inclusion – even among qualitative researchers (Grayson & Gomersall, 2003; Petticrew, 2001). Petticrew addresses this issue (Petticrew, 2001), reinforcing the point that the systematic review is a methodology which can assist with the elimination of bias by promoting transparency of method and rigorous assessment of the quality of included studies – nothing more and nothing less (p99). For Petticrew, the definition of a systematic review rests on the fact that it is *systematic* rather than the method of synthesis; he argues that a non-systematic review is liable to be biased, but that there is a variety of techniques available to the reviewer to enable the synthesis of different types of study[3]. It is not the methodology which limits the types of studies which can be included in a review, but the reviewers themselves; systematic reviews of whatever synthetic stripe are simply useful tools for testing hypotheses and / or summarising the results and assessing the consistency of relevant primary research (ibid).

While some social scientists may view a review methodology rooted in positivist reasoning as anathematic to the qualitative paradigm within which their work is located (just as many natural scientists might similarly undervalue or disregard research from the qualitative paradigm), continuing to promote the paradigmatic debate in the context of the systematic review is increasingly being seen as both unhelpful and overly simplistic (Smith J, 1984; Baum, 1995; Angen, 2000; Boaz et al, 2002; Dixon-Woods et al, 2004). In fact, the positivist approach to researching social policy has a long lineage in the social sciences, having been well established in the United States by the 1930s (Oakley, 1998 & 2005); indeed, Corcoran (2007) argues that an appreciation of different epistemologies allows the social scientist to reconcile the application of empiricist methodologies in the study of socio-cultural issues as *"a valid way of knowing when applied to appropriate questions"* (p54). That said, the positivist, empiricist approach is not unproblematic when operationalised in the context of social and healthcare interventions which lie outside of clinical medicine. Such interventions are heavily context-dependent in a way that many clinical studies are not, and cultural, social and individual effects

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[3] Some examples of these techniques would be narrative synthesis to include qualitative studies, meta-analysis for quantitative research with standardised outcomes and effect direction plots for observational studies with similar but slightly different outcomes.

must be accounted for when evaluating social interventions as they can have causal influences on the intervention outcomes (Popay, 1997; Petticrew, 2001; Bambra, 2005). Social interventions need to be evaluated in different ways, depending on whether the goal is to decide whether or not they have been successful, or to tease out *whether* they work, *why* they work, *for whom* they work and *in what contexts* (Pawson, 2006), the latter outcomes representing a level of contextual development which cannot easily be achieved by a traditional approach such as a meta-analytic synthesis.

1.2.3 Narrative synthesis

Prior to the emergence of both meta-analytic and traditional synthesis methodologies, the most common method of evidence synthesis was the narrative literature review (Cooper & Rosenthal, 1980; Light & Pillemer, 1984; Rumrill & Fitzgerald, 2001; Denyer & Tranfield, 2006). The standard narrative literature review, usually undertaken by an 'expert' in the field, has been widely criticised for its subjectivity, susceptibility to bias, lack of formal processes, lack of transparency and for neglecting large amounts of information contained in the primary research it purports to review (Cooper & Rosenthal, 1980; Light & Pillemer, 1984; Rumrill & Fitzgerald, 2001; Denyer & Tranfield, 2006; Pawson & Bellamy, 2006). Rooted in the approaches of the narrative literature review, **narrative synthesis** methods (Popay et al., 2006) were developed to answer some of these criticisms, providing a unified, thorough and transparent methodology for researchers interested in synthesising their evidence narratively. Narrative syntheses are used to pull together evidence from either qualitative primary research or from primary studies incorporating both qualitative and quantitative data; the method lends itself particularly well to the synthesis of heterogeneous primary studies where there are few, or no, common outcome measures.

It is this utilisation of much more heterogenous primary research which has made the migration of the evidence movement from clinical medicine into social science and policy so problematic. Where primary studies of social interventions exist, they may not be amenable to statistical analysis, and published primary research into particular interventions may either not exist or be virtually impossible to access (Petticrew, 2003). Narrative syntheses therefore have a greater focus on

foregrounding the steps which have been taken to eliminate bias and subjectivity and to show that some form of transparent, formal process has been adhered to in order to ensure that the final synthesis is both reliable and trustworthy. To demonstrate that steps have been taken towards the elimination of bias, reviewers need to make the steps they have followed transparent to their audience, delineating the literature search strategy, inclusion and exclusion criteria and the process of quality appraisal. Much of the work which has been done on developing techniques of narrative synthesis has been concerned with formalising the process, distilling it down to a series of steps which reviewers can follow – and, importantly, demonstrate that they have followed – in order to bring a sense of order and rigour to what was previously (under the banner of narrative (expert) reviews) a largely ad-hoc, subjective process.

To answer critics of narrative techniques, a number of different variations on the narrative theme have been developed, each of which has been shown to be useful in the policy context. Dixon-Woods and colleagues, for example, have worked to address concerns with the difficulty inherent in determining what constitutes 'good evidence' from qualitative studies (2004, p.46). Conscious that, however problematic, some form of quality assessment is required in order to establish which studies should be included in reviews, Dixon-Woods' team have developed the technique of critical interpretive synthesis (CIS) as an offshoot of the narrative technique. CIS is conceptualised in such a way that it is capable of handling both qualitative and quantitative data, and is concerned with the integration and interpretation of qualitative research in an explicit and robust manner, utilising abstract concepts and theory. This concern is also apparent in Popay and colleagues' work to develop narrative synthesis as a robust method in and of itself rather than developing new or adapted approaches (Popay, et al., 2006), though this work concentrates less on conceptual issues – for example, what constitutes a narrative review - than on how to actually conduct a synthesis of evidence using narrative techniques.

What all these techniques have in common is a concern with the identification of reasons which might explain why a particular intervention does, or does not, work, with narrative techniques having developed sufficiently to be able to pinpoint underlying theories about why a particular intervention works or not. The work of

Popay and colleagues is perhaps the most concerted effort to refine the technique of narrative synthesis by establishing a template for its conduct which makes the process more explicit and contributes to increasing the validity – or trustworthiness – of the method. Building on Popay's guidance, systematic reviews have been conducted using narrative synthesis techniques which demonstrate the utility of a more transparent process; the findings of these syntheses bear out the assertions of Dixon-Woods et al, Harden et al and Popay et al that it is perfectly acceptable to synthesise evidence using methods other than those which might traditionally be associated with the conduct of a systematic review provided they are appropriate to the task; but these methods *must* be explicitly described and adequately justified in the final report of the synthesis or review. A good example of this is Arai and colleagues' demonstration review of research on the implementation of smoke alarms (Arai et al., 2007). Using the techniques of narrative synthesis, this review functions as a toolkit, demonstrating the both adaptability of the technique to heterogeneous primary research and the ways in which it a narrative evidence synthesis can be made more robust and transparent. The reviewers focused on a small number of primary papers which provided thick description of the issues with encouraging people to use smoke alarms; while they do not claim that their results are exhaustive (Arai's team are explicit in noting this in their summing up), the authors do demonstrate the additional transparency of technique which can be achieved by incorporating systematic processes into a narrative synthesis. The review shows that interventions to encourage the use of smoke alarms are too complex to be judged in terms of whether they work or not; there are a myriad background circumstances to be taken into account – such as, for example, whether people issued with free smoke alarms can afford to replace the batteries. This also resonates with Petticrew's (2001) assertion that the systematic review is nothing more or less than a technique for the consolidation of evidence and the elimination of bias; synthesis is just one part of the systematic review process and the choice of methods used to achieve this should not be limited by a blinkered view of the systematic review as being useful only for the meta-analysis of scientific evidence.

1.2.4 Realist synthesis

Realist synthesis, the synthesis methodology to be tested over the course of this thesis, offers a slightly different perspective on how reviewers can navigate through the complexities of heterogeneous evidence bases. Pawson (2002, 2005, 2006) describes the realist standpoint as being grounded in philosophy of science rather than in a particular research paradigm, and as viewing social change as a complex and transformational, rather than linear, process. This perspective acknowledges that social systems are 'open' and in constant flux, rather than 'closed' and fixed; patterns of social behaviour are shaped by disparate forces and influences, meaning that responses to – and engagement with – social systems will vary between places, groups and cultures (Pawson, 2006). The result of this is that no social system, programme or intervention will be operationalised in exactly the same way everywhere it is implemented; as a consequence, it is not often possible to isolate factors which contribute to different individual responses in ways which can be empirically adjudicated to determine whether the system 'works' (ibid; Wong, 2013).

One of the main points of departure from traditional, meta-analytic and narrative techniques is that realist synthesis assumes a *"generative model of causation"* (Pawson, 2006 p21); in other words, it seeks to explain what it is about a particular intervention that generates the observed outcomes. To add to the complexity of delineating the differences between the different methods of evidence synthesis, narrative syntheses are also capable of looking at the causal powers of individual circumstance and social context when their purpose is to seek to understand explanatory theory. Where realist synthesis differs is that theory is the foundation on which it is built: it is not a particular intervention or set of interventions *per se* which a realist synthesis seeks to understand, but the theory which underpins the intervention. For example, in his 2002 review of Megan's Law[4], Pawson looks not at whether or not the Law itself can be taken to work or not in terms of keeping tabs on sex offenders, but at the background circumstances which influence its operation and the mechanisms within both the programme and the communities in which it is implemented which operate to influence the social control of sex offenders. By testing the theories which underpin the programme rather than the

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[4] The US sex offender registration and notification programme.

programme itself, Pawson is able to identify weak points in the legislation which are highly likely to result in unintended, negative outcomes. While Megan's Law has had some positive effects, the review is able to highlight the difficulties in legislating on human behaviours that wider society finds sufficiently abhorrent that communities are liable to take the law into their own hands. In terms of the methodological aspects of the 2002 review, Pawson (2006; 2002) explains that it is not interventions or programmes which 'work' as discrete entities, but the implicit mechanisms within the interventions which, in conjunction with particular contextual factors, will be more or less successful in generating desired outcomes with different sub-groups of the target population. Realist synthesis seeks to observe explicit patterns of intervention contexts, mechanisms and outcomes, reflecting the fact that sometimes interventions work well, sometimes they work in a limited way and sometimes they do not work at all. It is this facet of complex interventions which makes efforts to ascertain whether they work so frustrating. The way in which the realist technique seeks to establish patterns is by looking for what Pawson has termed *'demi-regularities'* - circumstances under which particular outcomes happen with some degree of regularity among specific groups. Taken together, these demi-regularities build into mechanisms which can be used to explain causal relationships; that is, the facets of the intervention which contribute to making things happen (ibid, pp22-24). Emerging from the realistic evaluation techniques described by Pawson & Tilley (Pawson & Tilley, 1997), the approach takes the standpoint that interventions and their modes and methods of delivery are theories which themselves arise from the baseline theory that if an intervention or programme is delivered in a particular way, particular outcomes will result (Pawson; 2002, 2005, 2006). By seeking out the mechanisms which generate outcomes (whether intended or unintended) and taking into account the contexts in which they are operationalised, reviews should be able to track the patterns of intervention success and failure to build and refine explanatory theories about the ways in which the intervention interacted with its target population to generate the observed outcomes (Pawson, 2002).

Pawson argues that intervention outcomes are not fixed entities. Programmes present participants and implementers with a range of choices to which they will respond differently, at different times, depending on their own lifeworld circumstances – that is, responses are constrained by the contexts in which

respondents find themselves at different stages of their lives. By making the role of context explicit, proponents of realist synthesis assert the validity of individual choice in social programmes: implementers can choose when, where and how the programme or intervention should be implemented, while those being targeted can choose when, where, how and, indeed, whether, to engage. Participants are thus agentive. By capturing the interactions of intervention contexts and mechanisms, and the contexts in which people respond to them, realist synthesis purports to offer a way to understand the routes by which interventions and programmes can work, for whom and in what ways. There are, then, significant similarities and points of departure between established and realist synthesis techniques, applied within the framework of the systematic review. Each uses and combines different sources of evidence using similar processes within the same guiding framework to consider questions of effectiveness. In order to understand more clearly why these techniques within the systematic review continue to present challenges to social policy research, and also why harking back to old paradigmatic debates is *"disingenuous"* (Dixon-Woods et al, 2004 p1), it is worth looking in more detail at the systematic review process itself.

1.3   How the three techniques fit within a systematic review framework

In any given systematic review, it is imperative that the choice of synthesis technique is appropriate to answering the review question. Researchers and reviewers must, however, be careful not to fall into the trap of drawing paradigmatic battle lines (Dixon-Woods, et al., 2005 (Gough et al., 2012)); quantitative research designs should not be exclusively aligned with aggregative review methodologies (for example, meta-analysis[5]), nor qualitative designs with interpretive techniques (for example, narrative synthesis). Over-reliance on paradigmatic divisions can result, Gough and colleagues (2012, p.2) argue, in *"polarized debates about the utility and relevance of different research paradigms [which] may further complicate terminological issues and conceptual understandings about how reviews actually differ from one another"*. Dixon-Woods and colleagues (2005) cite Noblit and Hare's (1988) distinction as a useful one for reviewers to bear in mind: ***"Integrative** synthesis is concerned with*

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[5] Dixon-Woods and colleagues suggest that it would be difficult, but not impossible, to undertake a meta-analytic analysis of qualitative primary research – for example, by assigning numerical values to particular outcome measures.

combining or amalgamating data...and require[s] a basic comparability between phenomena studied so that data can be aggregated for analysis" (Dixon-Woods et al, 2005 p46, emphasis added). In contrast, *"**Interpretive** reviews...see the essential tasks of synthesis as involving both induction and interpretation ...achiev[ing] synthesis through subsuming the concepts identified in the primary studies into a higher order theoretical structure"* (ibid, emphasis added). In the same way, although this definition tends to lend itself more to the interrogation of qualitative research, it does not preclude quantitative studies being used to develop higher order theories and concepts.

Dixon-Woods and colleagues go on to conclude that all syntheses contain some degree of both interpretation and integration; as such, aligning one type of synthesis explicitly with a particular paradigm or methodological tradition risks the exclusion of primary research which might make a valuable contribution to answering the review question under consideration. While ***integrative*** syntheses focus on data aggregation rather than concept development, this does not mean that they are unable to put forward illuminating theories, though the theories generated are likely to be those of correlation rather than explanation. . Conversely, ***interpretive*** syntheses are defined by their focus on the development of concepts and the subsequent generation of theories (generally of explanation rather than correlation) which ***integrate*** these concepts. Gough and colleagues (2012, p.4) tend to support this view, albeit using slightly different terminology, arguing that *"[a]ggregative reviews are often concerned with using predefined concepts and then testing these using pre-defined (a priori) methods. Configuring reviews can be more exploratory and, although the basic methodology is determined (or at least assumed) in advance, specific methods are sometimes adapted and selected (iteratively) as the research proceeds"*.

At its most basic level, a systematic review is simply *"a method of locating, appraising and synthesising evidence"* (Bambra, 2011 p15). It relies on the reviewer following a rigorous process to undertake these three fundamental tasks; the debate which has arisen around the use of the systematic review in the social sciences centres around *where* the evidence should be located, *how* it should be appraised and *how* the evidence should best be synthesised to ensure maximum utility for end users of the research. A tabular illustration of the integral processes

of the systematic review framework, and the ways in which each of the techniques described above deal with these processes, is provided in **Table 1** at the end of this chapter (page 39).

1.3.1 Establishing the review question

One of the first, and most important, tasks in the systematic review process is the establishment of the research question (or hypothesis to be tested) (Bero & Rennie, 1995; Pawson, 2002; Petticrew & Roberts, 2006; Mays, Pope & Popay, 2005; Popay, 2006; Pawson, 2006; Tricco, Tetzlaff & Moher, 2011; Bambra, 2011). It is important because it is the nature of the review question which suggests the type of synthesis most appropriate to answering it. A concern, for example, to establish the efficacy of a clinical treatment based on RCT results would be most appropriately answered by either a traditional or a meta-analytic synthesis (depending on the level of homogeneity of the included studies); while a concern to know whether a public health intervention had been successful in changing health behaviours might be better suited to a either an interpretive or an integrative method (Dixon-Woods et al., 2004; Gough et al., 2012) given the greater heterogeneity of the evidence base. The question should, regardless of the type of synthesis, be clearly defined and should explicitly make reference to the research participants, the intervention(s) to be assessed and the outcomes to be assessed (Petticrew & Roberts, 2006; Bambra, 2011).

In the case of realist synthesis, however, early definition of the review question is not always clear-cut, being part of a wider process of theoretical development. This was a particular challenge for this review; given that the theoretical development takes place hand in hand with an exploration of the literature in a realist review, defining the final research question could not take place before the commencement of the review proper. As is discussed in later chapters, some scoping work had to take place to identify the nature of the evidence base on both systematic reviews and on volunteering before any decisions could be made about the final phrasing of the research question. For narrative reviewers, this theoretical development involves teasing out theories about whether the intervention has been successful, while realist reviewers are more concerned with making explicit and exploring the theories underpinning the intervention to

establish *why* it has been successful (or not), for which groups of people and in what contexts. Regardless of review methodology, where possible the research question should be delineated in conjunction with the end users of the review in order to maximise its utility by ensuring that end users' research needs are addressed (Popay et al., 2006; Petticrew & Roberts, 2006; Petticrew & Roberts, 2006). There are two major challenges here: first, as Bambra (2005) argues, the formulation of an overly 'tight' question can lead to a review which fails to meet the needs of its end users, while a broader research question which more accurately reflects end users' needs carries the concomitant risk of being too wide-ranging and failing to answer the question at all. Second, as Mackenzie and Blamey (2005) have demonstrated, the tight timescales for intervention implementation and lifecycles tend to preclude the inclusion of experienced evaluators, or reviewers, in the planning stages. Clearly, a balance needs to be struck: involving end users of the review from the start can (at least in part) mitigate against the review drifting too far towards either extreme.

1.3.2 Delineating the protocol

The next recommended stage in the review process is the delineation of a study protocol; this is perhaps the most obvious legacy of the review methodology's origins in a positivist, empiricist epistemology and Archie Cochrane's insistence on the RCT as the evidentiary 'gold standard'. Common in both meta-analytic and traditional reviews, neither narrative nor realist methodologies insist on this stage as both methods take the standpoint that deciding on inclusion criteria should be a more iterative process which is refined as new data become available from the literature search. The purpose of the protocol is to outline explicitly what criteria will be used to decide which studies are included in – and equally importantly, excluded from – the review (Petticrew & Roberts, 2006; Bambra, 2011). If the research question sets out to collect data from experimental research such as the RCTs, for example, research would be excluded if it was not derived from clinical trials. Where these are sparse, and / or where the question is broad enough to include contextual or mechanistic facets of the intervention, the review can – and should – include other study designs where these are relevant to the question under consideration (Petticrew, 2001; Petticrew & Roberts, 2006). Different types of evidence will be required to answer different types of questions (Carter & Little,

2007; Tricco et al., 2011); thus the synthesis method employed by the reviewer must be sufficiently flexible to incorporate whichever types of primary research the reviewer wishes to consult to be able to answer the research question. (Petrosino et al., 2011, p17). Whether or not a formal protocol is required is thus dependent on the type of review to be conducted.

1.3.3 Selection of methodology

The increasing use of the systematic review in the social policy field has, as Bambra (2011) has shown, highlighted the fact that the methods used to conduct reviews in clinical medicine cannot simply be transferred wholesale to the social policy arena. While narrative and realist methodologies are more commonly used to evaluate interpretive, qualitative studies (Dixon-Woods et al, 2004; Petticrew, 2001; Petticrew & Roberts, 2006), there are particular challenges thrown up by qualitative research which need to be explicitly addressed at this stage and transparently reported in the final presentation of findings. Both review methods utilise context to build theory to explain how the intervention works and in what ways (the intervention mechanism) leading to particular outcomes in different contexts.

The more interpretive, theoretical approaches of the qualitative paradigm allow for a better understanding of why individuals respond (or do not respond) to a given intervention in particular ways. The integration of theoretical constructs, abstract concepts and individual experience serves to provide a much deeper understanding of human social experience than can be derived from statistically calculated effect sizes (Baum, 1995; Angen, 2000; Bambra, 2011). This is not, however, to say that one methodological approach to systematic review is necessarily 'better' than another; as Light & Pillemer (1984) argue, this argument is unhelpful as no one method has to be prioritised. What is important for the reviewer is to select the method which is best suited to an exploration of the intervention and which is best able to explain the observed outcomes of the intervention(s) being reviewed (Petticrew & Roberts, 2006; Gough et al., 2012). This is especially important in fields such as social policy or public health where what Oakley (1995), Dixon-Woods et al (2004) and Bambra (2005) have described as

the lack of a formal evaluation culture means that there may be limited studies available on which to base evidence reviews.

1.3.4 Searching the literature

The next stage of a systematic review is the literature search and, once again, each synthetic technique approaches things in different ways. This is where one of the major differences between realist synthesis and the other approaches becomes apparent. Context-dependent, like narrative synthesis, the realist technique does not seek literature which will prove or disprove the hypothesis that the intervention has been successful. Instead, a realist review seeks to make explicit the mechanisms which interventions and programmes utilise to present participants with a range of options, contingent on the contexts within which both the intervention and its target population are located (Pawson 2002, 2006a, 2006b; Pawson & Tilley, 1997; Pawson & Bellamy, 2006; Pawson, Greenhalgh, Harvey & Walshe, 2004 & 2005). A realist synthesis does not seek to discover whether an intervention has succeeded or failed; rather the purpose is to build theory about how and why the intervention population respond to the available mechanisms within particular contextual constraints (ibid). This, in turn, places different stresses on the literature searching process than are encountered in other types of synthesis. In realist reviews, the literature search is a complex, multi-phasic, iterative process which is integral to all the other stages of the review. As new theories about how and why the programme works, and for whom, emerge from the data, each has to be researched for the appropriate evidence to either confirm or refute it. In narrative reviews, the literature search is part of the development of an initial theory about how the intervention works, which is then used to underpin the analysis of whether or not the intervention *has* worked in practice; in contrast, aggregative reviews seek literature which is able to demonstrate empirically whether or not the entity being explored has been successful. Although defined as a separate stage of the review, the realist literature search has more in common with narrative techniques in that it is an iterative process which drives the continued search for relevant evidence.

1.3.5 Critical appraisal

Relevant studies having been identified, the next step is for them to be critically appraised to assess the quality of the studies being included in the review. For meta-analytic reviews, this appraisal involves the use of standardised checklists[6] to identify the methodological soundness of the primary studies themselves. Realist reviews tend to avoid rigid checklists, supplementing them with reviewer judgement of the rigour and fitness for purpose of the primary research in relation to the theory being explored. Pawson (2006) does not exclude the use of checklists altogether, but they need to be adaptable and tailored to the types of primary evidence which have been gathered from the literature searches. Study quality is thus assessed against criteria appropriate to the type of primary study rather than a "one size fits all" checklist (Pawson & Tilley, 1997; Pawson, 2006), as with narrative reviews.

For narrative synthesis, critical appraisal can be carried out at one of two points in the review: either as part of the data extraction process, or later on in the review when the robustness of the preliminary synthesis is tested (Popay et al, 2006). As an extension of this process, narrative reviewers are then able to explore relationships between and across studies which might influence different outcomes of the same intervention (Popay et al., 2006; Arai et al., 2007; Rodgers et al., 2009) (ibid). Meta-analytic reviews treat critical appraisal as a separate stage, conducting it with the aid of standardised data extraction forms, with at least two people independently extracting and checking all the data to ensure that the process is reproducible and transparent. For the realist reviewer, critical appraisal is a more iterative process with data being extracted from relevant studies in a manner which reflects the heterogeneity of the data being collected, and the fact that the included studies are likely to focus on different facets of the intervention. For the realist reviewer, it is not the whole study which is drawn into the synthesis, but the fragments of it which have something useful to contribute to the review. That is, the reviewer is not bound by the robustness of the entire study, but seeks to critically appraise the robustness of the insight which (s)he wishes to extract from it. Looking beyond methodology, realist reviews extract data from primary

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[6] The different types of checklist utilised by different research traditions are discussed fully in **Chapter 5**.

studies according to its relevance to the theory, or theories, being investigated and the reviewers' needs for data to confirm or refute the theory, or theories, underlying the programme(s) under investigation (Pawson, 2002 & 2006).

1.3.6 Data synthesis

The next step in the review process is the actual synthesis of the primary data. Configurative, or interpretive, reviews precede this with the construction of a preliminary synthesis of data much earlier in the review process to test the ability of the review to answer the research question before seeking further evidence to support or negate the arguments being presented. In the case of traditional reviews, this is the stage at which the homogeneity of primary studies is assessed and a decision made about the appropriateness of undertaking a statistical meta-analysis. Realist syntheses use this stage to aid refinement of the underlying intervention theory – what Pawson has described as delineating *"what works, for whom, how and in what circumstances"* (Pawson 2002, 2005 & 2006). The point of departure here, however, is that while aggregative syntheses are seeking a definitive answer to the question of whether a particular intervention has worked, narrative and realist approaches seek more nuanced explanations for intervention success. In the context of a theoretical model of causality, narrative and realist techniques make allowances for context and individual choice; in a realist synthesis, however the principal task is one of defining which parts of the underlying programme theory contribute to which responses from individuals, or groups of individuals, and the explicit acknowledgement of context and individual choice as pivotal influences.

By shifting the unit of analysis away from the whole study as a discrete entity, and focusing explicitly on the findings of interest, described by Pawson as *"evidential fragments"* (2006, p.88), realist synthesis aims to develop a 'middle range' theory (ie one which is both theoretically valid and potentially operationalisable) to account for contextual variation where the intervention has been implemented in more than one area or with more than one population (Pawson, 2006). Working through the evidence amassed from the literature involves deciding which data are pertinent to which stages of the implementation process, thus allowing the reviewer to compare how the intervention was **proposed to have worked** and how

it *actually worked* in practice (ibid). In this way, it is possible for realist (and narrative) reviewers to distinguish whether it is the underlying programme mechanisms which have failed to engage participants, or the way in which these mechanisms have been implemented 'on the ground' – perhaps due to a failure to take account of differing contexts. The point of divergence is in the role of theory. Where narrative reviewers seek to describe the underlying causal theory in terms of whether or not it has 'worked' overall, the realist approach is more nuanced, acknowledging from the outset that no single intervention will work as predicted for whole populations and seeking to unpack the theory, or theories, that best explain the programme outcomes which have been achieved in each setting.

1.3.7 Writing up

Once the synthesis is complete, the next stage is to write up the findings of the review. For integrative and aggregative reviews, this is reasonably straightforward and includes details of the literature searching process, the ways in which studies have been selected, appraised and had data extracted from them and an account of which studies were excluded at each stage and why (Petticrew & Roberts, 2006). From here, these reviews move on to deal with the wider dissemination of their findings which, Petticrew & Roberts suggest, should include assessing the impact of the review on the relevant outcomes and / or, as Pawson (2002) suggests, evaluating the extent to which the behaviour of those tasked with implementing the intervention changes in light of the review.

In contrast, this stage of the process for interpretive or configurative reviews is described in the literature not as a writing up of a final report, but an *"assessment of the robustness of the synthesis product"* (Rodgers, et al., 2009, p.63); in other words, this is the stage at which reviewers take stock of the evidence they have collated and how it fits together within the framework of the preliminary synthesis in order to build explanatory power about how the intervention works. As the synthesis draws towards its conclusion, the exploration of themes and relationships across studies should move towards an assessment of the strength of the evidence available for basing conclusions on the findings of the synthesis. Rodgers and colleagues (ibid) go on to suggest four criteria which provide a useful framework within which each study or group of studies can be appraised: "methodological

soundness, appropriateness of study design for answering the research question, study relevance [and] assessment of the overall weight of the evidence which the study [or group of studies] provides" (p65). This brings us neatly back to the debate around how the validity of primary qualitative research can best be addressed.

For realist reviews, the report writing process should take particular account of contextual issues which might be relevant to particular policy makers (for example, the review commissioners). The realist report should be a culmination of the theory refinement process which will alert policy makers and practitioners to which intervention mechanisms operate within which contexts to achieve which outcomes, allowing them to learn from previous interventions and refine the underlying theories of future programmes (Pawson, 2002 & 2004).

1.3.8 Questions of validity

Rodgers and colleagues suggest that validity is best assessed in the context of the relevance of a particular primary study to its original research question. The robustness of the evidence is then assessed in relation to how well the original authors have adhered to the methodological principles they have delineated. These suggestions are broadly in line with the argument that it is inappropriate to judge the outputs of one research tradition by the criteria used to judge another which embraces an entirely different set of principles (Ryechetnik et al, 2002). As far back as 1990, Mishler was crystallising the arguments against qualitative research being denied legitimacy on the grounds that it could not be validated by experimental methods, and suggesting that, instead, the concept of 'validity' should be re-formulated to incorporate 'trustworthiness'. Mishler viewed trustworthiness as a more socially constructed concept, and suggested that changing the focus in this way would relocate the whole notion of validity to the social world, where the concepts of both validity and trustworthiness could be continually refined through discourses between researchers of all epistemological hues.

This notion is returned to again and again in the literature. Angen (2000) argues that validity might also be re-defined as *confidence in* rather than *certainty*

about results; such confidence can be gained in the manner later echoed by Rodgers et al – namely, assessment of the conformity of the study design to its chosen methods and its fitness for purpose in answering the original research question. Bambra (2005), too, asserts that issues of study quality are (slowly) starting to move on from the long established idea that one type of study design is intrinsically 'better' than another, and towards the notion (again, with resonance in the contentions of Mishler, Angen and Rodgers et al) that studies should be assessed in terms of whether they are 'fit for purpose'– in other words, how likely it is that a particular research design will be able to contribute to answering the question of interest. Carter & Little (2007) lend further credence to this viewpoint with their contention that epistemology is a key factor in assessing study validity. Epistemology, they argue, is 'made visible' through the methods used to conduct the study, which are in turn constrained by methodological choices (p1321). These concepts are inextricably linked, and the ways in which researchers weave their epistemological and methodological choices into their work allows an assessment to be made of how thoroughly they have espoused the choices they profess, and thus how well a particular study can be said to have been conducted. This notion also has a great deal of resonance within the realist approach, where the concern is to seek out primary research which has something to say about the review question of interest and acknowledges that different types of study will be able to contribute to the theory-building process in different ways.

1.4   Summarising the systematic review typologies

The process of collating and synthesising evidence to inform policy decision-making, then, is complex and contested. While it is broadly accepted that the systematic review framework represents the most useful way of pulling evidence together and presenting it in a way which is meaningful and relevant to policy-makers and practitioners alike, the debate around the 'best' way to interpret and adapt the framework continues. Proponents of each type of synthesis methodology are coming to realize that, as Light & Pillemer (1984) and Dixon-Woods et al (2004) argue, paradigm partisanship is increasingly redundant.
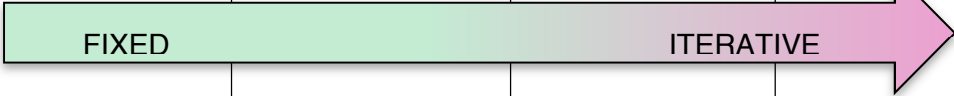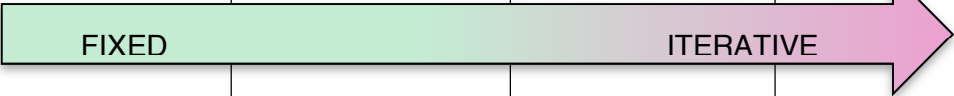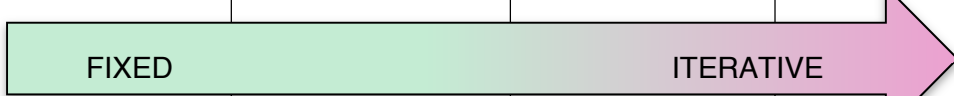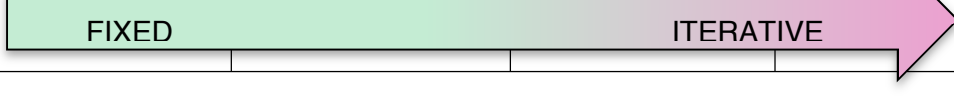
The type of study available for interrogation by a systematic review, therefore, is as important a consideration for the choice of data synthesis methodology as is the
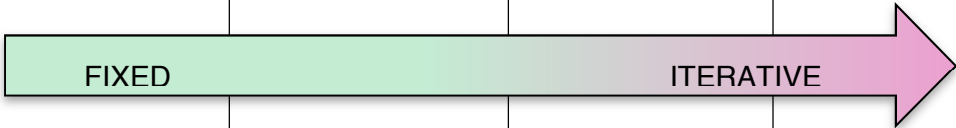
type of question to be answered. Where primary studies have standardised outcome measures related to effectiveness (for example, is Treatment B more effective than Treatment A in preventing / inducing outcome X?), meta-analytic methods are an appropriate way to synthesise data, calculate effect sizes and determine whether the hypothesis posited in the review question holds. Examples of this would be the type of review of RCTs of medical treatments conducted and disseminated by the Cochrane Collaboration (www.cochrane.org).

Where the review question demands a 'yes or no within a particular context ' answer, narrative synthesis is a more useful technique for reviewers. Relationships between data can be explored in depth, allowing the story told by the data to unfold and enabling reviewers to make recommendations which take account of the reasons why particular programmes have or have not proven to be successful. The important thing for a reviewer to consider is how likely it is that a particular research design will be able to answer (or contribute to answering) the question of interest. Moving the focus of debate in this way ensures that it is the most appropriate studies which are included in systematic reviews.

This notion feeds directly into debates on the validity and relevance of primary research, upon which the 'paradigm wars' rest. The key concept which is emerging is **appropriateness**, and from this considerations of relevance and validity flow more easily than from the concept of methodological rigour. Further, moving the focus of review inclusion criteria onto 'appropriateness' does not require any seismic shift in epistemological, ontological or theoretical thinking for any of the three synthesis methodologies considered here. For meta-analysis, there is no reason why the concept of appropriateness cannot dovetail with considerations of methodological rigour, while for both narrative and realist syntheses 'appropriateness' is already a significant factor in the selection of studies for review.

Table 1: differences between synthesis methods

Domain	Meta-analytic synthesis	Traditional review (without meta-analysis)	Narrative synthesis	Realist synthesis	Key differences of realist synthesis
Review question	FIXED →			ITERATIVE →	Definition of a review question takes place on a continuum from completely fixed (meta-analysis) to completely iterative (realist synthesis). Realist synthesis takes a more nuanced theoretical approach, defining a review question which will direct the review towards unpicking the theory and evidence behind the success of particular programme mechanisms.
Protocol	FIXED →			ITERATIVE →	Protocol definition also takes place along a continuum. Meta-analytic reviews define a protocol at an early stage and stick to it rigidly; the process becomes more fluid as the synthesis method becomes more integrative and tends to be iterative in narrative and realist reviews.
Literature search	FIXED →			ITERATIVE →	Literature searching for RS is a more iterative process than for the other three methods. While narrative reviews can cope with a Cochrane-style meta-analytic synthesis (if the primary studies are significantly homogenous), RS continues to refine search criteria as new data are used to build theory about the ways in which programme mechanisms are effective.
Quality appraisal	FIXED →			ITERATIVE →	The significant difference for RS here is the concentration on theory building. The context of primary findings is privileged, which is not the case with the other methods. This allows contextual detail to inform the development of theories to explain the operationalisation of programme mechanisms.
Data extraction	FIXED →			ITERATIVE →	Significant difference for RS is that there is no potential for a standardised data collection process. Relevance of primary research is based on a judgement of contextual fit where the other methods seek to ascertain whether a study has

Domain	Meta-analytic synthesis	Traditional review (without meta-analysis)	Narrative synthesis	Realist synthesis	Key differences of realist synthesis
					answered the research question it set out to consider.
Data synthesis	FIXED → ITERATIVE				Significant difference for RS is the focus on context and its influence on the operationalisation of programme mechanisms. Effect size and direction take second place to consideration of the circumstances under which programmes operate most effectively.
PURPOSE OF REVIEW	To make recommendations to continue & promote good, safe practices and to abandon practices which are either equivocal in effectiveness or shown to have negative effects.	The traditional approach allows reviewers to make recommendations based on whether the intervention or practice under study has been demonstrated to work or not.	The purpose of a narrative synthesis is, as Popay (2006b) tells us, "telling a trustworthy story". The narrative synthetic approach brings together evidence in a way which tells a credible story about the ways in which a programme or intervention has proven to be effective – or has been implemented effectively – in particular contexts and with particular groups of participants.	The purpose of a realist synthesis is to ascertain 'what works, for whom, how and in what circumstances'. This allows for generalisability across whole families of programmes / interventions based on similar theories; achieves a more holistic and operationally grounded review than focusing narrowly on whether a particular programme or intervention 'works' per se.	To unpick the theory or theories which underpin the intervention or practice under study to arrive at an understanding of how the intervention might work, for whom and under what circumstances.

1.4.1 The case for a realist synthesis of 2014 Games health inequalities impacts

The 2014 Commonwealth Games legacy presented a live, complex and context-rich challenge for reviewers and policy makers alike. Existing systematic reviews of major sports events (Weed et al, 2009; McCartney et al, 2010) have shown that there was little or no evidence of positive impacts accruing to host populations as a result of major multi-sports events, and that where benefits are perceived to have accrued, it may be difficult to attribute them solely to the effects of the events. They have also shown that there is significant potential for unintended negative consequences to result from hosting the event. This strikes a discordant note against the positive rhetoric of the 2014 legacy, when viewed in the light of political assertions about the centrality of research evidence to the policy process (Boaz, et al., 2002). At policy level, questions of interest are likely to centre around whether the Games legacy has achieved the aspirations set out in the Glasgow City Council and Scottish Government legacy documents[7] (Glasgow City Council, 2008; Scottish Government, 2008). It is probable that the policy community will want to know whether the legacy aspirations have been achieved, and whether any specific population sub-groups have benefited more than others, or whether the implementation of legacy plans differed to any significant degree in different parts of Glasgow or Scotland.

A meta-analytic review of legacy outcomes from previous large scale events would be likely to show only whether outcomes from previous, similar, events had been achieved or had not, with no room for a more nuanced exploration of whether discrete parts of event legacies had been more, or less, successful. Traditional reviews with meta-analytic syntheses, such as those conducted by Weed (2009) and McCartney (2010) would be able to tell us much about whether Games-driven programmes were likely to have positive or negative impacts and how small or large these impacts might be, and which aspects of social life event legacies would be most likely to impact on (for example, employment or physical activity). A narrative synthesis would be less likely, however, to be able to provide insights into the ways in which Games-driven programmes operated

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[7] The legacy aspirations are set out, and discussed in greater detail, from **Chapter 2** onwards.

within the real-world contexts of Glasgow's population, because the method looks to summarise outcomes and is thus weaker at building a theory of why a particular programme might, or might not, work in a given context. The rationale for proceeding with a realist review here is to test whether such an approach can tell us anything about the potential success of Games-driven initiatives which would not have been uncovered using a different approach to evidence synthesis. Realist synthesis is theory-driven and context-dependent, conferring more flexibility on reviewers to consider *why* a programme might be more effective in one particular area or with a particular population sub-group. In accepting that differences in implementation will occur to suit local circumstances, a realist review will be able to consider what lies behind these differences and to build robust theories to explain the ways in which context has facilitated – or constrained –the operation of programme mechanisms towards the desired outcome.

1.5   Conclusion

This chapter has considered the different methods of evidence synthesis available to systematic reviewers, putting forward the case for proceeding with a realist synthesis of the evidence for the likelihood of positive health impacts arising from the 2014 Commonwealth Games legacy.

In order to test the utility and constraints of realist synthesis, and to compare the results of a realist review with those of the more traditional reviews of major sports events which have preceded it, it is necessary to narrow the field a little. The realist review which comprises the main body of this thesis will, therefore, focus on one particular strand of the 2014 legacy in order to unpack the mechanisms by which it is evidenced to operate them, and build theory about the contexts in which – and the people for whom – it is likely to operate most successfully.

The next chapter will begin by considering how the legacy potential of major sports events rose to prominence and why this is important for Glasgow. It will then go on to consider in some detail the choice of legacy strand on which this review is based, and the reasons for making that choice.

Chapter 2

Major sports events and the need for a lasting legacy

2.1 Introduction

As outlined in the introduction, the XX Commonwealth Games commenced in Glasgow on 23rd July 2014. Despite the legacy focus on the potential for significant socio-structural improvements which the Games would bring, particularly to the deprived east end of the city (Glasgow City Council, 2008; Scottish Government, 2008), the event was not welcomed by everyone. Preparations for the event attracted some controversy (Games Monitor, 2014), with local residents and campaigners raising concerns about the vigorous land clearance policies pursued by the council to make way for the new accommodation and sports facilities needed to host the Games. Yet from the moment it was announced that Glasgow's bid to host the Games had been successful, the official rhetoric was geared towards huge infrastructural improvements and a plan to promote increased levels of physical activity across the population of Scotland, and Glasgow in particular (Glasgow City Council, 2008; Scottish Government, 2008). This, it was anticipated, would lead to a concomitant reduction in the high rates of chronic disease and premature death which have long blighted Scotland's health record (McCartney, 2011). Considerable investment was subsequently made in the provision of an improved sports and physical activity infrastructure, in the hope of persuading the population to take steps towards improving and then maintaining their own good health. This, it was anticipated, would lead to a fitter, healthier nation and reduce the pervasive and persistent health inequalities between the most and least affluent in Scotland (Scottish Government, 2008), an aspiration which was particularly relevant for Glasgow, where there is a difference in life expectancy in the order of fourteen years between men living in the most affluent parts of the city (75.8 years) and those living in the poorest, most deprived areas (61.9 years) (McCartney, 2011).

The potential impact of the Games on health inequalities, however, was implied rather than explicitly stated in both the City Council and Government legacy

documents (Glasgow City Council, 2008; Scottish Government, 2008). Explicitly described benefits focused principally on improved fitness, both physical and fiscal, and the legacy documents anticipated that these goals would be achieved through a diverse range of mechanisms and pathways. These included greater community involvement, increased physical activity, improved access to affordable housing, increased employment opportunities, economic growth and an improved physical environment and city image for Glasgow, all of which have been shown to have effects on health (Macintyre, 1986; Davey Smith, et al., 1990; Balarajan, et al., 1992; Macintyre, 1997; Bartley, et al., 1998; Davey Smith, et al., 1990; Bambra, et al., 2009; Bambra, 2010). The Commonwealth Games is, however, first and foremost a sports event, designed to entertain (Perkin, 1989; Preuss, 2007; Murphy & Bauman, 2007) rather than a specifically designed regeneration or health inequalities reduction programme. In the wake of similar interrogations of the London 2012 Olympic legacy plans (Weed, et al., 2009; Wellings, et al., 2011), it seems prudent to question whether the anticipated legacy health benefits of the 2014 Games were, in fact, plausible. The findings of Friedman and colleagues (2001) and Lee and colleagues (2007) notwithstanding, (both referenced in McCartney et al., 2010)[8], evidence from the sports events and health inequalities literatures would tend to suggest not (Coalter, 2007; Weed, et al., 2009; McCartney, et al., 2010; Wellings, et al., 2011), despite the contentions of the official Games rhetoric (Glasgow City Council, 2008; Scottish Government, 2008).

Given this disconnect between research evidence and the legacy aspirations, it becomes important to consider the form and function of major sporting event legacies, particularly the Commonwealth Games, considering how and why they developed and why they are now so crucial for Games host cities and nations. The remainder of this chapter will contextualise the Commonwealth Games within the sporting events literature, before moving on to look at the ways in which an

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[8] Friedman et al compared hospital admissions for paediatric asthma during the period covering the Atlanta 1996 Olympic Games with similar admissions for the three weeks before and after, finding a slight reduction in admissions during the Games which quickly dissipated in the post-Games period. The suggested mechanism of change was the reduction in car access to the areas around the stadia; when car use returned to normal after the event, paediatric asthma admissions returned to pre-Games levels. Similar findings were reported by Lee and colleagues following the 2000 Olympic Games in Busan, South Korea; in neither case were the reductions in paediatric admissions sufficiently sustained post-event to be credited as a positive health benefit of the Games.

international sports event has become, for its host cities, a posited vehicle for economic growth, regeneration and health improvement. The focus will then shift to a brief critique of the 2014 legacy documents, seeking out information about specific legacy programmes which were promoted as having strong potential for positive health impacts. This lays the groundwork for the more detailed discussion of the concepts of population health improvement and health inequalities, and the rationale for focusing on a reduction in health inequalities as an outcome measure of interest from the realist perspective, which is covered in **Chapter 3**. Finally, this chapter will consider the ways in which the theories underpinning posited Games-driven health inequalities impacts lend themselves to a realist synthesis.

2.2 The rise of major sports events: from 'festival' to 'legacy'

This section will look at the rise of multi-sport events, and in particular the Commonwealth Games, describing the way in which they have metamorphosed from celebrations of athletic prowess into multi-million pound enterprises which demand a more tangible legacy for host populations than enhanced civic and national pride.

2.2.1 Developing the festival

Major sporting events in urban areas are not a new phenomenon. The first modern Olympic Games took place in Athens in 1896, drawing in 311 athletes from 13 countries; a century later, in Atlanta, 196 countries fielded 10,788 athletes (Chalkley & Essex, 1999). The first FIFA World Cup took place in Uruguay in 1930 with 13 teams taking part; the 2010 competition in South Africa attracted 32 teams (FIFA, 1994), and the Commonwealth Games themselves started life as the British Empire Games in Hamilton, Ontario, in 1930, attracting 400 athletes from 11 countries; the City of Hamilton contributed $30,000 towards the travel expenses of participating countries (The Commonwealth Games Federation, 2013) and the entire event cost less than $100,000; in Glasgow in 2014, 6,500 athletes from 71 countries competed at a cost in excess of £400 million. The exponential growth in the size and cost of the Commonwealth Games has been mirrored by a similar growth in popularity, spurred on by technological advances which make it

possible for the event to be viewed by television audiences around the globe (Horne, 2007); it has also been mirrored by a rising need to justify the expenditure by evidencing a commitment to providing tangible, long-term benefits to host populations.

Many of the sports now considered integral to the Commonwealth Games - such as track and field athletics, squash and rugby (The Commonwealth Games Federation, 2012; Perkin, 1989) - were first played in a recognisably organised form in nineteenth century Britain, developed to foster the ideals of responsibility, team spirit and fair play among the future leaders of Empire (Perkin, 1989). Interest and participation grew as these 'movers and shakers' dispersed around the globe, bringing governance and team sports to their new environments. Perhaps inevitably, being able to field a local team good enough to beat the British came to be viewed among the colonies and dominions of Empire almost as an allegory of their fitness for self-government; celebrating sporting prowess developed independently of the governing British élites showed that the inculcation of responsibility, team spirit and self-reliance was complete and the colonists were ready to move forward as one nation, independent of British governance (ibid). As calls for independence from British governance grew, the first British Empire Games[9] were organised by, and held in, a Canada on the cusp of gaining total independence from Britain. National pride still plays a part both in the popularity of the Games and in the rationale for hosting them: Preuss (2007) considers an enhanced sense of national identity one of the *'intangible ends'* which major sporting events can achieve; Kavetsos and Szymanski (2010) posits that it contributes to the *'feelgood factor'* associated with such events, and the Glasgow 2014 legacy documents also emphasise the potential of the event to raise civic and national pride (Glasgow City Council, 2011; Scottish Government, 2011). With the greater need to evidence value for money, however, increased national pride is no longer the most important outcome measure for a successful Commonwealth Games; event Organising

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[9] The Commonwealth Games were known as the British Empire Games until 1950, changing to the British Empire and Commonwealth Games between 1954 and 1966 to reflect the changing political status of former British colonies. From 1970-1974 the event was known as the British Commonwealth Games before dropping 'British' entirely from 1978 onwards. Source: www.thecgf.com.

Committees need to demonstrate that host populations will accrue lasting benefits in the post-event period.

Even at the fundamental level of entertaining spectacle, however, there has long been an undercurrent of ulterior motive beneath the surface of major sporting events; Perkin (1989) posits that the evolution of organised games helped to foster *"the spirit of the public service ideal"* (p147), promoting among players *"self-confidence, self-reliance, leadership, team spirit and loyalty to comrades"* (ibid), which in turn fed into notions of good citizenship, civic pride and patriotic fervour as sports and sporting competitions grew in scope and popularity (Chalkley & Essex, 1999; Waitt, 2003; Girginov & Hills, 2008). Patriotism and national or civic pride, however, are clearly not the only reasons for the continued and increasing popularity of the Games, nor for the intense competition among potential host cities. Gratton et al (2005) argue that, since the 1980s, UK sports development has largely centred on efforts to boost tourism and encourage inward investment in post-industrial cities, with an eye to improving external images of such cities, which are dominated by images of poverty, deprivation and unemployment in the wake of de-industrialisation. This is a theme which resonates throughout the literature, with a number of commentators stressing the potential of major sports events to enhance the national – and global – image of cities struggling to negotiate the post-industrial landscape (Chalkley & Essex, 1999; Newby, 2003; Gratton, et al., 2005; Horne, 2007; Smith & Fox, 2007).

Horne (2007) suggests that this use of sports events to enhance city image has been boosted by huge leaps forward in global communications. Waitt (2003) tends to support this assertion, arguing that the generous budgets and global marketing opportunities which come with an increased, worldwide spectator base have underlined the need for post-industrial cities to re-invent themselves in order to compete on the world stage both in terms of their economies and tourist potential. Weed (2009) and Kavetsos and Szymanski (2010) also argue that the carnival atmosphere around large scale sports events helps to boost cities' images in the eyes of their own citizens, thus bolstering a sense of community and belonging. Indeed, *"in a longitudinal study examining individual and collective enthusiasm towards Sydney's 2000 Olympic Games"* Waitt (2003 ,p.194) drew on

social exchange theory to find that this sense of community was felt particularly in traditionally marginalised sections of the community (for example, immigrant families), enhancing their sense of being a part of the community and the nation in which they lived.

2.2.2 Developing the legacy

The exponential increase in the size and popularity of the Commonwealth Games since 1930 has, in common with similar major sporting events such as the Olympic Games, resulted in a concomitant increase in the costs associated with hosting the event. No longer are athletes content to board in the classrooms of a local school as they did in 1930 (The Commonwealth Games Federation, 2012); construction of appropriate residential facilities alone for the 2014 Glasgow Games was initially set at £247.1 million (Audit Scotland, 2009). The burgeoning opportunity costs associated with the event have meant, as McCartney et al (2010) have argued, that cities bidding to host the Games can no longer justify their desire to be involved solely on the basis of entertainment value, a desire to be more visible in the international arena or a consolidation of civic and national pride. It is against this background of the increasing size of major sports events – and the increasing costs involved in hosting them – that the concept of legacy has begun to emerge as an integral part of the event hosting process. This has largely been spearheaded by the International Olympic Committee (IOC), who formalised their recognition of the need for the Games to be associated with sustainable change in 2000 with the formation of OGGI – the Olympic Games Global Impact project – designed to encourage and facilitate post-event evaluation of the *actual* impacts of the Games, and focusing on their potential for both social and environmental sustainability (Preuss, 2007, p210).

The concept of legacy, however, is itself contested, as is the context within which it is framed. The IOC favours the notion of legacy as that which is turned over to communities for use in the post-event period (ibid, p210 – 211), but this, too, covers a multitude of contexts – economic, regenerative, sports development and cultural. Different commentators take slightly different viewpoints; although there is no consensus on what legacy *is,* there does appear to be some agreement about what it *is not*; Preuss (2007), for example, posits that – contrary to the

claims of the IOC – there is no consensus on a clear definition of legacy, contending that *"not all legacies are positive, nor can they be entirely planned"* (p207). This point is further illustrated by Kavetsos and Szymanski (2010) who cite the example of the 1976 Montreal Olympic Games, where the costs of hosting the event were not matched by any stimulus to growth or profits associated with it, leaving the citizens of Montreal paying a high price for international prestige and civic pride. Similarly, Chalkley and Essex (1999) and Horne (2007) point to Sheffield, where a successful bid for the 1991 World Student Games (which was neither predicated on, nor underpinned by, a proper impact study) left the city with £180 million debt which, in the early part of the 21st century, was still being paid for by the people of Sheffield via their Council Tax bills.

Returning to Preuss' argument, he further posits that the etymological definition of legacy – *"property left by will"* (2007, p.209)- is not appropriate in the sporting events context because the notion of 'property' implies exclusive ownership and it is not always the case that event legacies – for example, an improved city image – are exclusively 'owned' by any one person or group. Mangan (2008, p.1869), meanwhile, contends that a legacy *"can be benign or malign, advantageous or disadvantageous, intended or unintended",* (a definition which is also well illustrated by the examples given above) while Girginov and Hills (2008) suggest that 'legacy' is increasingly understood within the context of sustainable development of which sports development is only a small part, thus placing the concept of 'legacy' in relation to major sports events firmly within the much wider socio-economic context of the event's host city (p2092 – 2093). Contextualising legacy within the wider socio-economic framework facilitates understanding of the ways in which sports event legacies have the potential to impact on individual lives by highlighting the range of policy domains upon which they impact. Housing, employment, health, urban regeneration and economic policies are all purported to be influenced by sports event legacies (Gratton, et al., 2005; Preuss, 2006; Newby, 2003; Preuss, 2007; Gratton & Preuss, 2008; Smith & Fox, 2007). As the official rhetoric around current major sports events increasingly focuses on the potential benefits they can bring to host populations (Glasgow City Council, 2010; Glasgow City Council, 2011; Scottish Government, 2011), many commentators remain sceptical of the veracity of these claims given the paucity of evidence to support them, and the tendency of event proponents

to overstate potential rewards and underplay costs (Flyvbjerg, 2005; Preuss, 2007; Horne, 2007; McCartney, et al., 2010; McCartney, et al., 2012a).

For Sterken (2007) too, the key issue for host cities must be whether the proposed economic and social benefits will be realised, given that the evidence for such benefits is inconclusive. Many researchers (Weed et al., 2009; McCartney et al., 2010; Wellings et al., 2011) posit that there is simply not enough evidence about the beneficial aspects of hosting major sports events to substantiate the positive claims which have been made in recent legacy documents pertaining to the London 2012 Olympics and the Glasgow 2014 Commonwealth Games; all have been at pains to echo Preuss' (2006) contention that a major sporting event should not be viewed, in and of itself, as a panacea for the inherent ills of the society upon which the event is purported to impact. Horne (2007) and Girginov and Hills (2008) share this concern with the apparent gap between the assumed benefits of hosting a major sports event and those which are actually realised in the post-event period, as do Weed and colleagues (2009) and McCartney and colleagues (2010). The consensus in the literature is that the evidence for positive impacts and socio-economic benefits resulting from the hosting of major sports events is negligible at best. Horne goes on to show that, despite this lack of evidence, a number of post-industrial cities have invested heavily in sports infrastructure, guided by projected benefits which their citizens will reap from the hosting of major events in the future, a point upon which other authors (Chalkley & Essex, 1999; Newby, 2003; Gratton, et al., 2005) elaborate. Two cities where this approach appears to have had a modicum of success are Manchester (Commonwealth Games, 2002) and Barcelona (Olympic Games, 1992), but in both these examples, the city authorities used the impetus of hosting the Games to combine expected benefits with existing plans and programmes for regeneration and improvement which has proven to be the exception rather than the rule in other host cities. The issue for Glasgow was that, while the area of the East End chosen as the site of the Games had largely lain derelict for decades, plans for its regeneration appeared to be solely dependent on attracting the Games to the city; as such, the focus appeared to be less on how the regeneration of the East End would benefit its existing citizens than on how to transform a derelict area of the city in order to boost tourism. In the post-event period, considerable criticism has been levelled at the council for pricing local

people out of the new sporting facilities (The Guardian, 2014), and for its plans to dig up the newly installed green spaces in some of the more deprived parts of the East End in order to sell the land to private developers (A Thousand Flowers, 2013).

A potential explanation for this is that, as traditional heavy industry declined during the 1970s and 1980s, UK government expenditure on sports facilities was viewed at policy level as a valuable, and valid, contribution to local welfare provision (Gratton, et al., 2005). This began to decline in the mid-1980s, as the public expenditure cuts of the Conservative government began to bite, and was gradually replaced by sports investment framed within the language of the projected economic benefits it might engender for tourism, inward investment and changing the city image (Gratton, et al., 2005). The cities which adopted this strategy were not those traditionally thought of in terms of their tourism potential (ibid); Glasgow, Sheffield, Manchester and Birmingham are perhaps best described in this context as cities working hard to re-invent themselves as they negotiated the complexities of rapid de-industrialisation (ibid; Horne, 2007). All four invested heavily in their sporting infrastructure in order to be able to submit credible bids for major sporting events (Chalkley & Essex, 1999; Horne, 2007), a strategy which has meant that Glasgow has had less to provide in the way of new infrastructure for the 2014 Games than might otherwise have been the case, since it was the intention of the 2014 organisers to utilise existing stadia as far as possible - for example, Celtic Park, Ibrox Stadium and the Kelvinhall sports complex (Glasgow 2014, 2007). This has not necessarily been reflected in reduced expenditure on venues, however; with an initial budget of £332.7 million earmarked for the construction of new sports facilities and the refurbishment of existing ones (Audit Scotland, 2009), Glasgow was likely to spend nearly £100 million more on sports facilities than the most recent comparable Games in Delhi in 2010. In addition to having already invested significantly in sports infrastructure (albeit much of this required substantial upgrading for the 2014 event), Glasgow has also had some experience of hosting major cultural events with similar goals of kick-starting regeneration and boosting civic pride, having played host to the Glasgow Garden Festival in 1988 and having been named European City of Culture in 1990 (Glasgow City Council, 2007). Both these events were, according to the City Council, successfully utilised as drivers for

regeneration of derelict and deprived parts of the city, but this is not entirely borne out by the wider academic literature, or a drive around the city. The Glasgow Garden Festival site on the south side of the city, for example, remained derelict from the end of the festival until 2014 and the event underpinned no noticeable long-term improvements in the socio-structural environment of nearby Govan, an area of the city hit particularly hard by de-industrialisation. This indicates that while events such as the Garden Festival and Year of Culture may have been outwardly successful in improving the image of Glasgow and providing infrastructure which is still in regular use (for example, the Royal Concert Hall), there were many failings associated with the two events (Garcia, 2004); the benefits which it had been claimed Glasgow would reap were not underpinned by wider policy and thus many event-driven improvements failed to continue after the events were over. Both events were heavily criticised, too, for presenting to the world a sanitised image of a city where the real economic hardships shaping the lives of many of its citizens had largely been ignored in the interests of boosting tourism (Garcia, 2004; Mooney, 2004; Murphy & Boyle, 2006). In the context of the 2014 Games, campaign groups such as Games Monitor (www.gamesmonitor2014.org) raised serious concerns that no lessons have been learned, as large parts of the existing East end community had been displaced with little or no consultation in order to make way for showpiece facilities.

Nevertheless, previous large scale events did result in some improvements being made to the city's image, which contributed to Glasgow's transformation from a place failing to adapt to the post-industrial landscape to a place where people would want to live and to visit; a rationale which makes it more understandable that the council – and the Scottish Government – should feel confident about obtaining similar results from the Commonwealth Games. Girginov and Hills (2008) pinpoint this as an increasing politicisation of the legacy discourse. Hosting a major sporting (or cultural) event, they argue, needs to be politically driven and supported due to the requirement for large scale public investment to kick start the legacy process (ibid; Gratton, et al., 2005; Downward & Ralston, 2006). Given the concomitant risk that the public purse may have to absorb sizeable losses in order to achieve gains in the wider economy (Gratton, et al., 2005), the legacy process becomes, of necessity, tasked with delivering tangible benefits to ensure continued support from the voters on whom politicians rely

(Downward & Ralston, 2006). This is further complicated by what Preuss (2006) describes as the widely differing aims of event stakeholders; politicians, he argues, are concerned with tangible benefits such as promoting economic growth and developing infrastructure, while host populations may be more interested in the intangible benefits arising from such events, such as improved cultural spaces, improved city image and a greater sense of community (ibid; Glasgow City Council, 2007). From this perspective, the Games legacy documents (Glasgow City Council, 2008; Scottish Government, 2008) have been positioned as a rallying call for as many people as possible to get behind the event and make the most of the opportunities presented to them by Glasgow's host city status.

2.3 Contextualising event legacy: Glasgow and the 2014 Games

Glasgow was awarded the right to host the 2014 Commonwealth Games on the 9th November 2007, at a time of relative prosperity in the worldwide economy. Since that time, and against the background of a worsening financial climate in the UK as the event loomed closer (Taylor-Gooby & Stoker, 2011), the pressure on the event to prove itself as a worthwhile recipient of increasingly scarce public funds increased (ibid). As budgets for essential services were drastically reduced and the cost of day to day living continued to increase (Congress, 2013; Asenova et al., 2013), the 2014 legacy plans assumed an even greater importance; now more than ever, the Games were expected to deliver tangible benefits to the host population in order to justify the commitment of the considerable sums of public money required to host the event (Gratton, et al., 2005; Preuss, 2006; Downward & Ralston, 2006; Girginov & Hills, 2008). In short, the general public expected to see tangible benefits accruing from the hosting of the 2014 Games, and politicians know that these benefits must be actively pursued. The complexity inherent in the expectation of – and need for – tangible improvements, the differing expectations of lay, political and athletic stakeholders (Preuss, 2006) and the increasing politicisation of the legacy discourse (Girginov & Hills, 2008) was deepened by the lack of reliable evidence from previous major sports events that any of the purported benefits of hosting the 2014 Games would be realised (Weed, et al., 2009; McCartney, et al., 2010; Wellings, et al., 2011).

Table 2 sets out the ways in which both the Council and Government legacy documents (Glasgow City Council, 2008; Scottish Government, 2008) perceived that Glasgow – and Scotland – might benefit. The table assumes that, as Newby (2003), Coalter (2007) and Horne (2007) suggest, work to bring the legacy to fruition was tied into, rather than working in competition with, existing economic and health improvement policy goals. Clearly, there was a high degree of crossover, with a number of policy goals being important at both local and national level – for example, economic growth and health improvement, two policy goals which were deeply embedded in the legacy documentation. Unpicking the legacy documents in this way begins to illustrate the potential mechanisms by which Games-driven programmes were posited to be able to deliver the legacy aspirations for both the nation's health and its economy. Building on the unifying theme of 'improved fitness' (both physical and fiscal), the mechanisms illustrated in **Table 2** are remarkably similar, indicating the potential for any given mechanism to have a plurality of possible outcomes. Volunteering, for example, was promoted in the legacy documents as a stepping stone to improved health; equally, it was suggested as a driver for economic growth, by giving individuals tangible employability skills and a sufficiently boosted sense of self confidence to be able to attain better jobs and contribute meaningfully to the national economy.

This potential for any given Games-driven programme to have more than one measurable outcome, whether tangible or intangible, proved to be important as the realist review which forms the bulk of this thesis progressed. The legacy documents were somewhat vague on specific outcome measures, beyond their claims that hosting the Commonwealth Games in 2014 would, in the long run, prove to be beneficial for the people of Glasgow and of Scotland. In order to pin this down, and deduce which mechanisms were most likely to succeed, for which people and under what circumstances, the realist synthesis needed to consider theories pertaining to all the possible outcomes of the specific Games-driven programme selected for review.

The next section will consider each of the legacy documents in turn, drawing out the primary mechanisms focused on in each, and suggesting how it is anticipated

that the particular legacy goals of Glasgow City Council and the Scottish Government respectively are likely to be attained.

TABLE 2
Legacy document analysis

DOCUMENT	CONTEXTS	MECHANISMS	OUTCOMES	UNDERLYING THEORY
A Games Legacy for Glasgow (Glasgow City Council, 2008)	City wide, with no specific or explicit focus on the East End (the area is mentioned only briefly). No explicit focus on any particular communities or groups – emphasis is on 'whole Glasgow' approach – although document artwork and personal testimonies suggest an intention to focus on deprived areas.	Volunteering (primary mechanism) Infrastructure development Games-led regeneration	More connected communities; strengthened social networks. Better employability skills Healthier population	By encouraging people to volunteer their time and skills, it is anticipated that employability skills will be shared and improved; communities will become more connected with each other and, as a direct consequence, more pleasant places to live; and population level health outcomes will improve as people become more active both physically and in terms of the building and improving of their social networks and connections.
A Games Legacy for Scotland (Scottish Government, 2008)	National, with a brief focus on Scotland's international position. No explicit mention of any particular communities at which Games-driven programmes and interventions will be aimed; general emphasis is on a 'whole Scotland' approach.	Volunteer programmes Educational programmes Physical activity programmes	More connected communities (at local, national and international levels); strengthened social networks. Better employability skills among all age groups. Healthier population	Encouraging people to volunteer will make them healthier (by motivating physical activity and encouraging the building of social bonds), improve their chances of working their way out of poverty by gaining better employment (which will also impact on health by giving them access to healthier dietary options which they might otherwise be unable to afford) and encourage international co-operation.
Health Impact Assessment of the 2014 Commonwealth Games (Glasgow City Council, 2007)	City of Glasgow with particular emphasis on the potential impact of the 2014 Games on deprived areas.	Volunteer programmes Community engagement Health promotion Ensuring accessibility of new sporting facilities Improved local transport infrastructure	More connected communities Lower perception of crime in deprived areas Motivation to increase participation in healthy activities Better chances in the employment market Easier to get around the city, encouraging participation in events outwith local areas and widening social networks	The HIA is complementary to the legacy plans, suggesting a number of ways in which positive legacy outcomes can be maximised without increasing health inequalities as a consequence.

2.4 Contextualising event legacy: the policy background to 2014

In 2008, the Scottish Government published *Equally Well*, the report of an inter-departmental task force set up to consider the causes of, and potential solutions to, the continuing problem of health inequalities in Scotland. In his foreword to the report, Alex Salmond argued that *"it's unacceptable in 21st century Scotland that some people can expect to die earlier than others, simply due to an accident of birth or circumstances"* (Scottish Government, 2008, p.vi), echoing Dahlgren and Whitehead's (1991) definition of health inequalities as *"differences in health that are unnecessary, avoidable, unfair and unjust"* (Braveman & Gruskin, 2003, p.254). This puts the reduction of health inequalities at the heart of the Scottish administration's health policy agenda; the further assertion that *"reducing health inequalities is vital to achieving the Scottish Government's overall purpose: sustainable economic growth"* (Scottish Government, 2008, p.vi) provides a direct link between the legacy focus on a fitter population and economy, and over-arching government policy.

A Games Legacy for Glasgow (Glasgow City Council, 2008) laid out the City Council's aspirations for the 2014 Commonwealth Games as they related to the City of Glasgow. It is divided into six broad categories within which the Games are posited to drive change, the aspirational end result being a fitter population (in both physical and fiscal terms). Despite the Games locus being in the East End of the city, an area of complex deprivation and poor health outcomes (McCartney, 2011), it is barely mentioned in this document which focuses, instead, on expressing a 'whole city' approach to the ways in which the Games might benefit Glasgow. The contexts in which change might take place are difficult to divine; deprived communities and deprived individuals are not explicitly mentioned, being alluded to instead in the document artwork (depicting high rise flats) and the personal testimonies of Glaswegians which stress how getting involved in their communities has made them feel better both mentally and physically. None of the testimonials, however, allude to the socio-economic circumstances of the individual being quoted. The potential mechanisms for change described in the document, as shown by McCartney, Hanlon and Bond (2013), are economic growth, increased sports participation, increased civic pride and sense of community, volunteering experience, improved environment and legacy programmes. Each of

these pathways has the potential to impact on health and the economy and to have more than one measurable outcome, but by far the greater emphasis in the Glasgow legacy document is on using these pathways to bring about population level health improvement through a focus on changing individual health behaviours.
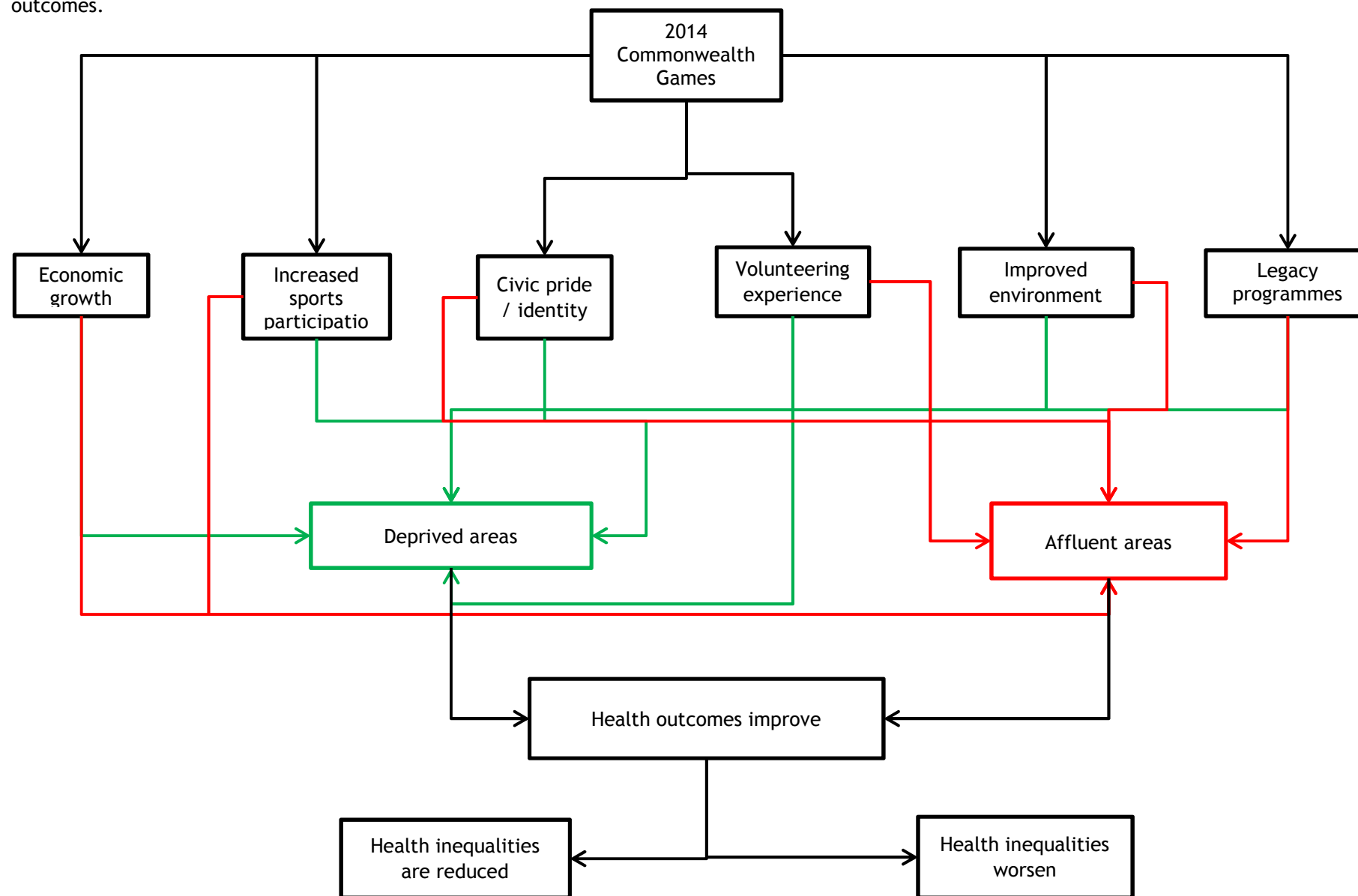
The six pathways and their potential to influence population level health outcomes are illustrated in **Figure 1** (below). This diagram also illustrates the potential for more than one outcome, and for unintended negative outcomes to arise from the Games legacy plans. This is of particular importance for this review because of the direct links between the legacy rhetoric and that in *Equally Well* (Scottish Government, 2008); the legacy focus on individual health behaviours is problematic in the context of the health policy focus on reducing health inequalities since achieving one does not necessarily guarantee achieving the other – the implications of this for the 2014 legacy aspirations will be explored in greater depth in **Chapter 3**.

The mechanisms for change (illustrated in Table 2) are largely focused at the individual level, in that they are reliant on people changing their behaviours and attitudes sufficiently to engage with the legacy programmes and contribute to the ultimate goal of a healthier population, but there is a high degree of crossover between the mechanisms designed to bring about health improvement and those designed to boost the economy. Regeneration programmes designed to attract investment and create jobs also have the potential to impact on health by providing well-designed, safe, amenity rich neighbourhoods where people will be able to interact more readily with one another and build stronger links within their communities. Black (Townsend, et al., 1992), Dahlgren and Whitehead (1991) and Waitt (2003) have shown that safety and increased feelings of community pride can have positive impacts on both physical and mental health over and above those improvements derived from access to employment and adequate housing. Similarly, volunteering programmes which are promoted as having the potential to impact first and foremost on health by improving physical activity and engagement with the wider community; making people feel part of something and combating social isolation are also posited to have an impact on the local economy (Scottish Government, 2008). Through volunteering initiatives, the legacy documents

promised that individuals would be able to access a wide range of skills training and employment experience, enabling them to take advantage of the job opportunites created by the increased investment in the local area. Tying the legacy into the existing *Volunteer Strategy* (Scottish Government, 2004), the centrality of volunteering to the legacy aspirations is shared by the focus on regeneration, and the potential offered by the latter for boosting businesses, investment and overall economic performance. Neither the local (city council) nor the national (government) document makes an explicit link between area level deprivation and poor health outcomes, or the ways in which area level regeneration can impact on either.

Again, there is a high degree of crossover between mechanisms designed to impact on health and those designed to impact on the national economy, with programmes which have the potential to influence health outcomes being described solely in terms of the economic benefits which they might accrue. *A Games Legacy for Scotland* demonstrates more clearly than its Glasgow counterpart the potential for dual economic and health benefits to arise from all aspects of the legacy, and ties this to the potential for people to be inspired to change their behaviours in light of having watched at first hand the efforts of elite international athletes. In doing so, the potential to benefit from the legacy pivots on the success of the Games acting as a spur to good intentions and prompting people to become more active both economically and physically. While the logic of this stance is clear, it fails to take account of the unreliability of the 'inspiration effect'; Bowles and colleagues (2006), Coalter (2007), Horne (2007) and Weed (2010) have all shown that spectating at a major multi-sport event is unlikely to have any demonstrable long term effect on population level sports participation or increases in physical activity.

Figure 1: Multiple potential outcomes of the 2014 Games legacy. Green lines are positive, red lines negative outcomes.

The greater emphasis in both documents, then, is on health and in taking action to improve the poor record of health outcomes both in Glasgow and in Scotland. In both legacy documents, the concept of health is framed most strongly within the context of increased physical activity and sports participation, although there are also substantial links forged between health and involvement (through volunteering) and environmental improvement (through access to green spaces and the promotion of walking and cycling). These contextualisations reveal an implicit understanding that 'health' is a contested and multi-dimensional concept, encompassing as it does physical, social and mental wellbeing, as delineated by the World Health Organisation (Townsend, 1974; Macintyre, 1986). All of the mechanisms for health improvement implied by the legacy documents have been shown to have some impact on health, whether in a tangible or an intangible way (Townsend, et al., 1992; Marmot & Shipley, 1984; Marmot, et al., 1991; Macintyre, 1986; Davey Smith, et al., 1990; Macintyre, 1997; Braveman & Gruskin, 2003; Shaw, et al., 2005; Bambra, et al., 2009); there thus appears to be an implicit 'common sense' reasoning underpinning the legacy documents that giving people access to well-equipped, accessible and affordable sports facilities, encouraging volunteering and other community engagement projects and providing people with the tools to gain employment cannot fail to bring about improvements in physical and mental well-being. The flaw in this reasoning, however, is that it fails to take account of the potential for the majority of jobs created in the wake of the Games are likely to be short term, low-skilled and poorly paid and will potentially leave individuals no better off than they were before (Preuss, 2006; Sterken, 2007; Glasgow City Council., 2009). There was a very real possibility that funding allocated to support the Games would take funding away from existing or planned services unconnected to the event (McCartney et al., 2010).

2.5 Contextualising event legacy: how it relates to health

What neither of the legacy documents focus on, however, is the potential for the legacy to either have an impact (positively or negatively) on health inequalities; surprising given the legacy's positioning within a wider Scottish Government health policy, the stated aim of which is to tackle health inequality (Scottish Government, 2008; Scottish Government, 2010). The 2014 legacy was implicitly based on the social model of health (as posited by Dahlgren and Whitehead and discussed in

Chapter 3), in so far as some consideration was given to the effects of (un)employment and physical environment on health outcomes; but where the social model of health focuses on the causes of – and potential ways to mitigate – health inequalities, the primary focus of the 2014 legacy is on improving mean population health outcomes. The legacy documents are problematic in this respect, in that the implicit 'common sense' reasoning behind them appears to conflate the concepts of *health inequalities reduction* and *population health improvement*; they are not the same and the former does not necessarily flow from the latter. If the health of the population improves across the board, the likelihood is that health inequalities will still persist, and possibly worsen (Krieger, 2008; Krieger, 2011).

Exploring the potential of the 2014 Games to impact negatively on the host population and contribute to a worsening of health inequalities was the preserve of the 2014 Health Impact Assessment (HIA) (Glasgow City Council., 2009). Compiled under the auspices of Glasgow City Council and with input from the Glasgow Centre for Population Health, NHS Greater Glasgow & Clyde, the Medical Research Council (Social and Public Health Sciences Unit) and the University of Glasgow, the HIA takes a much more inequalities-focused approach to assessing the beneficial potential of the 2014 event. Where the Council and Government legacy documents concentrate on the potential for positive health impacts across the whole population and the likelihood of concomitant economic benefits being delivered by the same mechanisms, the HIA focuses exclusively on the differential impacts, both on mean population health and across different sectors of the population and how these impacts might improve – or indeed worsen – the health of deprived sectors of the population.

The HIA is the only one of the three legacy-focused documents to explicitly acknowledge that the *'physical, mental and social well-being'* embedded in the World Health Organisation's definition of health (World Health Organisation, 2012) are affected not just by fitness or activity levels but also by a range of socio-economic factors such as access to adequate housing, (un)employment, education, transport and community ties. Where the other legacy documents are concerned with promoting the event and persuading stakeholders of the benefits which are likely to accrue, the HIA takes a less boosterist look at the particular ways in which

the proposed Games-driven economic, social and health improvement programmes are likely to impact on the real world lives of different sectors of the host population. The document explains – and utilises – the social model of health as posited by Dahlgren and Whitehead (1991), and in doing so the HIA is able to do two things which the legacy documents do not. First, the explication of the social model of health allows the authors to introduce a logical contextual framework within which to understand the concept of health inequalities and the importance of working to reduce them. Second, the authors are able to clearly illustrate the differences between the public health imperative (the reduction of health inequalities) and the legacy imperative (improved population health outcomes). In doing so, the HIA is thus able to suggest ways in which the 2014 legacy planners can – and should – promote inclusivity and guard against alienating the population groups who stand to gain the most from engagement with legacy programmes to improve health, education and social ties.

The HIA, then, although integral to the legacy process does not exist simply to bolster the legacy rhetoric. Rather, it is a critique of the legacy rhetoric, highlighting the domains across which the Games legacy is predicted to operate to impact on health outcomes, suggesting the domains across which the legacy *must* operate to tackle health inequalities and laying the foundations of a framework against which the legacy claims can be evaluated, post-event, to assess which (if any) of the legacy programmes have been successful, for which sectors of the population and under which circumstances. The document concluded that, as **Diagram 2** illustrated, care needed to be taken to ensure that the inclusivity of Games-driven programmes did not inadvertently lead to disproportionate benefits among the more affluent sectors of the Glasgow population. Were this to be the case, health inequalities would worsen despite apparent improvements in population level health outcomes (Glasgow City Council., 2009; Krieger, 2011).

2.6 Critiquing the 2014 Legacy

The HIA is not, however, the only (nor, indeed, is it the most explicit) critique of a major sports event legacy. It bears the stamp of being informed by two comprehensive systematic reviews of the legacy process; Weed and colleagues' (2009) consideration of the evidence base for developing a health legacy specific to

the London 2012 Olympic Games, and McCartney and colleagues' (2010) review of the evidence pertaining to the health and socio-economic impacts of major sports events on host populations worldwide. Both reviews conclude that, while there are some studies that support beneficial impacts derived from major sports events, such evidence is sporadic and generally derived from insufficiently rigorous primary research to be able to support official legacy claims unequivocally. Weed and colleagues contend the possibility that there is a paucity of evidence for beneficial impacts because previous events have not explicitly planned for the collection and analysis of legacy outcome data. They take the position that a lack of evidence for increases in physical activity participation or improved health behaviour choices does not mean that these changes have not taken place. Just as likely as a lack of change is change that has not been captured due to poor evaluation planning (Petticrew et al., 2009; Weed, 2010). Weed's review goes on to suggest that this is because commonly utilised macro-level evaluation strategies – looking for 'success' or 'failure' across an entire host population – are insufficiently sensitive to detect changes in health behaviour choices and physical activity participation levels which are directly attributable to the event itself. Indeed, this bears out Newby's (2003) finding that disaggregating change directly attributable to the 2000 Commonwealth Games in Manchester from that which would have happened anyway if the same regeneration and health improvement strategies had been implemented in the absence of the Games was incredibly difficult. Weed and colleagues suggest that a reliable evaluation of event impacts must be able to separate out the different expected outcomes and must be able to establish a *"baseline (without event) case"* which will allow for a meaningful comparison to be made in the post-event period. Whatever the reason for the dearth of evidence for positive impacts arising from the hosting of major sports events, the fact that this dearth is acknowledged leaves insistent legacy claims of positive impacts resting on insecure foundations.

Highlighting the unsuitability of macro-level evaluation to the capture of nuanced data on the potential impacts of major sports events also illuminates the need for a different type of review, one which is able to ask more nuanced questions of the available primary research. For example, if evidence for population level increases in physical activity is sparse, is there evidence of such increases for particular sectors of the population? If no single mechanism can be identified which brings about population-level change, are there particular mechanisms which operate

independently and simultaneously to encourage particular population groups to adopt healthier lifestyles? And are these mechanisms contingent on any particular aspects of individuals' lives?

2.7 Determining outcomes: the potential of realist synthesis for 2014

The gap in the knowledge base which might be filled by a different type of review is further highlighted by McCartney and colleagues (2010). Their assessment of the evidence available for review as being derived from poorly designed studies lacking both comparison and real-time data and being at high risk of both commissioning and publication bias stands as a clarion call for more comprehensive primary evaluations of the impacts of major sports events, as does their explicit stance that long-term evaluation plans need to be included as an integral part of the planning stages of such events. The overall finding of the review, that the evidence gave no clear indication of either overwhelmingly positive or negative effects on host populations further strengthens the argument for considering the evidence relating to the impacts of major sports events (both positive and negative) within the framework of a different type of review. Non-realist reviews, as exemplified by both Weed et al (2009) and McCartney et al (2010) in their narrative syntheses, are geared towards eliciting whether a particular policy, programme or initiative has succeeded or failed and are less suited to unpicking whether any aspects of a programme have been successful in particular circumstances. These questions are important in the policy context; in order to justify the amount of public expenditure which has gone into the 2014 Games, it is important that policy-makers and legacy planners have a clear idea of which Games-driven initiatives and programmes are likely to be the most successful in achieving the higher legacy outcomes (improved physical and economic fitness for Scotland), for which population groups and in what ways.

Realist synthesis, considered in the previous chapter, offers an alternative approach to investigating the complexities inherent in determining which strands of the Games legacy stand the greatest chance of contributing positively to reductions in health inequalities. Recognising social change as transformational rather than linear, and avoiding the 'success or failure, works or doesn't work' rationale of non-realist reviews, it is anticipated that this realist review will be able to add to

the canon of knowledge about the impact of major sports events on health inequalities. It will do this by unpacking the complex mechanisms of change within the legacy package (McCartney, et al., 2012) and acknowledging the validity of both individual choice and the individual lifeworld as influences on the decision to engage (or not) with these pathways. Using realist synthesis to identify the operational pathways of the principle mechanisms for the potential achievement of reduced health inequalities allows for the exploration of the theories which underpin the promotion of these mechanisms within the Games legacy rhetoric, and for seeking points of confluence within the wider academic literatures and previous, similar, initiatives.

The task of the next chapter will be to illuminate the importance of reduced health inequalities as an outcome of hosting the Games and to begin to identify the mechanisms by means of which this might be achieved.

Chapter 3

Exploring understandings of health inequalities

3.1 Introduction

Building on the description of, and rationale for using, realist review methods in Chapter 1, the previous chapter established the political drivers behind the need for a measurable legacy to be derived from the 2014 Commonwealth Games. The task for this chapter will be to look more closely at the aspiration that the Games should deliver a *"fitter Scotland"* (Scottish Government, 2008, p.vi) to try to understand where the legacy plans fit into the Scottish Government's wider health policy focus on reducing health inequalities (Scottish Government, 2008; 2010). What will be considered here are the differences in outcome between improving health and reducing health inequalities, working towards the identification of mechanisms of change within the legacy plans with the potential to make a meaningful impact on health inequalities. The chapter will then explore the utility of realist techniques for unpacking these mechanisms, building towards the identification of an appropriate review question.

3.2 Exploring the links between the 2014 Games legacy and health

The potential for the Games to influence population health suffused both the Government and the Council legacy documents (Scottish Government, 2008; Glasgow City Council, 2008), framed in the language of reducing Scotland's poor health record by encouraging individual health behaviour change: *"we need to...turn around the situation where around two-thirds of the Scottish adult population are not sufficiently active to protect themselves against serious disease and obesity"* (Scottish Government, 2008, p. 7). From a Public Health perspective, however, the greater contemporary policy concern is in dealing with the impacts of health inequalities, particularly on individuals and communities living in areas of greatest socioeconomic deprivation (Scottish Government, 2008; 2010; Glasgow City Council., 2009; McCartney, 2010). Yet neither of the legacy documents explicitly discussed health inequalities, despite the potential for the event to widen the health inequalities gap (Glasgow City Council., 2009, pp.30-83). In order

to understand why the legacy health focus was fixed on improving health outcomes rather than reducing health inequalities, it is useful to understand the distinction between the two concepts.

The following section will explore the two concepts in greater detail, using the social model of health (Dahlgren & Whitehead, 1991), with reference to Raphael's and Krieger's critiques of this model (Raphael, 2002; Raphael, 2011; Krieger et al., 2010; Krieger, 2011), to illustrate the nuanced differences between reducing health inequalities and improving health outcomes, and to consider why this is important for the 2014 legacy.

3.3 Social determinants of health and the concept of health inequalities

This section will explore the theories underpinning the social model of health and those underpinning the concept of health inequalities. It will then briefly discuss the ways in which these theories have been incorporated into health policy, and the potential links between policy level approaches to tackling health inequalities and the 2014 Games legacy.

3.3.1 Social determinants of health

Figure 2: The social model of health as posited by Dahlgren and Whitehead (1991) Source: www.healthknowledge.org.uk

Glasgow is *"the most deprived and unhealthy city in the UK"* (Shaw, et al., 2005, p.1018), with wide disparities in health outcomes between the most and least

affluent areas of the city (Hanlon, et al., 2006; Gray & Leyland, 2009). Within Glasgow, the East End of the city – where the bulk of the 2014 Games activity was situated – has been shown to be the nexus of socioeconomic deprivation, with the life expectancy of adult males in the area being approximately fourteen years lower than it is for their counterparts living in more affluent parts of the city (McCartney, 2010). Both the City Council and the Scottish Government profess a desire to see this disparity significantly reduced, resulting in people living *"longer, healthier lives"* (Scottish Government, 2008, p.2). In order to understand how the Games Legacy, with its over-arching focus on 'fitness' might fit into an overall strategy for the reduction of health outcome disparities, it is useful to look at the factors which create or contribute to these disparities in the first place.

Dahlgren and Whitehead (1991) have argued that the most deprived in any society bear the brunt of ill health and premature mortality. **Figure 2** (above) illustrates what they have termed the 'social model of health', which describes the ways in which socioeconomic, cultural, environmental and individual lifestyle factors interact with each other and with more fixed elements such as age, sex and heredity (for example, a genetic predisposition to a particular disease or diseases) to influence individual and population level health outcomes. The model illustrates the ways in which factors across a number of domains can interact to influence health outcomes, illustrating how each facet of an individual's life is influenced by the surrounding context. Lifestyle factors, for example, must be viewed through the lens of an individual's social and community networks, which in turn must be viewed through the lens of their general socio-economic, cultural and environmental factors, such as unemployment, housing and access to health care services (ibid, p11). Neighbourhood social problems such as a high crime rate or a high proportion of drug misusers within the community, Dahlgren and Whitehead contend, have as much potential to precipitate negative health outcomes as dilapidated and unsuitable housing stock, a facet of health inequalities which is also well illustrated by Krieger (2008) and Raphael (2011). Deprived neighbourhoods make healthy lifestyle choices problematic for their residents; there are likely to be difficulties encountered in accessing amenities and services, and the physical layout of some communities may be difficult for the elderly or those with young children to negotiate, thus normalising social isolation – which in turn contributes to poor physical and mental health outcomes (Dahlgren &

Whitehead, 2006, p.28; Krieger, 2008; Raphael, 2011). The model also illustrates the inter-connectedness of factors such as food production, living and working environments, access to health services, housing and educational attainment, and consequently the knock on effects of resource poverty in any one of these areas. For example, people who have drifted away from formal education early are more likely to end up in unskilled, poorly paid employment where they have little control over their day to day conditions of work; such individuals are also more likely to experience some form of work related injury or illness, shift work and monotonous jobs where it is not always possible to take voluntary breaks (Dahlgren & Whitehead, 1991).

Similarly, people living in poor quality housing are likely to experience poor access to community resources such as good quality food shops or health services, which in turn impacts on their health outcomes in the longer term (ibid). The social model of health also contends that this contributes to the prevalence of unwise health behaviour choices, arguing that in many workplaces, going for a cigarette break may be the only socially sanctioned mechanism for individuals to take a break from monotonous and / or strenuous tasks (Marmot et al., 2008). Unemployment, too, is an omni-present spectre among those on low incomes whose jobs may not be subject to secure, permanent contractual arrangements contributing to stress and mental health problems among disadvantaged groups who have the least resources available to them to combat negative health effects (Marmot, 2005; Marmot et al., 2008). The central premise of the model is that, with the exception of what Dahlgren and Whitehead term 'fixed' elements (age, sex, heredity), the remaining elements such as housing, neighbourhood characteristics, (un)employment and lifestyle choices such as smoking or poor diet, are determined socially; that is, attitudes towards them and ideas about how they can be improved are heavily influenced by the prevailing social context in which they exist (Dahlgren & Whitehead, 1991; Hunter & Wilson, 2012; Marmot, et al., 2008; Whitehead, et al., 2001).

Dahlgren and Whitehead's model, then, is an excellent illustration of the social construction of health and the ways in which different socio-structural factors impact on health outcomes. What it does *not* illustrate is the social patterning underlying this construction; in other words, the ways in which individuals' socio-

economic status determines their access to the resources illustrated in Dahlgren and Whitehead's model (such as housing or education). Marmot (2005, p.1101) has termed these underlying factors *"the causes of the causes"*, and it is these factors and the health inequalities they propagate which will be discussed in the following section.

3.3.2 Health inequalities

The social gradient of poor health outcomes, improving across and between socio-economic strata as individuals become more affluent, is now widely recognised (Townsend, et al., 1992; Dahlgren & Whitehead, 1991; Whitehead, et al., 2001; Lynch, et al., 1997; Marmot, 2005; Marmot, et al., 2008). Indeed, many of the determinants of both poor health outcomes and health inequalities are situated within the same policy domains – for example, housing, education, employment, welfare – and the distinctions between the two concepts can easily become blurred (Krieger, 2008a), leading to the erroneous conclusion that by taking action to improve health outcomes, health inequalities will automatically be reduced. It is important, therefore, to understand how health inequalities are defined in relation to poor health outcomes, in order to be able to separate out the different causal processes which contribute to each concept and how these processes relate and interact.

Health inequalities are generally understood to be *"differences in health that are unnecessary, avoidable, unfair and unjust"* (Whitehead, 1992 cited in Braveman & Gruskin, 2003, Marmot 2005 and Marmot et al, 2008); it is the emphasis on injustice and the ways in which this injustice is socially contextualised which allows health inequalities to be conceptualised differently from poor health outcomes. The latter have been shown to be determined socially in such a way that they operate across all socioeconomic levels; those at the lower end of more affluent socioeconomic categories, for example, while undoubtedly benefiting from better health outcomes than their counterparts in the least affluent socioeconomic categories, will still fare worse than their contemporaries at the higher end of their own social class. If this disparity could be shown unequivocally to be caused by some fixed factor (such as age, sex or heredity to use Dahlgren and Whitehead's fixed categories) it could be argued that it did not represent an inequality in the

spirit of Whitehead's definition because it would not be possible to ameliorate the underlying causes of the disparity. Since the 1980 Black Report (Townsend, et al., 1992), however, it has been consistently shown that disparities in health outcomes across and between socioeconomic categories are not fixed and immutable; they are driven by factors which are, given sufficient political will to do so, open to change and improvement. At the most basic level, an individual can be considered to be affected by health inequalities if he or she can expect worse health outcomes as a direct result of factors beyond his or her direct control which are, nevertheless, amenable to change.

3.3.3 Theories underpinning health inequalities

"...much of the burden of illness leading to appalling premature loss of life arises because of the immediate and structural conditions in which people are born, grow, live, work and age" (Marmot, et al., 2008, p. 1661)

The Black Report posited four broad categories of factors which might contribute to the creation of health inequalities: artefactual, health selection, behavioural / cultural and social / structural. The theory of artefactuality contends that apparent health inequalities are artificial representations of what is occurring in reality. It has been suggested, for example, that changes to the ways in which social and occupational class are coded by the Registrars General might have contributed to apparent health inequalities being made manifest over time where, in fact, none exist (ibid). Artefactuality, has, however, now been largely discredited as a causal factor for health inequalities (indeed, the Black Report suggested it was an unlikely explanation) as changes in coding to allow for alterations in Registrar General classification have failed to eradicate persistent differences in health outcomes for individuals in lower occupational and social classes. The same gradient of inequality is found almost regardless of individual or area measures of income and / or deprivation, and over time.

The second category of potential explanations for health inequalities, the Black Report suggests, is health selection. The central premise of this theory is that of reverse causation; that illness 'causes' social or occupational class by selecting individuals out into a lower social or occupational class when illness or disability

forces them into a lower paid job (or unemployment) thus reducing household income and, potentially, precipitating a move from a more affluent to a poorer area where the cost of housing is cheaper (Townsend, et al., 1992; Dahlgren & Whitehead, 1991; Whitehead, et al., 2001). The health selection premise has been investigated using longitudinal study designs to track the effects of social class mobility (upwards as well as downwards) on health over time. While health selection has been shown to be a valid causal theory for a small proportion of the population, the numbers affected are not sufficient for it to be considered a substantial causal mechanism for health inequalities (Marmot & Shipley, 1984; Marmot, et al., 1991; Chandola, et al., 2003).

The third category highlighted by the Black Report is that of behavioural and cultural factors which, the report suggests, are agentive; that is, there is an element of personal choice in engaging in potentially harmful health behaviours such as smoking or drug misuse, and that having once chosen to engage in such behaviours, individuals can also choose to change them. Behavioural factors are viewed as being independent of social position, and the logic behind the theory is that poorer people could attain the same health outcomes as their more affluent counterparts if they chose to modify their health behaviours – for example, by stopping smoking, eating more healthily and engaging in some form of regular physical activity in their leisure time (Townsend, et al., 1992). Cultural factors, within this theory, are conceptualised as society-wide extensions of behavioural factors; the theory holds that in poorer communities, what is held to be socially acceptable is determined by choice rather than income and that damaging health behaviours such as smoking become normalised within the wider cultural sphere of such communities. Targeting behavioural and cultural factors, it has been contended, is popular at policy level because damaging health behaviours are highly visible; locating the responsibility for change at the individual level focuses the debate on individual responsibility for the attainment and maintenance of better health outcomes and away from the over-arching need to consider the factors which underpin and constrain individual health choices (Szreter & Woolcock, 2004a; Szreter & Woolcock, 2004b; Shaw, et al., 2005; Bambra, et al., 2009; Bambra, 2010).

The fourth category of factors identified by the Black Report is that of socio-structural elements, defined as factors which *"[emphasize] the role of economic and associated socio-structural factors in the distribution of health and wellbeing"* (Townsend, et al., 1992, p. 106). These have been shown to underpin the individual health behaviour choices targeted for change at policy level (Shaw, et al., 2005; Bambra, et al., 2009; Bambra, 2010). Socio-structural factors which influence poor health outcomes and premature mortality include:

- the type of housing (in terms of condition, tenure and security) made available to individuals and families.
- the types of employment open to them (what type of work, security of contract and any associated benefits such as sick pay, and bearing in mind that unemployment, too, has been shown to have a negative effect on individual and household health outcomes).
- whether access to amenities (such as shops, libraries, leisure centres and health centres) is limited and by what.
- whether access to education is limited beyond secondary level.
- whether people have access to appropriate and affordable transport.
- income and overall wealth and the physical characteristics of the neighbourhoods in which individuals and families live.
- government policies and wider political climates.

Sources: Marmot & Shipley, 1984; Marmot, et al., 1991; Macintyre, 1986; Macintyre, 1997; Davey Smith, et al., 1990; Lynch, et al., 1997; Dahlgren & Whitehead, 1991; Braveman & Gruskin, 2003; Shaw, et al., 2005; Marmot, et al., 2008.

These are all factors which require political will to drive, and achieve, any meaningful long term change in the social distribution of health (Shaw, et al., 2005; Marmot, 2005; Marmot, et al., 2008; Bambra, et al., 2009; Bambra, 2010)., illustrating the point made by Marmot and colleagues (2008) that *"health and health equity might not be the aim of all social policies, but they will be a fundamental result"* (ibid, p.1661). Marmot and colleagues contend that the principal causes of health inequalities are the inequitable distribution through societies of power, wealth, goods and services, a position shared by Whitehead,

Dahlgren and Gilson (2001), Krieger (2008a; 2008b; 2011), Raphael (2005; 2011) and Hunter and Wilson (2012). This line of argument widens the focus of tackling health inequalities from a narrow centring on health policy to take in the entire spectrum of the policy agenda. Whitehead, Dahlgren and Wilson (2001), Marmot and colleagues (2008) and Raphael (2010; 2011) illustrate this point with the example of economic growth. They contend that the application of stimuli to promote economic growth is a politically driven process, crucially important if governments are to have the resources to improve the lives of the people under their jurisdictions, but that economic growth also has the potential to exacerbate health inequalities where there is an absence of social policy to ensure that the benefits of growth are felt by everyone (Marmot, et al., 2008). In the absence of such policies, the benefits of economic growth do not accrue equitably to all sectors of the population but are skewed in favour of those individuals and communities with access to the resources to grasp them (Whitehead, et al., 2001; Krieger, 2011).

Hunter and Wilson (2012) posit that in order to tackle health inequalities properly, this 'knock on' effect from other policy domains needs to be harnessed, and that this can best be done by working to embed health equity into all public policies (p4881). They voice the concern (shared by Whitehead, Dahlgren and Gilson, and by Krieger) that the tendency to conflate tackling health inequalities with improving health outcomes masks the fact that engagement with health improvement initiatives is, itself, socially constrained (Hunter & Wilson, 2012). The impacts of social policies differ for different population groups depending on their socio-economic position (Whitehead, et al., 2001); effectively, this means that apparent overall population health gains can hide the fact that health outcomes have only improved for those with the resources and confidence to engage with health improvement advice in the first place.

3.3.4 Health policy approaches to health inequalities

In terms of health inequalities, then, a model is needed which incorporates the political and societal factors downplayed in the Dahlgren and Whitehead model (1991); such a model is suggested by Krieger (2008b) and is reproduced here in **Figure 3**. Clearly, Krieger's model is considerably more complicated to understand

than that posited by Dahlgren and Whitehead; where the latter were concerned to show the effects of social position and social conditions on the health of the individual, Krieger attempts to broaden this out in two directions. The diagram shows the potential impacts on social position and social conditions by political decisions taken at every level from the individual to the global and how these impacts affect the health of individuals across the life course from conception to death. It also shows how individual health outcomes and political decision making interact to influence overall population health.

Despite a considerable body of research evidence showing the greater influence of socio-structural factors than any others in creating and perpetuating health inequalities, health policy documents such as *Choosing Health* (cited in Shaw et al,, 2005 and applicable to England and Wales) and *Better Health Better Care* (Scottish Executive, 2007) and *Equally Well*[10] (Scottish Government, 2008) have continued to locate the responsibility for improving health outcomes, at least in practice if not in rhetoric, at the individual level. This is where Krieger's model is arguably of greater utility to policy makers than that of Dahlgren and Whitehead, illustrating how the global context influences the community and the individual. The wider historical contexts of inequality into which an individual is born (for example, racial, class-based or gender-based) impact on the health of the individual, the wider household and the surrounding community across the whole lifecourse, with concomitant relationships across and between different types of inequality. These inequalities are, in turn, subject to the influences of background political, economic and societal structures. Krieger (2008a; 2008b; 2011) argues that it is the way in which these influences are embodied and contextualised within any given society that gives rise to health inequalities, and that in order to build coherent policies to tackle them, policy makers and researchers must first stop conflating reducing health inequalities with improving population health outcomes. Only once the essential differences between the two have been understood can they then be tackled by policies – not necessarily having a primary health focus – aimed at realigning and redistributing the balance of power and the distribution of wealth within societies.

Raphael reinforces these arguments, stressing the importance of dealing effectively with *economic* inequalities in order to be able to successfully diminish *health* inequalities. He identifies four[11] principal discourses of health inequalities (2010) which underpin the ways in which health inequalities, and the social dimensions of health (SDH) which contribute to them, are understood. The first, and one of the most prevalent in health policy thinking (Scottish Executive, 1993; Scottish Government, 2005; 2007), is the focus on the lifestyle choices of the less affluent (for example, smoking, alcohol and drug (mis)use, diet and exercise) and how they impact negatively on health.

Despite a wealth of evidence which suggests that these choices are contingent on individuals' social situation, such as the area in which they live or their access to employment, good housing, education health care (Townsend et al., 1992; Dahlgren & Whitehead, 2006; Bambra et al., 2009; Krieger, 2011), initiatives aimed at tackling the poor health outcomes of the less well off in Scotland are still predominantly aimed at persuading them to smoke less, eat more healthily, drink less and exercise more; the more social-structural focus of the most recent update to health policy notwithstanding (Scottish Government, 2008; 2010).

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[11] In a later paper (2011), Raphael expands his tally of health inequalities discourses to seven. The extra three categories are largely derived from a sub-division of the initial four discourses; this chapter will therefore use the original four discourses to explain Raphael's theory.

ECOSOCIAL THEORY:
LEVELS, PATHWAYS & POWER

-- Embodiment
-- Pathways of embodiment
-- Cumulative interplay of exposure, susceptibility & resistance
-- Accountability & agency

POLITICAL ECONOMY AND ECOLOGY

racial/ethnic inequality

class inequality

Population distribution of health

gender inequality

historical context + generation

Lifecourse:

in utero   infancy   childhood   adulthood

Levels: societal & ecosystem

Processes: production, exchange, consumptions, reproduction

global
national
regional
area or group
household
individual

Note. To explain current and changing population distributions of disease, including health inequities, and who and what is accountable for the societal patterning of health, it is necessary to consider causal pathways operating at multiple levels and spatiotemporal scales, in historical context and as shaped by the societal power relations, material conditions, and social and biological processes inherent in the political economy and ecology of the populations being analyzed. The embodied consequences of societal and ecologic context are what manifest as population distributions of and inequities in health, disease, and well-being.
Source. See references 1,17–21.

FIGURE 1—A heuristic diagram for guiding ecosocial analyses of disease distribution, population health, and health inequities.

Figure 3: Krieger's theory of the production of health inequalities.
Reproduced from Krieger, N (2008) 'Proximal, distal and the politics of causation: what's level got to do with it?' *American Journal of Public Health* 98;2:221-230

The second discourse identified by Raphael is that of poverty, which involves a consideration of the types of deprivation experienced by the less affluent and focuses on the provision of initiatives *"specifically directed to ameliorating the effects of poverty, as well as identifying, and acting upon, the structural causes of poverty"* (Raphael, 2010, p.200). The disjunction identified here, however, is that despite the explicit acknowledgement by many in the policy community of the negative impacts on health caused by factors outwith the control of the individual (as evidenced by the third health inequalities discourse, that of the socio-economic gradient of health (Townsend et al., 1992; Marmot, 2005; Raphael, 2010)), social programmes aimed at tackling health inequalities and poor health outcomes are nonetheless consistently aimed at changing the behaviour of the individual. Raphael argues, amply supported by the weight of the available evidence (Townsend et al., 1992; 2008a; 2008b; 2010; Raphael, 2011; Marmot, 2005; Marmot et al., 2008) that it is the fourth discourse, that of economic inequality and how it might best be resolved, that holds the key to taking decisive action on the issue of health inequalities.

These discourses are further refined in Raphael's later work (2011), suggesting that a concern with individual health behaviours can be further subdivided into a

consideration of *who* is indulging in risky behaviours, what social groups these individuals are part of and *"what material living conditions shape [their] health"* (ibid, p.226) – in realist terms *what are their background circumstances.* He further suggests that the consideration of economic inequality needs to be further investigated in terms of the influence of economic and political structures, and the influence of those who profit most from the status quo – in realist terms, the *mechanisms* which explain the operation of health inequalities. Raphael's over-riding concern is with the potentially mitigating effects of income and wealth re-distribution, an action which can only be driven at government policy level. He crystallises the existing argument (Marmot, 2005; Dahlgren & Whitehead, 2006; Marmot et al., 2008; Bambra et al., 2009; Raphael, 2010; 2011) that only by judicious use of progressive taxation policies to redistribute wealth which might, for example, allow the less affluent to retain more of their wages, depend less on welfare benefits and be able to participate more fully in social life, will any tangible improvements be seen in the health inequality divide. This has been openly and explicitly acknowledged at policy level (Scottish Government, 2008), yet as Raphael illustrates, very little has actually been done to shift the focus away from the individual and towards changing social and political structures[12]. This conceptualisation of the root causes of health inequalities, then, illustrates the myriad ways in which these causes are embedded within societies and the huge policy challenges inherent in tackling them, not least of which is bringing about a change in thinking which will allow a more equitable distribution of wealth throughout societies. Krieger echoes backwards and forwards through the literature, with her arguments finding support from, for example, Whitehead, Dahlgren and Wilson (2001), Marmot, writing both alone and with colleagues (2005; Marmot, et al., 2008), and Hunter and Wilson (2012) also calling for a change in the policy making process so that *all* public policy, not just that specifically concerned with health, is assessed for its potential health equity impacts and adjusted accordingly.

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[12] It should be noted that Raphael has not, in common with Krieger, Dahlgren & Whitehead and the other authorities cited here, commented specifically on the Scottish situation. The lack of action to change social and political structures, however, is not limited to the Scottish Government. The UK, American, Canadian and other governments of developed nations have similarly done very little at policy to move the focus away from the individual.

From the Black Report in the 1980s, through the Acheson Report in the 1990s to more recent commentators such as Marmot, Bambra, Krieger and Raphael, the case has consistently been made for plans to redistribute income and wealth in a meaningful way to form the back bone of health policies focused on the reduction of health inequalities, yet there is little evidence to suggest that the political will has been found to engage with this type of legislation (Braveman & Gruskin, 2003; Shaw, et al., 2005). Scottish health policy, for example, appears conflicted about which approach to take. While *Equally Well* (Scottish Government, 2008) looks, in the long term, to a multi-agency, multi-dimensional approach to health inequalities reduction and acknowledges the impact of socio-structural factors on morbidity and mortality, there is no explicit acknowledgement of the need for redistributive policies relating to income and wealth; in the short term, as outlined in *Better Health, Better Care* (Scottish Government, 2007) the onus is placed firmly on the individual to take responsibility for his or her own personal health outcomes. The *Equally Well* task force explicitly underlines, for example, the *Better Health, Better Care* recommendation that NHS Scotland should *"[a]ddress the risks for individuals, including their health related behaviours such as smoking, which is a major cause of health inequalities"* (Scottish Government, 2008, p.42); a statement which both conflates reducing health inequalities with improving health, and fails to acknowledge the wider, social causes of health inequalities as described by Dahlgren and Whitehead, Krieger, and Raphael. The report also advocates the promotion of anticipatory care measures, specifically the *Keep Well* initiative, as a means of tackling health inequalities by reducing deprived individuals' lifetime risk of diabetes and cardiovascular disease; again, health improvement is conflated with health inequalities reduction, and responsibilty for the former is placed on the shoulders of the individual (albeit with health service support for lifestyle changes).

What implications does this have for the potential impact of the 2014 Commonwealth Games on the health, and health inequalities, experienced by the people of Scotland? The following sections will consider the place occupied by the 2014 legacy within the wider health policy arena and which aspects of the legacy might operate as mechanisms of change across policy domains. Finally, one particular mechanism which is amenable to investigation using realist techniques will be selected as the principal subject of the realist review.

3.4 The 2014 Games Legacy and health inequalities

The 2014 legacy documents were clear that improved health for the population of Scotland, particularly in Glasgow, was a key outcome against which the long term success of the Games legacy would be measured. The difficulty inherent in this aspiration is that the focus on 'across-the-board' health improvement takes no account of the evidence that efforts to improve health outcomes at macro-level can actually increase health inequalities, because the health of the most affluent is likely to improve at a faster rate than that of their poorer counterparts in response to agency-dependent health improvement initiatives (Macintyre, 2007). The legacy documents also appear to contradict the Scottish Government's long term health policy, as outlined in Equally Well (Scottish Government, 2008), where the socio-structural determinants of health and health outcomes were explicitly acknowledged in the context of a long term strategy to tackle them across policy domains; that said, the legacy health aspirations do appear to dovetail with the short to medium term health policy agenda (Scottish Executive, 1993; Scottish Government, 2007) of encouraging people to take more responsibility for their own health by minimising their participation in risky health behaviours such as smoking.

A Games Legacy for Glasgow (Glasgow City Council, 2008) and *A Games Legacy for Scotland* (Scottish Government, 2008), however, are first and foremost publicity documents for a major sporting event rather than *bona fide* statements of policy intent. Their primary objective is to convince the people of Glasgow and of Scotland that bidding for the event was a worthwhile use of public resources which will ultimately benefit both city and country, with the potential to leave a lasting legacy for future generations.   The definition of a strategy to maximise the benefits accrued in the wake of the Games is the province of documents such as the Health Impact Assessment (Glasgow City Council, 2007), which has a specific remit to consider how the Games are likely to impact on the health issues facing both Glasgow and Scotland. In the wider policy context, social determinants of poor health and the ways to mitigate them represent an important pillar of the health agenda (Scottish Government, 2008; Dahlgren & Whitehead, 1991; Townsend, et al., 1992; Hunter & Wilson, 2012). While this is not explicitly represented in the legacy documents, their focus on improving Scotland's poor health record and higher goal of a fitter, healthier population in the wake of the

2014 Games mean that the legacy needs to be considered in terms of how it fits into the complex system of the wider health policy context – a complexity which is evident in the difference in focus between *Better Health, Better Care* (Scottish Government, 2007), which concentrates on encouraging individual health behaviour change and *Equally Well* (Scottish Government, 2008) which delineates a strategy to tackle the wider socio-economic determinants of health. It thus becomes important to scratch the surface of the legacy claims about health benefits in order to consider the potential impacts (whether positive or negative) of the legacy plans on health inequalities.

3.5 Narrowing the focus: pathways to change

How, then, might the 2014 Games make a positive impact on Scotland's health, whether in terms of improving outcomes or reducing inequalities? McCartney, Hanlon and Bond (2012) defined six critical pathways embedded within the 2014 legacy plans which have the potential to bring about positive health impacts:

1. Economic Growth
   The pathway to economic growth is underpinned by the theory that hosting the event will drive increases in tourism, inward investment and trade. McCartney and colleagues suggest that this pathway has the potential to be successful only if sufficient economic growth is generated to exceed the returns which would have been realised if the money invested in the Games had been spent on other civic and social projects. In addition, for health inequalities to be directly affected, the extra wealth created would need to be re-distributed across the population, proportionate to need.
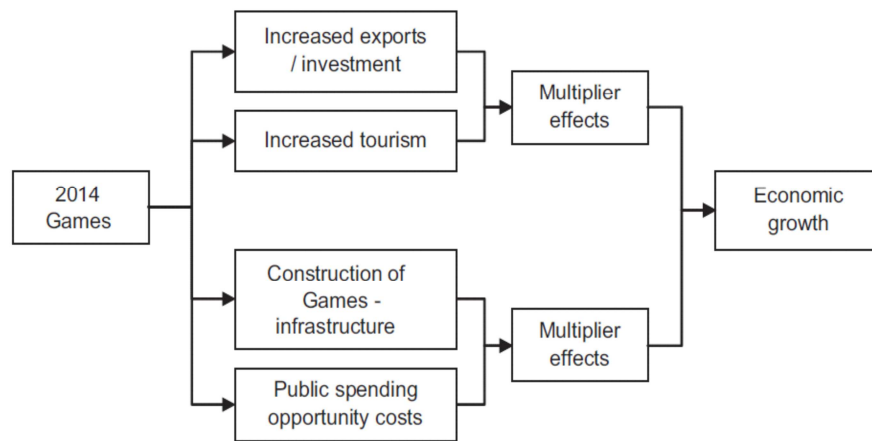
Figure 4: The pathway from the Games to economic growth. Reproduced by kind permission of the author (McCartney et al., 2012)

2. <u>Increased sports participation</u>

The theory here is that the sense of festival engendered by the event, combined with the opportunity to watch world class athletes compete, will encourage people to become more involved in physical activities and sport (Weed et al., 2009; McCartney et al., 2012). The authors point out, however, that Weed and colleagues (2009) have already shown that these effects are likely to be limited and contingent on support for the event at a local level, the extent to which it is embedded in the community and the diversity of physical activities which are available to people (the festival effect) (ibid; McCartney et al., 2012).
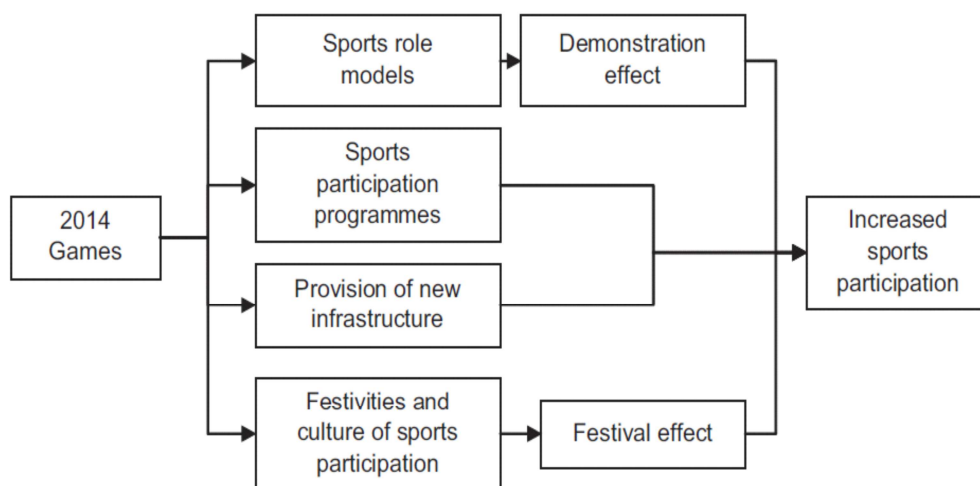
Figure 5: the potential links between the Games and physical activity. Reproduced by kind permission of the author (McCartney et al., 2012)

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3. Increased civic pride and sense of identity

Despite the lack of formal evidence for this pathway to better health, McCartney and colleagues include it as a theme which was consistently identified by members of the public consulted as part of the Health Impact Assessment (Glasgow City Council, 2007) community engagement exercise. Although the Games provides Glasgow with an opportunity to re-brand itself, such a strategy is unlikely to have much effect on health unless pursued aggressively at policy level.
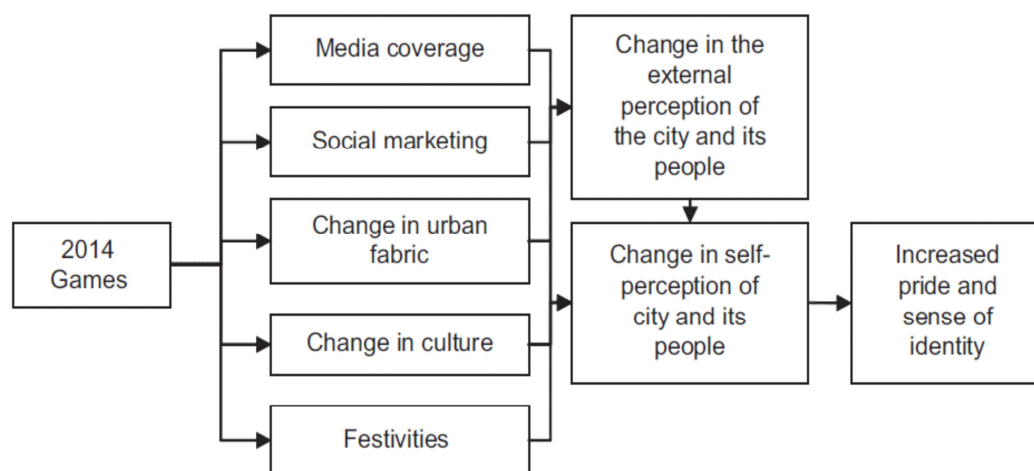
Figure 6: the pathway from the Games to greater civic pride. Reproduced by kind permission of the author (McCartney et al., 2012)

4. Volunteering experience

In general, volunteering has been shown to be beneficial to both the health of volunteers and the health of those on the receiving end of volunteer activity (Newman et al., 1985; van Willigen, 2000; Wilson, 2000; Fried et al., 2004). Given that around 15,000 volunteers were required over the course of the Games, it would seem plausible to suggest that Games-driven volunteer programmes may have lead to a variety of health benefits for the wider community. Based on outcome studies of the varied experiences of 2002 Commonwealth Games volunteers in Manchester, however, McCartney and colleagues conclude that there is a dearth of evidence to suggest that long-term positive health benefits are either feasible or likely as a result of 2014 volunteering; any benefits which do accrue are likely to be contingent on a variety of factors such as the type of volunteering, how volunteers are

utilised and treated or whether Games-driven volunteer activity gives people the chance to grow their social networks and develop new skills.

McCartney's review, however, looked only at the potential for the Games to succeed or fail in bringing about long term health benefits and /or reducing health inequalities. It is anticipated that the current review will be able to add more detail to his conclusions, by considering which, if any, aspects of the Games legacy will bring about positive change, for which sectors of the population and under what circumstances.
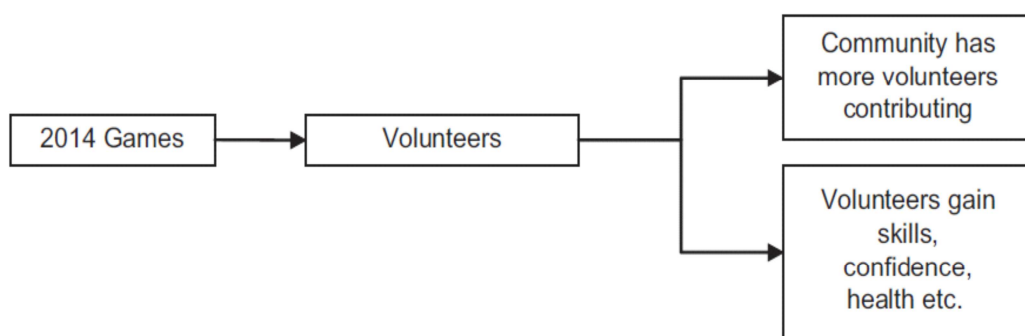
Figure 7: the pathway from the Games to volunteering. Reproduced by kind permission of the author (McCartney et al., 2012)

5. Improved environment

   McCartney and colleagues contend that there is an improved, though not uncontested, evidence base for the potentially positive health impacts of an improved living environment. They note, however, that it is unclear how an event such as the Commonwealth Games might contribute; specifically, that other than the construction of the Athletes' Village and a new cycling venue in the East End of Glasgow, very little regeneration is planned as a direct result of the event. The success of this pathway will be contingent on well-designed, affordable facilities (such as housing) being made available to local people, but there are concerns that the eventual result will be the gentrification (ie displacement of local residents) of a currently run down area rather than tangible benefits for existing local residents.
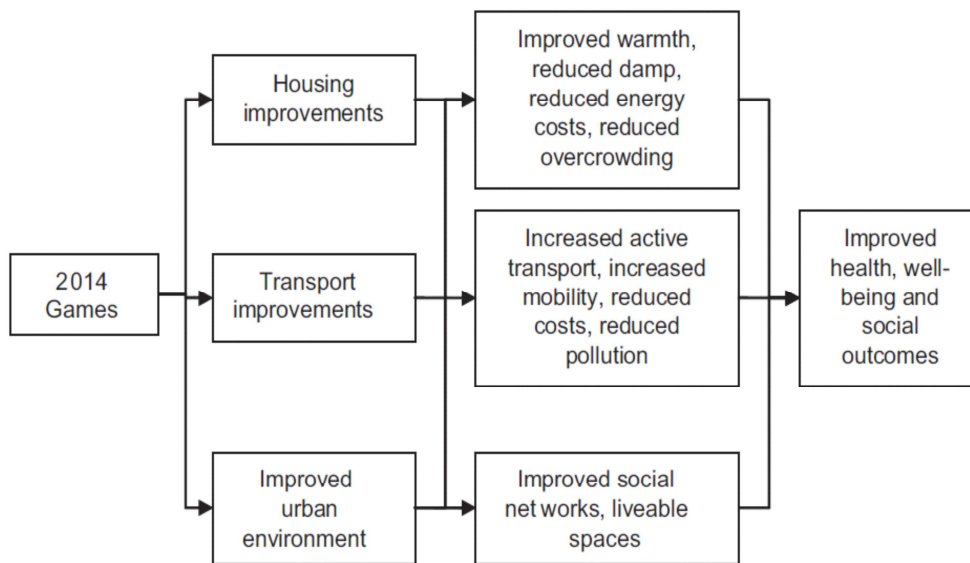
Figure 8: the pathway from the Games to an improved environment .
Reproduced by kind permission of the author (McCartney et al., 2012)

6. Legacy programmes

Not specific to any particular legacy programme, this pathway provides a
general consideration of the criteria legacy programmes will need to satisfy
if they are to have significant impacts on health. McCartney and colleagues
suggest that any such programmes will either have to *"be effective in their
own right, or they must be effective in the context of a Games host city"*
(McCartney et al., 2013, p.34). While there is some evidence for the positive
impacts of, for example, cultural programmes, the principal limiting factor
for all legacy programmes is that they are only likely to affect those who
consciously participate in them, meaning that *"the prospect of generating a
whole population impact is likely to be limited"* (ibid) and rendering any
meaningful impact on health inequalities even less likely.

Figure 9: an exemplar pathway of a Games legacy programme. Reproduced by kind permission of the author (McCartney et al., 2012).

In identifying the six pathways to change within the legacy documents, McCartney and colleagues (McCartney et al., 2013) also identify a paucity of evidence to support the legacy claims that these pathways will inevitably lead to the attainment of the legacy outcomes in the post-event period. The caveat here is that the sparse evidence to which McCartney and colleagues refer has been reviewed and synthesised using non-realist techniques, allowing the reviewers to consider only whether Outcome Y was achieved as a direct result of Intervention X. The paper considers the likelihood that increased sports participation would result from hosting the 2014 Games While Weed and colleagues (Weed et al., 2009) *were* able to say that physical activity might increase in the context of a major sports event if the public were encouraged to become more physically active as part of the festival (for example, women's 10k events) rather than through watching elite athletes competing, they *were* not able to show (partly due to the paucity of evidence) that London hostiing the 2012 Olympic Games was likely to lead to increased physical activity and / or sports participation at the population level. The specific contexts within which these pathways to change occur, however, are not surfaced or explored in McCartney's review but in a follow up paper (McCartney et al., 2012) which attempts to address the limited unpacking of mechanisms within the original review. This subsequent unpacking, however, is also limited in its ability to address the pathways as complex systems operating within the complex systems of sports event legacies (and the wider policy context) given that it relies heavily on the same theoretical literature as the earlier systematic review. Where the realist approach differs is that these wider contexts are acknowledged; rather than considering simply whether (in general terms) 'hosting the Games = better health', the realist approach to evidence synthesis considers which aspects

of hosting the Games might result in better health for which population groups, and under which particular conditions this is likely to happen.
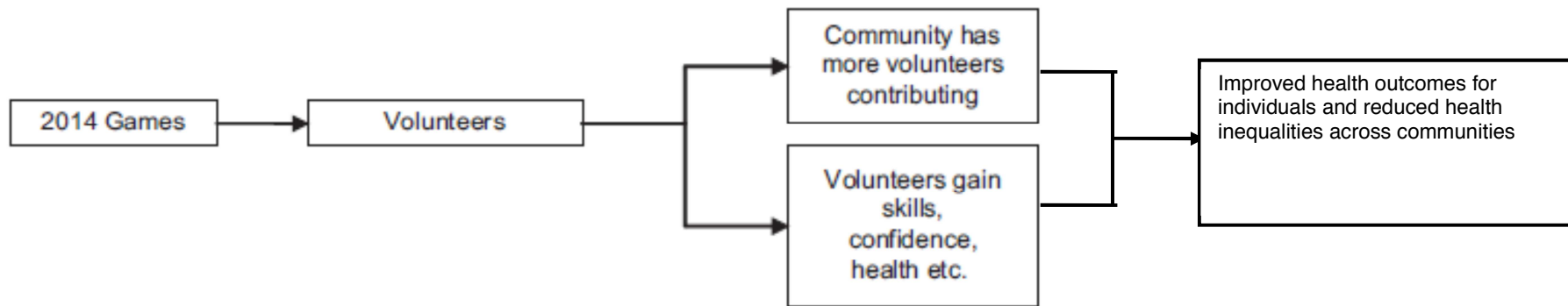
It would not have been possible with the time available, however, to undertake realist reviews of all the potential pathways to improved health outcomes and / or reduced health inequalities contained within the 2014 legacy documents. Furthermore, of the six pathways identified by McCartney and colleagues, volunteering participation presented as an interesting, live, policy challenge in so far as there is something of a gap in the knowledge base around which aspects of volunteering are most likely to operate to lever change, for whom and under what circumstances; yet volunteers were being recruited well in advance of the event in order to allow maximum time for selection and training. The volunteering pathway shows that there are two potential routes to success: at the individual level, where people gain specific skills and experiences as a result of volunteering which will help them to make changes in their every day lives that might contribute to better health outcomes and at the community level, where entire communities benefit at some level from greater citizen participation in volunteer programmes. A gap still existed in the knowledge base, however, around the specific mechanisms within volunteering which are likely to provide the impetus for mass participation and thus drive change and improvement at both individual and community level. There was also a gap surrounding the ways in which participation in Games-driven volunteering might influence the structural rather than the behavioural determinants of health. There was thus an opportunity to contribute learning directly to the policy process to maximise the potential for legacy-driven volunteering initiatives to be targeted where they would have the greatest likelihood of delivering results.

For politicians and policy makers, encouraging participation in volunteering represents a relatively cheap way to encourage better health; but 'for whom?' The expectation of the Games legacy documents was that young people participating in voluntanteering would gain the skills and confidence necessary to enter the labour market either as paid employees or embryonic business people (Glasgow City Council, 2008; Scottish Government, 2008); volunteering was portrayed as an ideal way for individuals to improve their employability by gaining new skills, confidence and work experience. This is illustrated in **Figure 10** which depicts the legacy view

of the outcome of Games-driven volunteering, overlaid with the critical pathway for volunteering identified by McCartney and colleagues (2013). Given the demonstrable links between (un)employment and health (Townsend, et al., 1992; Dahlgren & Whitehead, 1991; Krieger, 2011), the tenor of the legacy documents suggested that a newly skilled, confident workforce would gain the increased sense of self worth and the fiscal ability to sustain the healthier lifestyle necessary for the improvement of their long term health outcomes (Glasgow City Council, 2008; Scottish Government, 2008). This theory is further developed, as discussed above, by McCartney, Hanlon and Bond (2013), who identified volunteering as a potential *"direct effect"* (2013, p. 5) of the Games, counselling that any benefits accrued to individuals and communities as a result of participation in volunteering activities would be difficult to attribute to the Games alone. Given that both the city council and government intended to utilise existing voluntary organisations to further the legacy plans (for example, using the existing volunteer resource of the Glasgow Volunteer Centre), it is possible that fluctuations in volunteer numbers would occur anyway, whether or not Glasgow hosted the 2014 event. What is of interest, is *how* volunteering impacts on the individual or on deprived communities to bring about improvements in health and wellbeing (both physical and mental) and how this fits into the complex policy goal of reducing health inequalities.

The body of literature around volunteering is vast, and will be considered in depth in **Chapter 4**; a brief overview, however, suggests that there are a myriad of mechanisms of volunteering which might be operating in various settings to bring about improvements in volunteers' physical and mental wellbeing. These include concepts such as social involvement and the ability to make a positive contribution to the community, providing a sense of life structure and life satisfaction, education, the creation of human capital and the opportunity (and ability) to adapt to changing life circumstances (Wilson, 2000; Luoh & Herzog, 2002; Morrow-Howell, et al., 2003; Matsuba, et al., 2007; Narushima, 2005).

Figure 10: potential impacts of Games volunteering.

Volunteering pathway adapted by kind permission of the author, McCartney et al., 2013.

The depiction of volunteering in the 2014 legacy documents suggest that many of these mechanisms would be operational within the context of Games-driven volunteer initiatives. It also fed into the move, at policy level, towards greater integration with, and reliance on, the voluntary sector in the provision of public services (Danson & Whittam, 2011), in line with the Westminster government's conceptualisation of the 'Big Society' (Cameron, 2009). By presenting volunteering as an activity which promotes the common, as well as the individual, good, both the literature and the legacy documents opened the door to considering the ways in which volunteering can be utilised to bring about grassroots change at community level, with minimal intervention – and, crucially, funding – from the state at a time of fiscal austerity (Taylor-Gooby & Stoker, 2011). While there is an abundance of evidence to consider the ways in which Games-driven volunteering might impact on individual and population-level health outcomes, there is also a conceptual difficulty inherent in trying to understand how it might influence the structural determinants of health inequalities.

The legacy focus on tackling behavioural rather than socio-structural determinants of health and health inequalities resonated with the wider policy focus on encouraging self-reliance and reducing dependence on the state as an impetus for improvement (H.M. Government, 2013). Throughout the legacy documents, socio-structural improvements are linked more explicitly to the regeneration agenda than the health agenda, with actions which could potentially have a positive impact on the reduction of health inequalities (such as the post-event creation of a tranche of new social housing from the Athletes' Village) instead being promoted as a means of boosting the economy through the creation of jobs and job training schemes. This creates an implicit tension between the legacy documents between their focus on population level health improvement and the wider policy concern with tackling the socio-structural determinants of health in order to reduce health inequalities. There is evidence to suggest that individual health choices are socially constrained (Joshi, et al., 2000) and that behavioural choices are inextricably linked to *"the social structure and to the way that structure influences the lifestyle and quality of life of individuals"* (Berney, et al., 2000, p. 92). Thus, giving someone the skills to enter the labour market, to move into better housing or to become more connected with (and consequently less isolated from) their community – while a laudable endeavour - does not provide jobs, improve the

baseline quality of the housing stock or improve the structural fabric of communities in terms of availability of amenities such as shops or health care services.

3.6 Realistic questions and realist answers

Implicit in the legacy documentation is the theory that by providing individuals with the tools to bring about health improvement for themselves, it is then up to those individuals to engage with these opportunities in order to access, and share the benefits of, the long-term Games legacy, a theory which resonates with the Scottish Government's growing enthusiasm for assets-based approaches to health policy (Scottish Community Development Centre, 2010; Chief Medical Officer (Scotland), 2010). Volunteering emerges as a means by which people can reap the benefits for themselves in becoming more socially, economically and physically active, while at the same time making a valuable contribution to the life of their communities, but with certain caveats. McCartney and colleagues (2013), for example, while identifying volunteering as a potential critical pathway to improved health outcomes and reduced health inequalities, also identified that achieving these aims would be contingent on factors such as the types of volunteering offered, how volunteers would be utilised and whether the volunteering opportunities offered by the 2014 Games were likely to build or enhance social networks or help people to improve their skills. Other authors (Newman et al., 1985; Thoits & Hewitt, 2001; Luoh & Herzog, 2002; Morrow-Howell et al., 2003; Greenfield & Marks, 2004) have suggested that the success of volunteer initiatives in general is linked to the age and socio-economic status of potential volunteers in addition to the benefits which they are likely to gain from participation – such as a sense of holding a valued role within the community or a chance to increase social and business contacts. These contingencies for success suggest that volunteering, in the context of the 2014 Commonwealth Games, is likely to prove a more successful route to improved health for some individuals and communities than for others, which in turn suggests that it is a pathway to change which is ideally suited to interrogation using realist methods in order to unpack the theories around which aspects of volunteering are most likely to lead to improved health outcomes (and potentially reduced health inequalities), for whom and under what circumstances.

This raises a number of important questions about the role of volunteering as envisioned in the Games legacy. What sorts of roles, for example, will volunteers be expected to undertake? *A Games Legacy for Scotland* (Scottish Government, 2008) indicates that the primary roles will be to fulfil specific functions as stewards, first aiders and visitor guides, while *A Games Legacy for Glasgow* (Glasgow City Council, 2008) suggests (by utilising the personal testimony of an existing volunteer who gives up his time to coach youth judo) that taking on voluntary roles within the community might be the way forward.

This apparent breadth of choice suggests that the legacy planners were trying to avoid being prescriptive in the types of volunteer activity they recommend; the main thing is to encourage as many people as possible to get involved in volunteering in some capacity. However, in terms of specific Games-driven volunteering initiatives it would be impossible to fund everything, and expecting that people will be motivated to volunteer in their communities and on their own initiative purely as a result of the Games taking place is a risky strategy at best. In order to have the greatest chance of demonstrating the ways in which volunteering could be a successful pathway to better health and reduced health inequalities, choices need to be made in order to focus on programmes which stand the greatest chance of successfully engaging with the greatest number of people but this clarity is absent from the legacy documents. The purpose of this review will be to look behind the legacy claims for Games-driven volunteer activity to unpack the theories about what will work best, for whom and in what circumstances on which the claims are based, and to interrogate the emergent theories to build up a coherent pathway from volunteer participation to improved health outcomes and / or reduced health inequalities. In these early stages of the review, numerous questions arise around the type and scope of volunteer activity to be offered:

- Will Games-driven initiatives focus on formal volunteering, in terms of there being a set amount of time people might be asked to commit to undertake specific tasks, or informal volunteering in terms of participation being on a more *ad hoc* basis?
- What is it about these initiatives which has appealed to people and persuaded them that commiting their time and energy has a real chance of benefiting both themselves and their wider communities?

- Are the programmes work or training orientated?
- Working with peers or across generations?
- At grassroots, community level, or part of a wider national programme?
- What types of people are most likely to volunteer their time, and how can programmes attempt to engage with those who might not, initially, be keen to become involved with volunteering?

Questions arise, too, about the targeting of volunteer recruitment. If health inequality reduction is a real priority, will there be a concerted effort on the part of the Games organisers to recruit volunteers from the most deprived areas of Glasgow given that they will, arguably, stand to gain more from the volunteering process than their more affluent counterparts in other areas of the city? At the level of theory, questions arise about why the legacy architects are confident that promoting Games-driven volunteering will have positive health impacts; is there evidence to substantiate this confidence, or does it arise from the conflation of health improvement with health inequalities reduction discussed earlier in this chapter?

One way to begin to address these questions is through the synthesis of existing literature. Given that the questions to be asked of Games-driven volunteering are, effectively, realist questions (that is, they encompass Pawson and Tilley's (1997) *"what works, for whom and in what circumstances"*) and that the emerging mechanisms within volunteering itself suggest that different people will experience different outcomes from participation, the selected approach to evidence synthesis within the review is a realist one. Thusfar, volunteering has begun to emerge as a series of complex mechanisms embedded within the complex system of the 2014 Games, an event which itself is embedded within the complex systems of health and regeneration policy and the small sample of papers considered so far suggests that the theories underpinning how volunteer programmes work are likely to occur across a wide variety of academic and policy domains. A realist synthesis of the evidence will allow the positioning of volunteering within these systems and domains to be accounted for, taking cognisance of the layers of complexity and explaining them by looking at the theories which underpin the ways in which Games-driven volunteering is predicted to contribute to the success of the legacy health aspirations. By the end of the review, it is anticipated that a clear picture

will have emerged, illustrating which aspects of Games-driven volunteering are most likely to succeed, for which sectors of the population and in which circumstances. Bearing in mind the complex questions which need to be asked of volunteering, the task for the review was to illustrate what a realist review could tell us about the Games volunteer programme that other types of review would not. This was achieved by interrogating the cross-cutting, inter-domain literatures on volunteering to determine *if, how and in what contexts,* the planned approaches to volunteering would impact on the health inequalities experienced by different socio-economic groups across the population of Glasgow.

The next step is to consider the complexities of the realist method of evidence synthesis in more detail, delineating how its creator (Pawson) suggests it should be used and documenting how this worked in practice for this review. The following chapter will consider the initial stages of the review, balancing 'what should happen' against 'what did happen' and reinforcing the utility of the method for the task at hand.

Chapter 4

Methods and Findings Part I: preliminary model building.

4.1 Introduction

Chapter 1 introduced the concept of the realist review and discussed in some detail the differences between realist and alternative review techniques, and the different types of research questions each review is designed to answer. Chapter 2 detailed the development of the Commonwealth Games, the political imperative for organisers to promise and deliver a legacy from this type of event, and the fit with a realist review approach. Chapter 3 then focused on the rationale for considering Games-driven volunteering initiatives as a potentially important mechanism for change, with the chapter culminating in the identification of a specific demonstration question for the review to consider, (*if, how and in what contexts the planned approaches to volunteering impact on the health inequalities experienced by different socio-economic groups across the population of Glasgow*) in order to illustrate what realist synthesis could tell us about the operation of the programme that other types of review could not.

This chapter moves on to describe the specific steps which were followed in undertaking the review, using as a template the stages of a realist review outlined by Pawson (2006, Ch4 pp73-104).

4.1.1 A note on referencing

Realist synthesis as a systematic review technique has evolved from the realist approach to evaluation first put forward by Pawson and Tilley (1997). As the methodology has developed, the most prolific author contributing to the literature has been Ray Pawson. His book *Evidence Based Policy: A Realist Perspective* (2006) builds on his published papers (both individual and with collaborators) to provide a rich source of material on both the theoretical underpinnings of the methodology, and comprehensive guidance on the 'nuts and bolts' of undertaking a realist review.

A number of realist reviews have been published across different policy domains, including Jagosh and colleagues' work on the implications of participatory research for health research and practice (Jagosh J1, 2012); Pottie and colleagues' work on culturally appropriate diabetes education (Pottie K, 2013); O'Campo and colleagues' work on mental health and substance misuse (2009); McCormack and colleagues' work on practice development, which crosses the boundaries between health and education (2007); van der Knaap and colleagues' (2008) look at issues pertaining to the systematic review of evidence in the criminological domain; and Wong and colleagues' consideration of the problems inherent in using legislation to promote public health (2011). Similarly, several of Pawson's collaborators have begun to address some of the issues inherent in realist reviews with the RAMESES project (Greenhalgh, et al., 2011), which considers a number of the difficulties inherent in undertaking a realist review (including difficulties which reviewers are likely to encounter with assessing study quality). This work has produced a set of publication standards to *"help researchers, authors, journal editors and policy and decision makers to know and understand what should be reported in the write up of a realist synthesis"* (Wong et al., 2013, p.3).

The referencing for the remainder of this chapter is thus extensively focused on Pawson's work and the text itself reflective of his language and terminology around realist synthesis. As the majority of Pawson's published work pre-2006 is incorporated into *Evidence Based Policy,* this is the principal reference used for the remainder of this chapter, although insights into the process have also been gathered from recent publications from Wong and colleagues (2013), Jagosh and colleauges (2014) and Greenhalgh and colleagues (2011).

4.2 First steps in the review

The iterative nature of the realist review process means that a more holistic approach needed to be taken to the description of the methods used and discussion of the findings than might be the case in a non-realist systematic review. What follows, therefore, is an in-depth discussion of the first steps taken in conducting this review, encompassing the processes followed and the results obtained at each stage. It is unorthodox to include results in a methods chapter, but necessary to give a flavour of these findings in order to describe the iterative nature of the

approach; the results, however, are not critiqued in this chapter – this critique occurs later in **Chapters 6** and **7**.

Table 3 lists the processes of a realist review as described by Pawson (2006), and illuminates the iterative nature of the literature searching, quality appraisal and theory building processes, contrasted with the processes undertaken in conducting this particular review. Both tables will be reprised in the later chapters of the thesis to illustrate the effects of the iterative literature search and appraisal processes on the development of theory around Games-driven volunteering programmes.

Pawson (2006) indicates that the starting point for a realist review should be the identification, in consultation with stakeholders, of a review question. In this case, the decision to undertake a realist review of the 2014 Commonwealth Games legacy health impacts had been taken by the studentship funders and supervisory team prior to the commencement of the PhD studentship; the starting point thus became the identification of a specific strand of the legacy to review. An analysis of the policy documents (see **Chapter 2**) revealed that volunteering was being heavily promoted as a mechanism for achieving better health outcomes at the population level. Questions remained, however, around how this aspiration fitted into the wider health policy focus on reducing health inequalities; for example, how might the legacy focus on individual behaviour change influence structural determinants of health inequalities such as housing, education or employment? Having identified a strand of this legacy to review, the next task was to drill down into the topic to identify a specific research question for the review to address (the task of **Chapter 3**), before moving on to unpack some baseline theories around how Games-driven volunteering was intended to work.

This identification of baseline theories was a tri-partite process, taking in the initial analysis of the legacy documents, a brief scoping search to ascertain whether enough primary research on volunteering existed to make a review viable, and interviews with key stakeholders to provide a 'reality check' of both the emerging theories and the utility of such a review to the policy community. The embryonic theories emerging from the first two parts of the process were then used to provide a useful jumping off point for the conduct of interviews with key

stakeholders, with the results of all three parts of the process then combined to build an initial model of Games-driven volunteering.

This is a cyclical process, one of constant evaluation of new evidence in the light of what has already emerged; the initial analysis of the 2014 legacy documents in chapter two pointed the way to a scoping search to look for primary studies which had investigated the impacts of volunteering on both individual and community health.

Table 3 Comparing the processes of a realist review

Pawson's steps in a realist review	Steps in 2014 volunteering review
Identify review question (with stakeholders); make explicit which theories are being explored.	Within the framework the 2014 legacy, identification of a specific aspect of the legacy to review.
Identify baseline theories as part of building a theoretical framework on which to hang the review.	Baseline theories unpacked from legacy documents, brief scoping search & stakeholder interviews.
Conduct literature search for relevant evidence; this is an iterative step, to which the reviewer will continually return as the review progresses, in order to confirm or refute emerging theories.	Scoping search framework returned to in more depth after stakeholder interviews to begin to seek to interrogate initial model.
	Initial, brief appraisal of the relevance of scoping search findings to the research question to assess whether they might contribute to the initial model.
Appraisal of relevance and rigour of studies in light of their fitness for purpose – can they contribute to building theory relevant to the review question?	Initial data extraction based on analysis of legacy documents, health improvement and health inequalities literatures and scoping search findings in order to construct initial model of Games-driven volunteering.
Iterative data extraction: findings are assessed in the context of the primary study. Do they contribute explanatory power to the final synthesis? This process will also be repeated as each new literature search is undertaken.	Initial data synthesis: programme theory is teased out into an initial model, with a view to understanding how programme mechanisms are intended to operate and how context might constrain participant choices. Model then interrogated following further iterations of literature search.
Iterative data synthesis: programme theory is refined with a view to understanding how programme mechanisms are operationalised and how context constrains participant choices. This process is repeated as data are recovered from each new literature search, building new findings into the review framework.	
	Dealt with in later chapters.
Final report: should concentrate on specific contextual issues and how these influence programme mechanisms in order to facilitate continued learning from past experience.	Dealt with in later chapters
Dissemination: once final report sent to stakeholders and other interested parties, consideration should be given to evaluating the extent to which the programme has been adapted to take account of identified theory refinements.	Dealt with in later chapters

Source: Pawson, R (2006) *Evidence Based Policy: A Realist Perspective*
London, SAGE. Reproduced by kind permission of the publisher.

4.3 Establishing the baseline theories

The analysis of the policy documents discussed in **Chapter 2** revealed that volunteering seemed to be conceptualised by the legacy planners as a catalyst for both individual behaviour change, leading to improved population level health outcomes, and for achieving greater social cohesion with the potential (although this is not explicitly acknowledged in the legacy documents) to impact positively on health inequalities (Glasgow City Council, 2008; Scottish Government, 2008). Viewed from this perspective, volunteering emerged as a poorly understood aspect of the legacy, and the decision was taken to focus the review on seeking out the specific mechanisms within volunteering which were most likely to result in the outcomes delineated in the 2014 legacy documents. This was considered to be relevant to the policy community because of the gap between the focus on individualistic approaches to health improvement emphasised in the legacy documents and the wider health policy focus on reducing health inequalities.

Questions around how this gap might be closed prompted the initial scoping search of the volunteering literatures to begin to pick out and articulate theories about how 2014 Games-driven volunteer programmes might be able to bridge the gap. **Figure 11** (below) illustrates how the policy document analysis both kick started the review and provided a point of reference to return to in order to check the relevance of the scoping search and stakeholder interview findings in the early stages of the review.

4.3.1 The scoping search
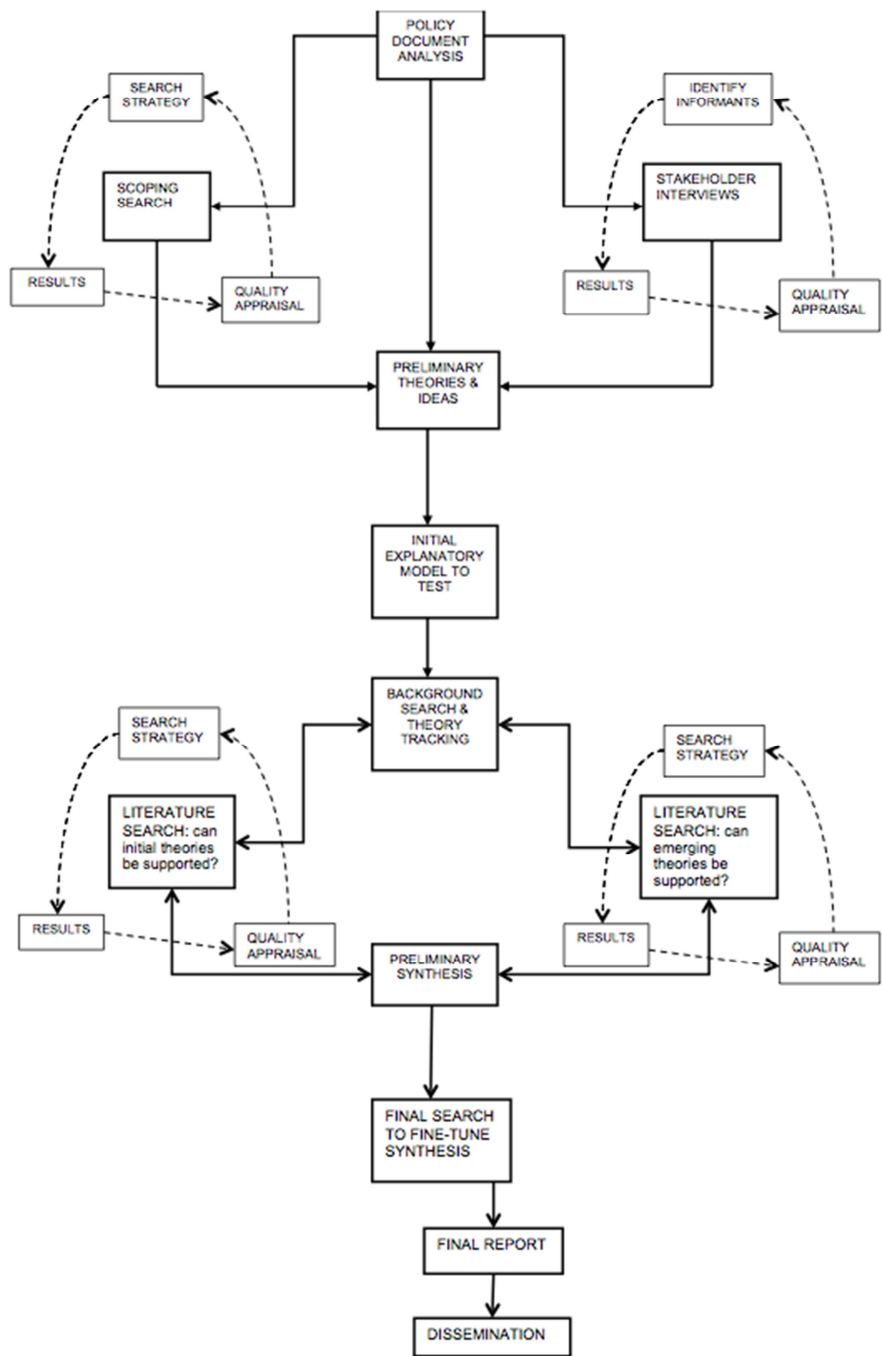
Deciding where to start the review was difficult, since at this stage ideas about how volunteering might impact on health and its wider determinants were vague. Based on Pawson's counsel that the reviewer should *"just do it"* (2006, p.83), the scoping search was based on the nascent theories (identified in **Chapter 3**) about the potential of the Games volunteer programme to have a positive influence on both community development and on the development of individuals in terms of skills, confidence and health. The purpose of this initial search was twofold; to ascertain that there was sufficient breadth and depth of available evidence linking health and volunteering on which to base the review, and to begin to identify

papers which could firm up the nascent theories about what the mechanisms of the programme might be.

The scoping search commenced with an internet search using the Google Scholar academic internet search engine (http://scholar.google.co.uk/schhp?hl=en-GB) using the search terms "volunteering evaluation health outcomes" and "volunteering evaluation health inequalities". This returned a substantial number of studies, a positive sign that there would not be a dearth of information available to inform the review. Given that the purpose of this initial search was simply to gain a feel for the quantity and types of evidence available, the search results were narrowed down in a relatively pragmatic fashion.

The first twenty pages of results were scanned, with papers which had not been subject to peer review, papers which were not in English, comments on journal articles and letters to journals discarded. Further exclusions were made on the basis of subject matter, where volunteer programmes and their potential impacts on the health of, or health inequalities experienced by, the individuals who volunteer and / or the impacts of increased volunteering on the fabric of the wider community were not the focus of the paper. This left twenty four papers from a variety of academic disciplines (such as public health, psychology, business studies and sociology) which contextualised volunteering within a variety of policy domains (for example public health, education, employment, the environment and the economy). These papers were read closely, to begin to identify the contexts in which volunteering operated and the mechanisms by which it operated to make it a potentially beneficial activity, for which kinds of people, and what sorts of impacts taking part in volunteer programmes might have on health or its wider determinants (Pawson & Tilley, 1997; Pawson, 2006).

Figure 11: the iterative phases of a
realist review.

Dashed lines represent iterative
processes within the different cycles of
the review; double arrow lines show
iterative processes within the review
itself.

Appendix 1 (Volume 2, page 6) illustrates the analytical framework which teased

out the contexts in which volunteering occurred, the lifeworld contexts of

volunteers, the mechanisms which presented individuals with sufficiently compelling reasons to participate, and the impacts on health or its determinants which had been noted as being attributable to programme participation. From these data, it was possible to begin making connections between contexts, mechanisms and outcomes and to begin to build preliminary theories about which configurations would allow the 2014 Games volunteer programme to have the biggest impact on health inequalities in Glasgow, and for which population groups this was likely to be the case.

Context is a key factor in realist reviews, acting as the principal constraint on the ways in which programme mechanisms can operate, and programme participants respond to the mechanisms. For example, the first choice open to potential participants is likely to be whether or not to engage with the programme, and this decision will be heavily contingent on their personal life circumstances at the time (Shepperd, et al., 2009). Equally important, however, are the mechanisms which operate within these contexts to achieve programme outcomes. Mechanisms are conceptualised as the drivers of human behaviour; that is, the factors within the programme which cause participants to respond to it in the way that they do (Pawson, 2006; van der Knaap, et al., 2008.

As this process unfolded, a number of complex theories began to be identified which might contribute to an explanatory model of the ways in which volunteer programmes impact on the health of volunteers. One of the first things to become clear was the multi-dimensionality of context as an important factor of successful volunteer programmes; in order to benefit volunteers, the organisational context within which volunteering took place was shown to be important, as were the everyday circumstances of the individual volunteers, with older people tending to accrue greater mental health benefits than their younger counterparts (Newman et al., 1985; van Willigen, 2000; Morrow-Howell et al., 2003; Fried et al., 2004; Fried et al., 2004; Jirovec & Hyduk, 2008). Mechanisms and outcomes, too, proved to be multi-dimensional in nature, bearing out the finding in **Chapter 2** that Games-driven volunteering had the potential to deliver several different outcomes, not all of which might have been either sought or considered by the legacy planners. Several authors cited the potential of volunteering to boost social contact, and to replace or maintain lost or diminishing social roles, again particularly among older

people (Newman et al., 1985; van Willigen, 2000; Thoits & Hewitt, 2001; Morrow-Howell et al., 2003; Greenfield & Marks, 2004; Lum & Lightfoot, 2005; Li & Ferraro, 2005). **Figure 12** (below) combines Pawson's guidelines (2006) with the preliminary search findings, and shows how the contexts of voluntary organisations and individual lifeworlds potentially overlap to create optimum settings for the success of volunteer programmes. The diagram illustrates how the social and spatial contexts of the volunteer lifeworld (in both individual and community settings) and the contexts within which voluntary organisations are themselves embedded overlap to create different settings for volunteer programmes. Programme mechanisms, represented by the arrow, must then negotiate the subtleties of these multi-dimensional contexts in order to achieve outcomes.
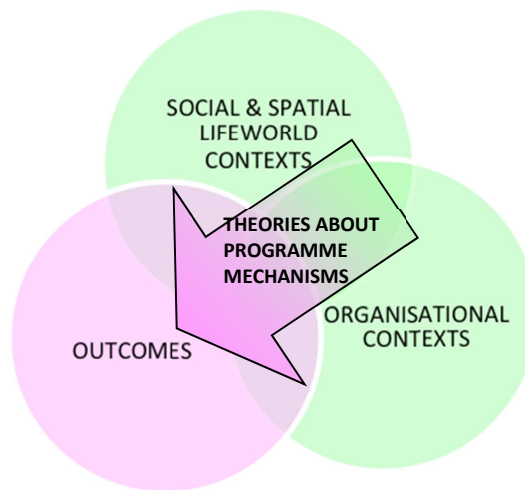
Figure 12:
Illustrating inter-relationship of context and mechanism and outcome

4.3.2 Theory 1: role accumulation

The emergent theories around *how* volunteer programmes operate could be split roughly into three broad categories, although there were subtle linkages between them. The first category coalesced around role accumulation theory, first outlined by Sieber (1974), which posits that "*...people in society occupy a number of social positions. These positions are associated with behavioural expectations for the social actors occupying them, regardless of the individual actors' personalities, and become roles*" (Greenfield & Marks, 2004, p.S258). In other words, individuals

simultaneously define themselves by the roles they play, and are defined by society according to these roles. A sudden reduction in these roles (perhaps due to retirement, unemployment or children leaving home) can lead to a loss of definition of the self, and a disconnection from wider society, which in turn can have a detrimental effect on health and wellbeing (Newman et al., 1985; van Willigen, 2000; Morrow-Howell et al., 2003; Greenfield & Marks, 2004). Volunteering thus provides an opportunity to take on a new social role, enabling the retention and maintenance of connections and position in society, and for new social connections and positions to be adopted. The social expectations of the volunteer role mean that those who volunteer can be *"…rewarded with gratitude and, not infrequently, social recognition and approbation"* (Musick & Wilson, 2003, p.259), further bolstering self-esteem and commitment to volunteering.

The obverse of this is the potentially detrimental health effects of role strain, when the individual has taken on too many roles, or is caught up in a situation where the demands of one role are in direct conflict with the demands of another, leading to an increase in stress as he or she attempts to reconcile different role expectations (Sieber, 1974). Sieber goes on to argue, however, that the benefits of holding multiple roles within society generally outweigh these risks. He asserts that there are four main types of reward, or benefit, for the individual in taking on different roles within society; these are **role privileges** (which serve as *"inducements for recruitment to roles and…as inducements for the continuation of role performance"* (ibid, p.569); **overall status security**, where the individual's status within society is bolstered and he or she has something to fall back on should any difficulties or failures be encountered within other social roles; **resources for status enhancement and role performance**, which Sieber describes as *"incidental emoluments or perquisites"* (ibid, p.574) – for example, the opportunity while carrying out certain social roles to be introduced to third parties who can advance the individual's personal interests, and **enrichment of personality and ego gratification**, which Sieber defines as an increased tolerance on the part of the individual for divergent viewpoints, greater adaptability in the face of conflicting role demands and an enhanced self-perception (ibid, p.576).

Both the benefits and the potentially detrimental effects of role theory as an explanatory model for volunteering linked into the second broad category of theory

to emerge from the scoping search. Initially defining this second theory as social capital in its broadest sense, it encompassed a number of permutations of Durkheim's (1952) theory about the potential positive and negative effects accruing from the individual's sense of self and of place within society. These theories included broad constructs relating to the opportunity to make and maintain a wider range of social contacts and relationships (Newman et al., 1985; van Willigen, 2000; Luoh & Herzog, 2002), increased access to social resources and the confidence to utilise that access (Wilson, 2000; Musick & Wilson, 2003) and the potential health benefits of increased self-esteem linked to a sense of social prestige, emotional gratification and having access to the elements of social capital which create links and bonds between diverse strata of communities (Wilson, 2000; Morrow-Howell et al., 2003; Musick & Wilson, 2003). Further development of this second category of theory demonstrated that 'social capital' was too broad a label; the myriad connections between individuals coming together as communities to interact with the legacy volunteering programme was better described as community involvement.

4.3.3 Theory 2: community involvement

From the small cross-section of papers returned by the scoping search, the strong emphasis on the perceived place and role of the individual within the community emerged as a crucial strand of the process of building a baseline theory about the potential operation of Games-driven volunteering. An initial theory was that if individuals felt themselves to be well embedded in their communities, and to have something to offer, they might be more inclined to get involved with projects which would allow them to help others in the community, simultaneously benefiting others and reinforcing their own sense of wellbeing and standing within the community (Friedli, 2012; Kretzmann & McKnight, 1996). Alternatively, depending on individuals' pre-existing social connections – for example, as leaders, facilitators or helpers of others – volunteering might be the mechanism which would allow them to step out of these pre-existing lifeworld roles and make more useful connections within their communities (Page-Adams & Sherradan, 1997). By taking part in a volunteer project as part of the Games, they would be able to do something different which would benefit them in terms of providing new challenges and opportunities, and also benefit others in their communities by helping them to

take on more varied life roles, gaining the confidence to fulfil these roles and take on new challenges in turn. The linkages between these two groups of theories, then, are complex and multi-dimensional, seeming to suggest that it is not only the maintenance of role identity which is important for the individual who volunteers, but also the way in which this identity impacts on, and integrates with, the wider community. By offering people the chance to participate more fully in community life, Games-driven volunteering would thus be imbued with the potential to boost self confidence and sense of place within society and reinforce the individual's sense of self worth, social resources, networks and relationships.

4.3.4 Theory 3: asset building
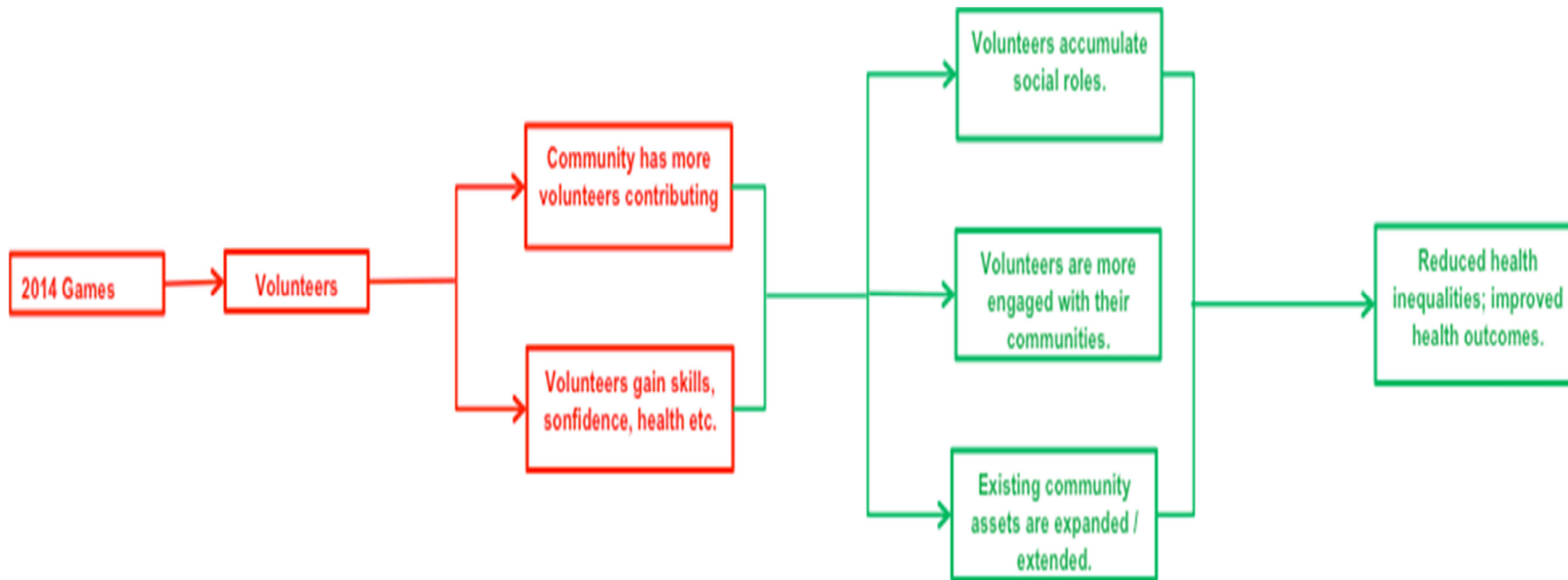
The third broad theoretical category to emerge from the scoping search was that of an assets-based approach to community development programmes. Emerging in the mid-1990s from work on the evaluation of community development programmes (Kretzmann & McKnight, 1996), assets-based theories take the existence of social capital as a given (ibid; Page-Adams & Sherradan, 1997; Mathie & Cunningham, 2003; Boyd et al., 2008), assets-based approaches are increasingly gaining ground in policy circles (Scottish Public Health Observatory, 2012; Scottish Government, 2012), on the basis that *"…assets, and the related concepts…can make a substantial contribution to overall health in Scotland and to reducing inequalities"* (SCOTPHO, 2012).   Taking existing community resources and facilities[13] as their starting point, assets-based approaches focus on involving communities in the strengthening of these resources, and access to them, in order to build change from within rather than relying on externally driven improvement programmes (Mathie & Cunningham, 2003; Boyd et al., 2008). Individuals thus gain the opportunity to work in collaboration with their wider communities to effect improvements in their social and spatial circumstances. Viewed through the lens of volunteer programmes, assets-based approaches thus have the potential to provide a link between social capital and the importance of role identity for the individual

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[13] Community resources and facilities are defined as the skills and abilities of individuals within the community or organisations (public, private and third sector) which are either resident or operating within the community; for example community groups, social services, health care centres (such as hospitals and GP surgeries), facilities such as shops, libraries and community centres and political connections available to, and influencing the lives of, community residents (Kretzmann & McKnight, 1996; Page-Adams & Sherradan, 1997; Mathie & Cunningham, 2003; McCartney et al., 2013).

and for the community, allowing successful volunteer programmes to flourish in the social and lifeworld spaces where these theories intersect.

Figure 13 (below) illustrates how the confluence of role identity, community engagement and asset building allow volunteering to flourish within diverse social, organisational and individual lifeworld contexts, and shows how these theoretical connections work with, and extend, McCartney and colleagues' idea of a volunteering-led critical pathway to improved health outcomes and / or reduced health inequalities (McCartney et al., 2012b). By providing a localised context for community improvements, facilitating greater community engagement and building on pre-existing physical and social assets within communities, volunteering contains the potential for individuals to contribute to the 'greater good' while simultaneously benefiting from positive changes to their social circumstances. In the long term, this approach has the potential to develop into a feedback mechanism, with improved engagement strengthening baseline community assets as more people within communities engage with community led improvement programmes.

Figure 13: early theories about contexts, mechanisms and outcomes

Volunteering pathway (in red) reproduced by kind permission of the author (McCartney et al., 2012). The green boxes show how the early theories about Games volunteering develop McCartney's ideas about how the mechanisms of volunteering work.

4.4 Checking the baseline theories

Having begun to tease out some preliminary theories, the next stage was to act on Pawson's advice that reviewers should take into account the *"reasoning and reaction of stakeholders"* (Pawson, 2006, p. 80), ascertaining whether there are any *"differences in understanding of the programme theory"* (ibid). This was an important step in the process of checking and refining the baseline theories, giving the reviewer the opportunity to find out stakeholders' perceptions of what the underlying programme theories were and to ascertain whether – and in what ways – these perceptions corresponded with the theories which had begun to emerge from the initial scoping search (Pawson & Tilley, 1997; Pawson, 2006). At the time of conducting the scoping work, the legacy documents were five years old; during that time, it was entirely possible that policy makers might have revised or fine-tuned their conceptions of how the programme was supposed to work. In addition, the review question (that the purpose of the review would be to determine *if, how and in what contexts the planned approaches to volunteering impact on the health inequalities experienced by different socio-economic groups*) had been arrived at in an academic setting, which gave added impetus to the task of speaking to key stakeholders to ascertain how they conceptualised the contexts, mechanisms and potential outcomes of the programme as it was beginning to be implemented. This was achieved by conducting a short series of interviews with selected key stakeholders, all of whom had some responsibility for the process of promoting, recruiting for and / or implementing the Games volunteer programme within the Glasgow area[14]. Ethical approval for the conduct of the interviews was granted by the University of Glasgow College of Social Sciences Ethics Committee on 7th December 2012. Although quite a small number of interviews, the purpose of conducting them was not concerned with canvassing opinion to produce generalisable theories; rather, it was a pragmatic step to ensure that the emergent theories made sense within the specific development framework of the Games programme. Pawson (2006) counsels that this is a worthwhile step in order to provide an essential *"reality check"* to ensure that the proposed model, and the

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[14] All of the partner organisations which contributed to these interviews were based in, and dealing with volunteer activity in, the city of Glasgow. Despite being a major stakeholder in the Games, the Scottish Government declined to participate in a student research project.

emerging theories, are relevant to the way(s) in which the programme being investigated is assumed to operate in practice (ibid).

In the main, the theories put forward by the interview respondents reflected those which had emerged from the legacy document analysis and the scoping search, principally that volunteering, as a mechanism for change, might drive forward the impacts on health inequalities aspired to in the legacy documents. The interviews generated a considerable amount of data covering both *"grand, explanatory theor[ies]"* (Weiss, 1977, p.427) such as engagement, place within society, social networks and social capital; and respondents' ideas about how these theories might fit together to produce a unified model of the ways in which Games-driven volunteering could successfully impact on health inequalities. In order to begin to map out where on the pathway these theories might connect, a framework was constructed to track their development; for reference, this is illustrated in **Appendix 1.** The interview findings are described below, highlighting any significant differences between the initial legacy aspirations and the interviewees' understandings of how volunteer programmes are intended to function as part of the 2014 Games.

4.5 Theory development: stakeholder interviews

Semi-structured interviews were undertaken with four programme stakeholders over a period of a month. One interview was conducted over the phone and three were conducted face to face, in the respondent's place of work. All the interviews were recorded and audio-transcribed before being coded for emerging themes.

The intended operational focus for Games-driven volunteering was described in varying amounts of detail by all four respondents but the general consensus was that three tiers of volunteer activity were planned, suggesting a more hierarchical structure than the inclusive model described by the legacy documents. The interview respondents all described the difference between formal volunteering (where individuals give of their time to aid a specific cause, organisation or individual), and informal volunteering (for example, helping elderly neighbours or family members with everyday tasks), and their conceptualisation of the ways in which Games volunteers would be utilised reflected this. **Figure 14** illustrates this

differentiation between formal and informal, and also reflects respondents' association of 'formal' with 'skilled' and 'informal' with 'unskilled'.

Figure 14: Three tiers of Games volunteering

TIER 1 - FORMAL VOLUNTEERING AIMED AT FILLING SPECIFIC, SKILLED ROLES

TIER 2: FORMAL VOLUNTEERING, AIMED AT FILLING SPECIFIC, SEMI-SKILLED ROLES

TIER 3: UNSKILLED,INFORMAL VOLUNTEERING - AIMED AT ENCOURAGING THE IDEALS OF GOOD CITIZENSHIP TO PROMOTE THE CITY
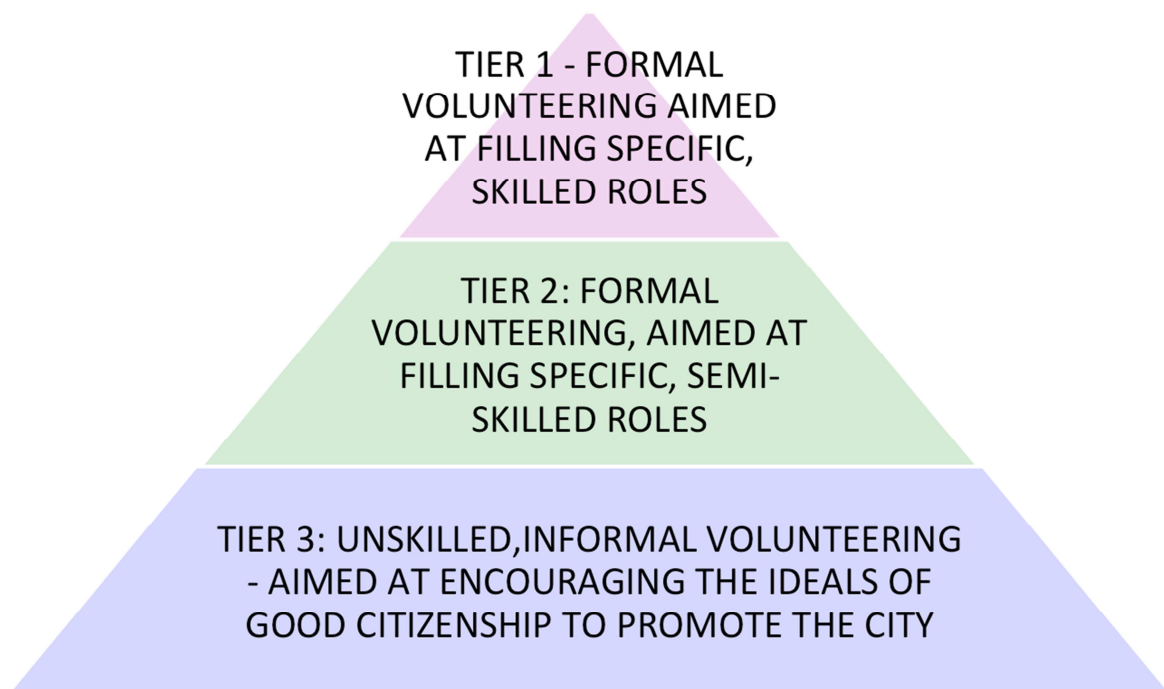
Effectively, the ideal presented in the legacy documents – that Games-driven volunteering would have 'something for everyone' – was maintained by the interview respondents, but the overall picture they painted was less inclusive than that portrayed in the documentation. As illustrated in **Figure 14**, the first tier, formal volunteering roles, was aimed at skilled individuals, who would be recruited to fulfil specific roles within the Commonwealth Games, and for which they will need to have particular skills – for example, as sports referees or medical staff. The second tier of volunteer activity, described by Interviewee 1 as *"the host city programme"* was intended to enable volunteer participation by individuals who had some level of skill, but were not necessarily specialists in any particular field, with the expectation that these individuals would work as greeters and guides to help visitors to the Games to orient themselves as they moved around both Games venues and the wider city throughout the eleven days of the event. These volunteers were expected to be supported in securing their roles by agencies with which they were already involved, such as the Social Work department, Glasgow

Housing Association and / or their local jobcentre. There were no plans for the Games Organising Committee (OC) to provide any extra levels of support for these individuals either during the recruitment process or during the event itself. The third tier of planned activity incorporated a much more informal approach to volunteering, with an emphasis on engagement with the Games via active citizenship. These volunteers were to have no formal role in the event but would be expected to act as ambassadors for the city where the opportunity arose within their everyday lives (for example, if asked for directions by visitors to the city). The interview respondents felt that this tier of voluntary activity in particular would be imbued with an understanding of *"what the Commonwealth Games means to Glasgow"* (Interviewee 1) and of reflecting *"...people's active engagement with their communities and active citizenship"* (Interviewee 2). All the respondents indicated that the greatest number of volunteers would be in Tier 3, and the smallest number (skilled individuals, recruited to the programme to undertake specific tasks) would be in Tier 1.

The consensus across the interviews was that *"people who are engaged are healthier in general"* (Interviewee 1), suggesting that engagement with the wider community promoted better health and that just by giving people the chance to participate in the Games in some way, their health would improve as they became more engaged with the social and cultural life of Glasgow (the assumption was that those who would engage with the programme would be those most in need of action to improve their health). This, it was felt, would enable them to accrue the maximum range of benefits from the event for both themselves and their communities. The formal volunteering roles in Tier 1 were viewed as separate from the more informal functions of Tiers 2 and 3. Tier 1 roles were conceived as specific roles essential to the smooth running of the Games for which only suitably qualified individuals would be recruited, raising questions about the potential for those with few or no specific skills to gain tangible experience which they would then be able to draw on in order to effect meaningful change within their own lives In the latter cases (Tiers 2 and 3 in the diagram), the prevailing opinion was that by encouraging people to work together to get the most from the Games, the end result would be happier, healthier, more engaged individuals, able to take a sense of pride in what they had achieved by their own efforts (Interviewee 2), and that this would inevitably lead to positive impacts on health and health inequalities.

Overall, the interview respondents perceived an interim outcome on the way to (potentially) better health: that of a greater sense of community cohesion, enabling people to work together to improve their access to better quality resources such as employment, education and housing. In the second and third tiers of volunteering, too, however the emphasis was on ensuring the smooth running of the event rather than on the potential health impacts for individuals and / or communities. The potential of the Games volunteer programme to generate improved population level health outcomes and / or to influence health inequalities was portrayed by the interviewees as a secondary outcome, with greater importance placed on the potential of the programme to boost community engagement in the process of delivering a spectacular event. Their principal concern was to utilise volunteers to facilitate a successful event, in the process presenting Glasgow as a forward thinking, vibrant city whose populace understood – and worked well together to create – an atmosphere of co-operation and mutual self-help. The consensus among interviewees was that the programme would work best in the communities, and with the individuals, most accepting of the need to promote and engage with this type of active citizenship. The programme was thus perceived as operating as a mechanism by which individuals would be able to get more involved in the social and cultural life of the city and of their communities, building their social networks and taking on roles which would provide them with a sense of personal achievement and purpose, while also being externally (to them) valued by the wider community within the city. The potential to influence health outcomes and / or health inequalities was conceptualised as something which would arise *automatically* from increased community bonding and activity resulting from the event, without the need for any specific actions to promote greater involvement in communities where the need for positive action to tackle health inequalities was greatest.

A more important benefit, for some interviewees, was that volunteers who had engaged with the Games could be utilised to develop a cohort of more engaged, more motivated individuals to be called upon in the future to service similar events. The creation of such a volunteer cohort, however, was not viewed with the same level of enthusiasm by all the respondents. A prominent note of discord was the opinion of one participant that the creation of a cohort of volunteers relatively specialised in the support functions for a major sporting event would do

little to further the cause of existing community volunteer programmes or to have any positive impact on health inequalities. This respondent felt that the Games volunteer programme failed to take into account what he termed *"the forgotten social determinant"*; that is, the way in which individuals work together to form, maintain and improve their communities and to improve availability of (and access to) resources such as healthcare, education and housing – resources which can and do influence the health inequalities gap. By slotting participants into a skills-dependent, hierarchical model of volunteering, this respondent felt that an important opportunity to integrate individuals and communities from all points on the socio-economic spectrum, to their mutual benefit, was likely to be lost.

The interviewees were also remarkably candid about the potential of the programme to lead to stable, paid employment for Games-time volunteers in the post event period, admitting that *"[b]y the very nature of the type of opportunities being offered, you're reducing the opportunities for the people who are furthest away from volunteering to be involved"* (Interviewee 1) and *"there are certain criteria…practical stuff that you've got to be able to commit to over the course of the Games"* (Interviewee 2, referring to the time commitments which would exclude, for example, current JSA claimants from volunteering as they would not be able to evidence jobseeking behaviours during their time as Games volunteers). This interviewee also alluded to the plan for the Organising Committee (OC) to hold back a proportion of the volunteer roles for employees of their 'top tier' sponsors, companies who wanted to be able to show that their support for the event had been more than financial; clearly, these roles would not then be available for the individuals described as being *"furthest from volunteering"*. As Interviewee 1 pointed out, many of the more high profile roles – for example, in the provision of medical services, brand protection and sports refereeing, required candidates to already be in possession of very specific skill sets; there were no plans to allow unqualified volunteers to work with these teams in order to gain or work towards certification in these areas. If, for example, a volunteer was interested in gaining first aid certification to enhance either their employment prospects or their potential to contribute to the community in a volunteer role post-event, there would be no opportunity within the Games programme for this to be enabled.

Volunteers coming to the event with no particular skills or qualifications would be streamed into the more general elements of the programme, such as 'meet and greet' roles at the various venues, spectator services (which none of the interviewees was able to define clearly) and simply being outside Games venues to direct spectators to the nearest public transport links or give more general directions to foreign visitors who might need help to find their way around the city. None of these things provided an adequate explanation of how individual volunteers might then be able to enhance their employability or gain new skills as a result of the programme, despite increased employability in the post-event period being a primary focus of the legacy documents. Interviewee 4 indicated that this had been addressed by the OC, and that arrangements had been made for volunteers to receive Scottish Qualifications Authority-accredited certification, which would detail and acknowledge the hours each individual had spent volunteering and the contribution they had made to the event. The plan, which had been agreed, was that this certification would then be acknowledged as an entry criterion on par with other (school based) qualifications for the purposes of entry onto SVQ level 3 and level 4 courses. There was, and remains, some confusion over this, however, as other interviewees were clear that this plan had been modified on the grounds of cost. It had not been considered to be financially or physically possible to furnish 15,000 people with such accreditation in the immediate aftermath of the event when the OC is likely to cease to exist. Instead, all participants were to be signposted to Scotland's Best, a training provider which works with young people to enhance their opportunities to enter paid employment or further education. The provision of SQA accredited certification would then be at the discretion of Scotland's Best; making contact and turning up would be up to the individual, depending on whether they felt it was a worthwhile way to take forward their Games-time experiences. It was likely, however, that the skills on offer would be 'softer' employment skills, such as how to dress for, and behave at, a job interview and the importance of punctuality rather than any tangible skills which would evidence aptitude for a particular type of employment. For its part, prior to the Games the SQA introduced a raft of new qualifications to address the skills needs of the event, but there was no evidence to suggest that preferential acceptance on to these courses would be given to Games-time volunteers (Scottish Qualifications Authority, 2014).

In the year prior to the Games, then, stakeholder opinion on what constituted the principal mechanisms of the volunteer programme had begun to coalesce around the potential benefits to the individual of greater community involvement and skills development, although these mechanisms were by no means uncontested. Alternative views represented among the interview respondents indicated that, from one standpoint, the mechanisms for change were largely irrelevant since the principal aim of volunteer recruitment was to ensure the smooth running of the event, not the impacts on health or health inequalities which might or might not accrue to volunteers. Balanced against this was the view that, while the mechanisms for change were important, they were likely to fail if individuals (particularly from deprived communities) were not engaged with on their own terms and in ways which would reassure them of the validity and worth of their potential contribution to the event. These views were derived from a very small sample, due to the difficulties in obtaining interviews with individuals connected with the implementation of the Games volunteer programme. While it would be unwise to give too much weight to the views of a potentially unrepresentative sample (their contemporaries may have viewed the focus of the volunteer programme very differently), viewing the developing programme theories through the lens of stakeholders proved to be useful in expanding the range of theories of how volunteering might work in the context of the Games.

4.6 Summarising the early findings: the emergence of a disconnect

As Pawson (2006) indicated, interviewing stakeholders in order to gauge their views on the emerging picture of Games volunteering proved to be a useful tool to begin to test the researcher's initial model of the theories underpinning the programme. The initial analysis of the legacy documents suggested, at the most basic level of the realist approach, that *something about volunteering* (the mechanisms) would appeal to *particular sectors of the population* (the contexts) to *mitigate the impacts of health inequalities on their lives* (the outcome), as **Table 4** illustrates (Kazi, 2003).

Table 4 Teasing out context, mechanism and outcome.

Context +	Mechanism =	Outcome
Something about: • Glasgow • 2014 Games • Population • Local community	Something about: • Volunteering	• Health outcomes for the whole population improve or worsen • Health inequalities improve or worsen

Expanding the model to include the findings from the scoping search was the starting point to begin the process of fleshing out the contexts and mechanisms, and making some suggestions as to what the 'somethings' about each might be. For example, if the affected group was young and unemployed (context) and was able to gain some new skills (mechanism) from the programme, the impacts of health inequalities on the group might have been mitigated. This also provided some insight into the population subgroups for whom the Games volunteer programme was likely to work. **Table 5** shows some further examples, substituting scenarios suggested in the literature for each of the examples in **Table 4**.

Table 5 Potential contexts, mechanisms and outcomes of the Games volunteer programme.

CONTEXT +	MECHANISM =	OUTCOME
1. Something about Glasgow: large proportion of population living in deprivation.	Something about volunteering: provides opportunities for people to improve their lives and communities.	Improved health outcomes and / or reduced health inequalities, but only where there is a concerted effort to recruit volunteers from deprived areas.
2. Something about the 2014 Games: a prestigious event with the potential to benefit the host population.	Something about volunteering: provides opportunities for people to increase their social networks and support.	Improved health outcomes and / or reduced health inequalities, but only where there is a concerted effort to recruit volunteers from deprived areas .

CONTEXT +	MECHANISM =	OUTCOME
3. Something about individual circumstances: (1)young, unemployed, few qualifications; (2) older, retired, adjusting to new pace of life.	Something about Volunteering: (1) opportunities to gain new skills to boost their employability; (2) opportunities to take on new roles to retain and maintain sense of place in the community.	Improved health outcomes and / or reduced health inequalities, but only where there is a concerted effort to recruit volunteers from among these population groups.
4. Something about the local community: high level of deprivation.	Something about volunteering: disproportionately targets the most deprived to give them the best chance of benefiting from the Games legacy.	Improved health outcomes and / or reduced health inequalities
5. Something about individual circumstances: (1) young, in employment, with reasonable or good qualifications; (2) older, retired, with strong social ties and networks.	Something about volunteering: (1) provides opportunities for the young and skilled to gain experience and boost their social and employment networks; (2) opportunities to take on prominent roles in the community, boosting existing ties and networks.	Health outcomes and health inequalities remain the same, or worsen, as all the benefits are felt by individuals who would have been able to access these kinds of opportunity if the Games had not taken place.
6. Something about the local community: high levels of affluence	Something about volunteering: communities with strong networks able to use their resources most effectively to benefit from the Games legacy.	Health outcomes and health inequalities remain the same, or worsen as deprived communities are unable to compete with their more affluent counterparts.
7. Something about the local community: strong ties and networks, and good access to resources regardless of levels of affluence or deprivation.	Something about volunteering: opportunities to build on existing resources and networks, improving community life and enabling citizen engagement with ongoing community improvement projects.	Health outcomes improve but health inequalities worsen as affluent communities are better able to build on the opportunities offered by Games volunteering than deprived communities.
8. Something about individual circumstances: strong ties and networks, and good access to resources regardless of levels of affluence or deprivation.	Something about volunteering: opportunities to build on existing resources and networks, improving community life and enabling engagement with ongoing community improvement projects.	Health outcomes improve but health inequalities worsen. People from all backgrounds are able to participate and potentially improve their health; inequalities worsen as more affluent populations are better able to continue building on existing resources in the post-event period.

The interviews revealed an emerging disconnect between the aspirations for the programme laid out in the legacy documents and the reality of programme implementation. The majority of respondents did not view the improvement of

health outcomes or the reduction of health inequalities as primary outcome measures; instead, impacts on health were viewed as secondary to the promotion of active citizenship and the provision of a successful event. Following the logic that *"people who are engaged are healthier in general"* (Interviewee 1), the assumption was that health outcomes and inequalities would automatically be impacted upon as individuals and communities became more engaged with each other, building stronger links and networks and facilitating better access to resources. Only one respondent raised the concern that this approach was likely to be problematic in the context of relative inequality, where individuals who would need more support to be able to participate were unlikely to get it. This respondent felt that it was important that the programme should *"engage people on their own terms"* and give them *"the wherewithal to identify what they can offer and what they can contribute as well as what they can receive and how they can benefit"* (Interviewee 4). The stakeholder respondents identified several obstacles to this type of engagement, many of which arose in the recruitment process itself; it was felt that people from deprived backgrounds with low levels of literacy, whose first language was not English or who lacked basic IT skills would find it more difficult to volunteer for the Games than their more affluent counterparts, regardless of the contribution to the event they might be able to make. These obstacles carried over beyond the recruitment process; respondents identified potential problems for the less affluent in terms of lacking the resources to commit to the eight days required of volunteers, and potential financial issues in being able to afford to travel to training sessions. Although funding to support the travelling expenses of the less well-off had been made available, this would not be available until the event was underway, and would not include accommodation expenses for volunteers coming from outwith the city.

The interview respondents also described a model of volunteering which did not appear to tally with the aspirational model set out in the legacy documents (Scottish Government, 2008; Glasgow City Council, 2008), and introduced a fourth potential explanatory theory to the review. The stakeholders interviewed were clear that the programme would offer the chance for participants to improve their employability skills, regardless of their pre-existing level of skills and experience. The reality, however, was a much more hierarchical, skills-dependent model where volunteers who already had the skills for particular roles were favoured in the

selection process. As **Figure 14** illustrated, individuals who lacked the specific skills for particular roles were recruited into the 'lower' tiers of the programme; although this gave people the chance to grow their social networks and meet others from different communities, it was unlikely to have a tangible impact on their employability skills. **Table 6** illustrates how the stakeholder perspectives influenced the early model, by substituting their input on contexts and mechanisms for the theories gleaned from the scoping search of the legacy documents and the literature (illustrated in **Tables 4** and **5**). The primary outcome of interest for the stakeholders interviewed was the promotion of community involvement as a means to promote the accumulation of prominent social roles, community engagement and asset building as drivers of both individual and community improvement. Impacts on health outcomes were viewed by the stakeholder sample as an inevitable positive outcome of involvement in the Games volunteer programme – that is, that by taking part in the programme, volunteers would automatically become much healthier. There was, however, no explicit focus on health inequalities from this group, reinforcing the emerging disconnect between the reality of programme implementation and the legacy aspirations, and health policy objectives.

Table 6: Stakeholder views of potential contexts, mechanisms and outcomes.
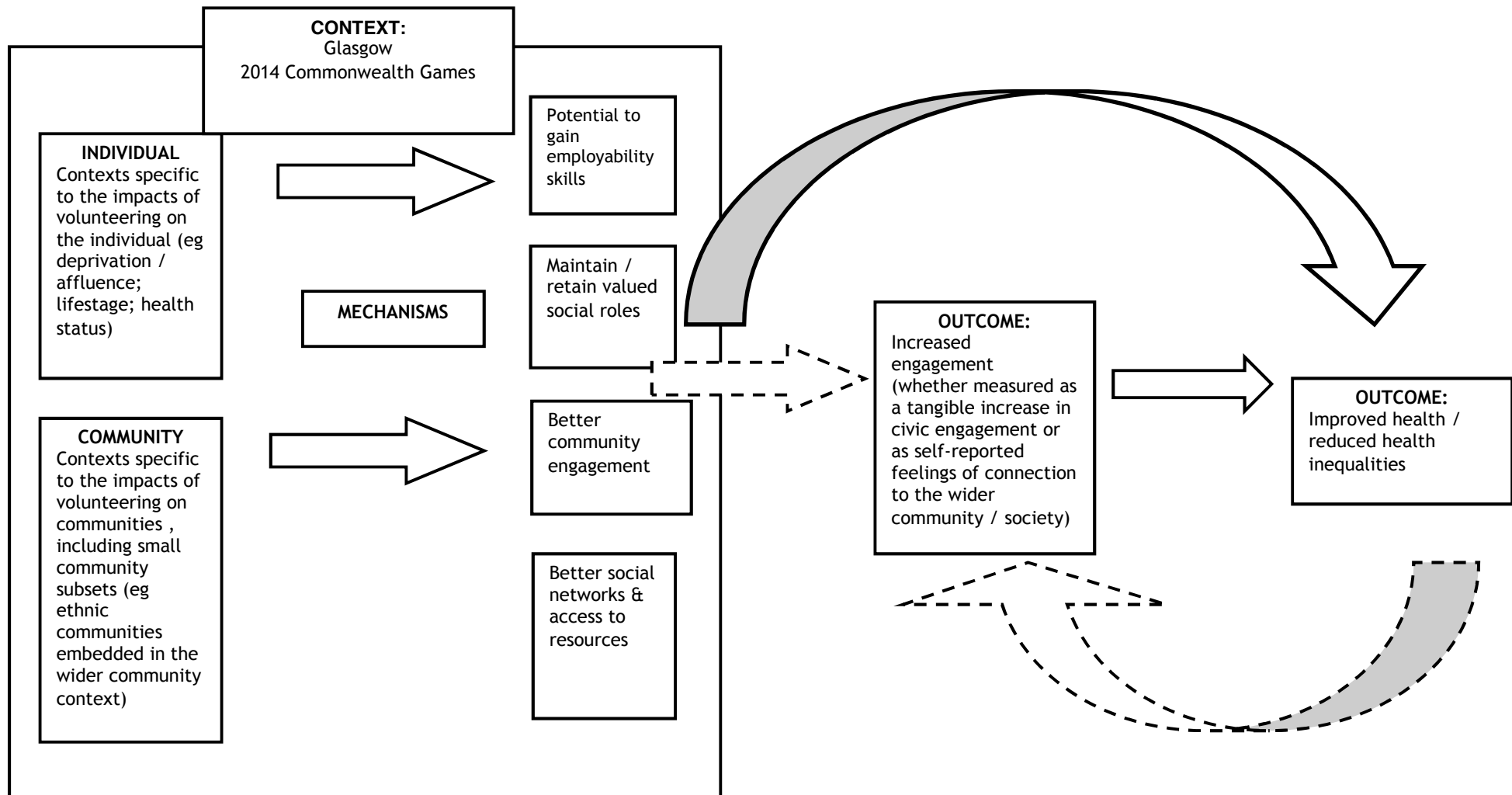
CONTEXT +	MECHANISM =	OUTCOME
1. Something about Glasgow: large proportion of population living in deprivation.	Something about volunteering: provides opportunities for people to take the initiative in improving their lives and communities.	Greater sense of citizenship within communities and the wider city; health outcomes likely to improve as a result of people being more engaged.
2. Something about the 2014 Games: a prestigious event with the potential to benefit the host population.	Something about volunteering: provides opportunities for people to become more engaged with their communities and with the city as a whole.	Greater sense of citizenship within communities and the wider city; health outcomes likely to improve as a result of people being more engaged.

CONTEXT +	MECHANISM =	OUTCOME
3. Something about individual circumstances: (1)young, unemployed, few qualifications; (2) older, retired, adjusting to new pace of life.	Something about Volunteering: (1) opportunities to become more engaged with the wider community; (2) no specific focus on older adults – emphasis is on benefiting the young unemployed.	Young, unemployed people become more engaged with the wider community, indirectly benefiting health; although no specific focus on older adults, same outcome of more active, engaged citizens is envisaged, with concomitant positive health impacts.
4. Something about the local community: high level of deprivation.	Something about volunteering: provides opportunities to become increase citizen engagement and boost social capital (although no specific or disproportionate targeting of deprived communities at the recruitment stage)	Community level health outcomes will improve as communities work better together, promoting bonds and inclusion and improving available resources and access to them.
5. Something about individual circumstances: (1) young, in employment, with reasonable or good qualifications; (2) older, retired, with strong social ties and networks.	Something about volunteering: (1) provides opportunities for the young and skilled to gain experience and boost their social and employment networks; (2) opportunities to take on prominent roles in the community, boosting existing ties and networks.	Health outcomes for these groups will improve as individuals become more engaged and motivated to continue with that engagement; likely that this will cause health inequalities to worsen, although no explicit focus on this by the stakeholders interviewed.
6. Something about the local community: high levels of affluence	Something about volunteering: communities with strong networks able to use their resources most effectively to benefit from the Games legacy.	Health outcomes for these groups will improve as communities become more engaged and motivated to continue that engagement; likely that this will cause health inequalities to worsen, although no explicit focus on this by the stakeholders interviewed.
7. Something about the local community: strong ties and networks, and good access to resources regardless of levels of affluence or deprivation.	Something about volunteering: opportunities to build on existing resources and networks, improving community life and enabling citizen engagement with ongoing community improvement projects.	Health outcomes for these groups likely to improve; likely that this will cause health inequalities to worsen, although no explicit focus on this by the stakeholders interviewed.
8. Something about individual circumstances: strong ties and networks, and good access to resources regardless of levels of affluence or deprivation.	Something about volunteering: opportunities to build on existing resources and networks, improving community life and enabling citizen engagement with ongoing community improvement projects.	Health outcomes for these groups likely to improve; likely that this will cause health inequalities to worsen, although no explicit focus on this by the stakeholders interviewed.

4.7 Preparing to move forward

This chapter set out to describe the initial stages of a realist review looking at the place and utility of volunteering in achieving the health outcome-based legacy ambitions of the 2014 Commonwealth Games. Over the course of the chapter, theories about how volunteering was expected to work in the context of Glasgow's socio-economic sub-groups have been uncovered and refined, taking account of the stakeholder view of improved engagement with the wider community as an important step in the improvement of population level health outcomes in the city, and potentially an outcome of interest in its own right. The next phase of the review, which will be described and discussed in **Chapter 5**, will focus on the methods used to interrogate the model of the Games volunteer programme which has been built and refined over the course of this chapter (and is illustrated in **Figure 15**). The discussion will focus on the search for credible evidence to confirm or refute the constituent parts of the model in order to ascertain the likelihood that the Games volunteer programme would achieve the anticipated health benefits. A full critique of the evidence and its relationship to the programme theories will be undertaken in **Chapters 6** and **7**.

Figure 15: potential contexts, mechanisms and outcomes of Games volunteering.

CONTEXT:
Glasgow
2014 Commonwealth Games

INDIVIDUAL
Contexts specific to the impacts of volunteering on the individual (eg deprivation / affluence; lifestage; health status)

MECHANISMS

COMMUNITY
Contexts specific to the impacts of volunteering on communities , including small community subsets (eg ethnic communities embedded in the wider community context)

Potential to gain employability skills

Maintain / retain valued social roles

Better community engagement

Better social networks & access to resources

OUTCOME:
Increased engagement (whether measured as a tangible increase in civic engagement or as self-reported feelings of connection to the wider community / society)

OUTCOME:
Improved health / reduced health inequalities

The diagram shows the expansion of the number of theories to four, with the inclusion of employability skills. The dotted arrows represent the stakeholder interest in community engagement as an important step on the road to improved population-level health outcomes.

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Chapter 5

Methods and Findings II: testing the model

5.1 Introduction

Chapter 4 set out the preliminary stages in considering *if, how and in what contexts* the planned approaches to volunteering as part of the 2014 Commonwealth Games were likely to impact on the health of different socio-economic subgroups across the population of Glasgow. Throughout, the emphasis was on building a plausible model of the Games volunteer programme, and its potential impacts, for the review to test and (where necessary) modify. Taking on board the findings of an analysis of the legacy documents, a brief scoping search and the perspectives of key stakeholders, the chapter concluded that health impacts were one of two outcomes of interest for the programme. As **Figure 15** illustrated, for the stakeholders, engendering a strong sense of community engagement was the primary focus of the programme, and one which was most likely to lead to long term health outcome impacts. As the contexts and mechanisms of volunteering began to emerge and the model was refined, it became clear that an explicit focus on health inequalities reduction – which tied the legacy documents (Scottish Government, 2008; Glasgow City Council, 2008) to over-arching Scottish Government health policy (Scottish Government, 2008) – was absent from the key stakeholder perspective. The diagram illustrated the complex nature of the relationship between community engagement and health outcomes, and indicated the possibility of a feedback loop inherent in the relationship between the two concepts (illustrated by the curved, dotted arrow in the diagram). This suggested that it was likely to be difficult to unpick which programme outcomes were expected to improve population level health outcomes, and which were expected to mitigate the impact of health inequalities.

The next step for the review was to interrogate the model of volunteer programmes defined in **Chapter 4** more closely, and to amass evidence from other programmes to confirm, refute or modify the theory that the Games volunteer programme, operating in different socio-economic environments in

Glasgow, was likely to precipitate a positive impact on health inequalities and by what mechanisms. The purpose of this chapter will be to describe the evidence gathering process, including the search strategy the inclusion and exclusion criteria for papers and how included papers were quality appraised.

5.2 Setting out the search strategy

This stage of the review, described by Pawson (2006, p84) as *"…in some senses the search proper"*, is where the focus shifts from *"browsing to shape up ideas"* (ibid) to *"…delving in order to track down apposite evidence on the selected theories from a range of primary studies…"* (ibid, n.d.). The rationale for this search was to be able to interrogate the model of how the programme is projected to work (as illustrated in **Figure 15** in Chapter 4) by seeking out evidence from primary research which will either confirm, refute or modify the programme theories (ibid).

The model suggests that, in order to successfully generate positive impacts on health outcomes and / or reductions in health inequalities, volunteers will need to be presented with compelling opportunities to gain employability skills, gain, retain and / or maintain a positive role in society, engage more fully with their communities and improve and maintain good social networks and access to resources. In order to find primary studies to test these theories, a search of the following academic databases was carried out between July and September 2013: OVID, ProQUEST Academic (including ASSIA (Applied Social Sciences Index and Abstracts)), EBSCOHost (including Business Source Premier, Chicano Database, CINAHL, EconLit, MEDLINE, psycARTICLES, Psychology & Behavioural Sciences Collection, psycINFO and SocINDEX), PUBMED and Web of Knowledge. A search of the grey literature was conducted during the same period using Open Grey, the Joseph Rowntree Foundation database, the King's Fund publications database and ProQUEST Dissertations and Theses. An attempt was also made to run the different search strands using Google Scholar; however, due to the limited functionality of the interface this proved to be a less than satisfactory endeavour. The removal (by Google) of the 'search within results' function meant that attempts to alter the syntax in order to fine tune the search resulted in the number of papers found growing (rather than reducing) exponentially,

with approximately 20,000 hits returned for each stage of each strand. A check of the first twenty pages of each set of returns revealed a high degree of duplication of papers found in more traditional academic databases; as such, it was felt that the Google Scholar search added very little to the pool of available evidence and the attempt was abandoned.

There was no restriction placed on the publication date of studies, although the language of publication was restricted to English as the researcher had no access to translation facilities. The search was initially piloted using the phrase "program* participa*" to attempt to find papers dealing with programme participation or programme participants from any type of social programme. However, this returned consistently low numbers of papers, which was unexpected given the indications from the scoping search that a wide range of primary research was available. The principal search term was subsequently changed to "volunteer* program*", which returned more encouraging results across all the databases searched, and the decision was taken to leave this as the primary search term.

The following sections will describe the different stages of the search, clarifying how papers were excluded at each stage before moving on to describe the quality appraisal process outlining how the final selection of papers was assessed for relevance and rigour. The assessment of relevance represented the final opportunity to exclude papers from the review; checking the remaining studies for rigour formed part of the data extraction process by focusing on the elements of the studies which had the potential to contribute meaningfully to the review and making judgements about whether these elements were sufficiently robust as to be able to support the inferences which would be made from them.

5.2.1 Conducting the search

Pawson, both alone and with collaborators (Pawson & Tilley, 1997; Pawson, 2002; Pawson & Bellamy, 2006; Pawson, 2006), stresses that, for a realist synthesis, the unit of analysis is the programme *theory* and not the programme itself or its outcome measures. The principal drawback of this is that it creates

a potentially endless pool of primary research, across numerous academic and policy domains, which might make use of the same – or similar – theories (Pawson, 2006, p.36). However, it is not the number of papers returned by the search which creates the complexity – large numbers of primary studies would be expected by reviewers conducting, for example, a Cochrane style systematic review, or a narrative review. The complexity which arises in a realist review is that the tools to narrow down the number of relative papers are more fluid and flexible than those available to reviewers working in other methodological areas; realist reviewers cannot, for example, restrict the search to clinical trials or to papers which included a particular outcome or took place in particular settings. When the focus is on the underlying programme theory, the reviewer is not looking for primary research dealing with just one type of intervention, but for primary research which employs the same, or similar, *theories* in any type of intervention. For example, in a Cochrane or Campbell review, the focus would be on one specific treatment or intervention and reviewers would be looking for primary research dealing *only* with that treatment or intervention (whether it had been effective, for how many patients, whether side effects had been reported etc. (Jenkinson et al., 2013)). In a realist review, however, the focus shifts to the underlying theories about *why* a particular treatment or intervention has (or has not) been effective. The search is not about whether a particular programme has 'worked', but about how the theories operate – and this takes into account the idea that successful theories are likely to be found in all kinds of programmes, not just the particular programme of interest to the review.

The task at this stage is thus to cast a wide net in searching for evidence (Pawson 2006), and Pawson does acknowledge that it is important to be pragmatic and to accept that it will not be possible to collate every piece of available evidence pertaining to every aspect of the theory (ibid). If the theories underpinning the programme of interest to the review can be utilised in any type of programme, in any circumstances, deciding when saturation point has been reached becomes a matter of nuanced judgement, because any paper on any topic is potentially relevant if it explores the theories of interest to the review. In order to refine the search to minimise the risk of excluding potentially useful studies, the search strategy is of key importance in a realist

review (Pawson & Tilley, 1997; Pawson, 2002; Pawson & Bellamy, 2006; Pawson, 2006). As **Figure 11** (Chapter 4) showed, and Pawson emphasises heavily (2002; 2006; 2006), the literature search for a realist review comprises a number of strands which must be worked through in order to arrive at a manageable number of rigorous and relevant primary studies which speak to the utility of the theory in explaining how and why the programme has produced particular outcomes. These strands are described as a way of sharpening the theory (Pawson, 2006), enabling the reviewer to piece together what has worked, why it has worked, for whom and under what circumstances. For this review, the literature search was divided into four separate strands, each corresponding to the four theories about volunteer programmes which had already been identified[15]:

1. That they have the potential to provide participants with increased employability skills.
2. That they allow participants to maintain and / or retain valued social roles.
3. That they encourage greater engagement between individuals and their wider communities (and between community leaders and the citizens they represent.)
4. That they give participants improved access to social networks and resources.

The search was limited to volunteer programmes rather than all types of social programme for reasons of pragmatism: the scoping search had already indicated that a sizeable volunteering literature was available across a number of academic and policy domains, and as such it was felt that nothing would be lost to the review by focusing on how the programme theories operated in programmes with a specific voluntary component. The UN (United Nations Volunteers Programme, 2000) definition of volunteering was adopted[16], and the activity had to be one to which participants had made a regular time commitment, or a time limited volunteering programme which participants attended regularly although no restriction was placed on how frequent this time

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[15] Illustrated in Figure 16
[16] The UN describes volunteering as an unpaid activity where someone gives their time to help a not-for-profit organisation or an individual who they are not related to.

commitment should be (for example, one hour a week or one hour per month). Papers were therefore excluded where the volunteer activity under research took place within the family, was unplanned or took place overseas (for example, as part of Voluntary Services Overseas, the Red Cross or Medecins Sans Frontieres ongoing work, or as part of a holiday) in order to focus the search on planned, formal volunteering in the context of a specific programme or activity.

The search was then further refined to capture papers which considered the impact of volunteer programmes on health outcomes and / or health inequalities and/or community engagement. Where the number of papers returned by the baseline search was more than twenty, refinement of the results was done by adjusting the search terms to exclude papers which did not discuss how programme mechanisms operated to bring about the outcomes of interest. Where the number of papers returned by the baseline search was less than twenty, this process was done manually, checking the abstracts (and, where this was inconclusive, the content of the paper) for relevance to the topic of interest. Across all four theories, the baseline searches returned a total of 3,524 papers. Of these, 756 papers discussed the relationship between the theory and health outcomes, 494 discussed the relationship between the theory and levels and / or feelings of citizenship, while only 28 papers discussed the relationship between the theories and health inequalities.

The 3,524 papers were then screened for relevance to the review question (described in **Section 5.3**), after which1,278 potentially relevant papers remained. It was noted that the search results seemed to be heavily weighted towards papers dealing with clinical treatment outcomes; careful checking of the abstracts revealed a significant number of these papers were, in fact, discussing the effects on health outcomes of clinical treatments and interventions rather than social programmes. In order to exclude these papers, the search syntax was amended to exclude papers where the abstract and main body of the text referred to clinical, medical or hospital treatment, or to volunteers who had participated in clinical trials of a specific treatment or intervention rather than in social programmes. Papers were also excluded where they were found to be duplicated as a result of having appeared in the search results from more than one database. These further amendments considerably

reduced the pool of potentially useful primary research, leaving a total of 108 papers to be read in full and assessed in more depth for relevance. **Figure 16** (below) illustrates how each refinement focused the search by rejecting papers from the baseline searches which did not consider the health and engagement outcomes of interest to this review, or which dealt with volunteer activity in clinical rather than social settings. It was noted that no papers were found which focused explicitly on links between the four theories and health inequalities.

Figure 16: the literature search process.

STAGE 1

Initial basket of papers potentially relevant to the review.

n = 1278

STAGE 2

Excluded: papers containing the terms "medical treatment" or "clinical treatment" or "random* control* trial" or "hospital treatment" or "RCT" or "trial intervention". (n = 1165).

Remaining papers: n = 113

STAGE 3a

Focusing on papers which consider how any of the four theories impact on health outcomes:

Employability skills: n = 2
Social role / social capital : n = 36
Community engagement: n = 28
Asset building: n = 0

Total papers dealing with health outcomes: n = 66

STAGE 3b

Focusing on papers which consider how any of the four theories impact on health inequalities:

Employability skills: n = 0
Social role retention: n = 0
Community engagement: n = 0
Asset building: n = 0

Total papers dealing with health inequalities: n = 0

STAGE 3c

Focusing on papers which consider how any of the four theories impact on levels of community engagement:

Employability skills: n = 4
Social role retention: n = 4
Community engagement: n = 26
Asset building: n = 13

Total papers dealing with community engagement: n = 47

STAGE 4

Excluded: papers which had been duplicated as a result of appearing in the search results for more than one database: n = 5

Remaining papers: n = 108

5.3 Building the quality appraisal process: assessing relevance

The centrality of theory to the realist approach means that final decisions about the inclusion and exclusion of primary studies come to rest on the concept of *relevance* – does the study contribute to the building, testing or modification of the theory or theories under investigation (Pawson, 2006; Rycroft-Malone et al., 2012; Wong et al., 2013)? How the quality of the primary research is incorporated into the synthesis is described in the next section.

For this review, the first step in assessing the relevance of the final selection of 108 primary studies was to give careful consideration to the potential interactions of context and mechanism which might produce the health and / or engagement outcomes outlined in the legacy documentation (Glasgow City Council, 2008; Scottish Government, 2008).

The four mechanisms of the 2014 Games volunteering programme identified in **Figure 15** (the potential to gain employability skills, the potential to maintain or retain social roles, the potential to improve community engagement and the potential to build better, stronger social networks) gave rise to nine potential outcomes which might occur in any combination, depending on the context in which the programme was embedded. Health outcomes, health inequalities and levels of community engagement could either improve, remain static or degenerate depending on the ways in which participants responded to the programme. Taking the example of the employability skills mechanism, in deprived areas, where employability skills are likely to be low, the potential to improve population health outcomes is greatest. If individuals living in the greatest deprivation are given the skills to gain paid employment, they then have the potential to improve their standard of living, afford more nutritious food and take part in social activities which their more affluent counterparts take for granted, all of which have the potential to positively influence health outcomes both for the individuals concerned *and* their communities, leading to an improvement in health outcomes for the population as a whole (Bambra et al., 2009; Bambra, 2010; Krieger, 2011). In communities where there is a mix of deprivation and affluence, the likelihood is that health outcomes will, at best,

remain the same at population level assuming that everyone within the community is equally likely to volunteer. Situating the programme in more affluent communities raises the potential for population level health outcomes to worsen given that opportunity costs for participation among the most deprived are likely to outweigh their potential gains. This is likely to result in those most in need of access to training and work experience being excluded in favour of those who already possess the requisite skills (Bambra et al., 2009; Bambra, 2010; Krieger, 2011).

A similar picture emerged for the ways in which the other mechanisms of interest interacted with the context of the programme: health inequalities, for example, were also more likely to be positively impacted where the programme was explicitly aimed at engaging deprived communities, or deprived individuals (Black, 1993; Townsend et al., 1992; Lynch et al., 1997; Cattell, 2001; Wilson, 2000) than with their more affluent counterparts who were generally expected to have better access to resources, higher levels of engagement and stronger social networks (Black, 1993; Townsend et al., 1992; Lynch et al., 1997; Marmot, 2005). The papers identified by the literature search would thus have to be able to demonstrate clearly that the outcomes on which they were reporting had arisen as a direct result of the way(s) in which the programme mechanisms had operated within their surrounding contexts.

To facilitate the assessment process, the following relevance criteria were developed; each study had to be able to satisfy at least one in order to be considered as having relevance to the review:

1. The study needed to have something to say about how one (or more) of the mechanisms of interest were operationalised.
2. The study needed to demonstrate the level at which the programme under investigation impacted, whether this was individual level, community level, or at a wider level of abstraction – for example, a particular socioeconomic group, geographical area or organizational group.
3. The study needed to demonstrate explicitly the interaction(s) of context and mechanism to produce the outcomes being investigated.

An analysis framework was then developed in order to track the process and provide a record of the decisions made about each paper. The full process of the relevance analysis is detailed in **Appendix 2** (Volume 2, page 19). Thirty-six papers were excluded at this stage because, they did not meet any of the relevance criteria. Eight papers, which did not satisfy any of the relevance criteria but which nevertheless had the potential to add something to the process of explaining the programme theories, were categorized as 'borderline'. These papers were held to one side, to be consulted again as the review progressed and their potential contribution became clearer.

The final stage of the quality appraisal process for this review was to assess the 64 relevant papers through the lens of rigour, or trustworthiness, before beginning the synthesis of the evidence which they provided. Unlike the assessment of relevance, checking the studies for rigour was not a process designed to eliminate papers. Rather, this part of the process allowed the studies to be mined for the 'fragments of evidence' which would be used in the synthesis, and those fragments to be annotated with any necessary caveats about the quality of the study from which they had been taken. The description of this process forms the subject of the next section, which will discuss what is meant by 'assessing rigour' in the context of systematic reviews in general, and realist reviews in particular, before going on to describe how this was done for this review.

5.4 Building the quality appraisal process: assessing rigour

Assessing the rigour (sometimes referred to as the 'trustworthiness') of primary research for systematic reviews is a complex task, regardless of the methodology underpinning the review. Generally, however, the process of assessing rigour follows relatively strict guidelines to ensure that the evidence contained within the primary studies has been obtained in such a way that the conclusions based upon it can be trusted. In non-realist reviews, the evolution of understanding is often aided by the use of checklists and standardized questions, which allow the reviewer to subject all the studies to the same quality assessment and make a judgement about whether the study has been conducted sufficiently well that

the results stand up to close scrutiny. Different criteria are suggested for interrogating qualitative and quantitative studies, although it should be noted that checklists are not always adopted by narrative reviewers; in these cases, it is not uncommon for the quality judgement to be based on a consideration of whether the authors of the primary study have been sufficiently true to the tenets of the methodology used to conduct the study (Popay, 2005; Petticrew & Roberts, 2006).

Greenhalgh (2001) suggests, for example, that readers of scientific or medical primary research should ask themselves a short list of questions before deciding whether the results in front of them are reliable, taking into consideration any evidence of bias, representativeness or generalisability of the study population and who might be missing from the study population. In the case of randomised controlled trials (RCTs), Greenhalgh suggests that reviewers should also consider whether the study was properly blinded and whether preliminary statistical questions have been addressed – for example, how large a sample of the population was studied, how long follow up lasted and how complete it was. This list is largely in tune with the suggestions of Petticrew and Roberts (2006), who go on to acknowledge the dangers of reviewers indiscriminately applying the restrictive quality assessment criteria of RCTs to all types of research. Checklists are not, they assert *"a shortcut to ensuring quality in qualitative research, but when using a research method such as systematic reviewing… provide one means of ensuring that included studies contain sufficient information about the sample, the question, the data analysis and so on"* (ibid, p153). That said, they do provide examples of critical appraisal checklists developed for use with qualitative research, and which ask different questions about study quality of a research paradigm other than the RCT. These are not, of course, the only checklists available; other good examples include those provided by the Critical Appraisal Skills Programme (CASP; http://www.casp.net) and those developed by the University of Glasgow's Department of General Practice and Primary Care, which provide clinicians with the tools to ask the appropriate questions of research from different methodological paradigms (University of Glasgow, 2012).

Petticrew and Roberts' (2006) suggested criteria notwithstanding, however, the concept of applying quality appraisal criteria to qualitative research is, as

Chapter 1 indicated, a contested issue. Views on the matter vary across a wide spectrum, from those who feel that QA criteria are entirely inappropriate for the paradigm (Dixon-Woods et al., 2004) to those who argue that such criteria are the only way reviewers can be sure of the reliability of the evidence on which they are basing their investigations (Petticrew & Roberts, 2006). Dixon-Woods and colleagues (2004), pinpoint the problems of producing quality appraisal guidance for qualitative research and suggest that the tendency to view qualitative research as a unified field with common practices and methods of interpretation is partly to blame. Given the multiplicity of epistemological and ontological standpoints inherent in the qualitative paradigm, gaining consensus on common quality indicators is a huge task, not least because there are over one hundred different variations on methods of qualitative inquiry, often with little or no common ground (Oakley, 2000; Dixon-Woods et al., 2004). Oakley (2000) also gives detailed consideration to the issue of judging the trustworthiness of qualitative research.

Agreeing that there are myriad ways of assessing the quality of qualitative research (assuming the reviewer's ontological standpoint underpins the necessity of such an assessment taking place at all), she points out that many of the criteria commonly used to make these judgements about qualitative research are, in fact, adaptations of those used to assess quantitative work and that *"the issues each are intended to address are the same"* (Oakley, 2000, p.62). She goes on to argue that *"…the distinguishing mark of all 'good' research is the awareness and acknowledgement or error, and that what flows from this is the necessity of establishing procedures which will minimize the effect such errors may have on what counts as knowledge"* (ibid, p.72). This point is picked up by Petticrew and Roberts (2006), who also acknowledge that *"study quality means different things to different people working in different disciplines"* (p.126), and suggest that the unifying factor in the debate about what constitutes quality across methodologies and paradigms is the necessity of ensuring that conclusions reached by a systematic review are based on solid primary research where the authors have done their best to minimise errors (such as selection bias or observer bias, for example) and / or explicitly acknowledged the potential impacts of such errors on the study findings. Assessing study quality is, they suggest, crucial in order to identify *"…errors that are large enough to affect*

how the result of the study would be interpreted" (Petticrew & Roberts, 2006, p.128). **Figure 17** (below) illustrates some of the common suggestions for ways of assessing the quality of both quantitative and qualitative primary research; although these lists are not exhaustive, they do illustrate some of the key differences between quality assessment in each of the two paradigms, with the suggested qualitative criteria tending to focus more on explicitness of explanation, completeness of description and the suitability of the method chosen for answering the research question. The quantitative criteria, in comparison, tend towards ensuring representativeness, minimisation of bias and the accuracy and completeness of the numerical analysis.

Figure 17: differences in quality appraisal methods for quantitative and qualitative primary research.

QUALITY APPRAISAL FOR NON-REALIST REVIEWS USING QUANTITATIVE PRIMARY RESEARCH	QUALITY APPRAISAL FOR NON-REALIST REVIEWS USING QUALITATIVE PRIMARY RESEARCH
1. Is the research original (or does it add to the existing knowledge base)? 2. Who is the study about (is it representative, was it recruited fairly, who was excluded)? 3. Was the study designed sensibly (what is being compared, what outcomes are measured and how)? 4. Did the authors strive to avoid or minimise systematic bias? 5. Was the study blind? 6. Were preliminary statistical questions addressed? 7. Do the numbers stack up? 8. Was the study influenced by external events which could affect reporting and interpretation of results? *SOURCES: Greenhalgh (2001) and Petticrew & Roberts (2006).*	1. Are the research questions clear? 2. Are the research questions suited to qualitative enquiry? 3. Are the sampling, data collection and analysis methods all clearly described? 4. Is there sufficient evidence to support the claims being made? 5. Are the data, interpretations and conclusions clearly integrated? 6. Does the paper make a useful contribution to the knowledge base? 7. Has consideration been given to the transferability of findings? 8. Has the author's conceptual and / or theoretical standpoint been explicitly acknowledged? *SOURCES:* Dixon-Woods M, Shaw RL, Agarwal S, Smith JA. 'The problem of appraising qualitative research.' *Quality & Safety in Health Care* 2004 June 1;13(3):223-225 and Oakley (2000).

Assessing the rigour of primary research for a realist review, however, is at once simpler and more complex. Simpler, because Pawson suggests that the traditional reliance on checklists and evidence hierarchies is cumbersome and

inconvenient (where the primary research comes from a wide range of disparate sources) - and largely irrelevant when the focus of the synthesis is not the papers as discrete entities, but the *"fragments of evidence"* (2006) that they contain. More complex because, in a realist review, *"the guiding principle is… that the appraisal criteria should be subordinate to the usage to which the primary study is put"* (ibid, p.87). What this means, he explains, is that the unit of analysis for the synthesis is shifted subtly, from the whole primary study to the (potentially useful) fragments of evidence contained within it. Each evidentiary fragment needs to be considered on its own merits regardless of the methodological shortcomings of the study from whence it came, with the reviewer being invited to consider whether *"the primary subset of evidence support[s] the secondary inference"* [ibid]; to paraphrase, overall flaws in a study might not be relevant so long as the data being extracted for the synthesis are arrived at robustly.

Pawson's statement, however, does give rise to some degree of opacity when trying to interpret his conceptualisation of the quality appraisal process. His use of the word *"subordinate"* could be interpreted as advocating the abandonment of quality assessment in realist reviews when this is not, in fact, the case; rigour is just as important in a realist review as in any other, but the difference here is the stage of the review at which it is assessed and the techniques which are utilised in order to do so. What Pawson advocates is that the only way to explore the merits of the pieces of evidence contributed by each study is to do so at the moment of substantive analysis, with judgements on quality being made *"as each study, from first to last, is written into the synthesis"* (2006, p.90). Rather than undertaking quality assessment as a discrete activity within the review, it becomes part of the synthesis process; each piece of evidence is thus assessed on its merits at the point at which it is incorporated into the review. This in turn allows the reviewer a more immediate opportunity both to comment on the contribution which the evidence makes to the theory testing process and to foreground any caveats about the robustness of the research on which the evidence was based. This helps to bring some clarity to the abstruse explanations of quality appraisal in realist reviews, and begins to shed some light on *why* Pawson feels checklists are unhelpful. What remains unclear, however, is the processes reviewers should use to assess evidence quality while remaining

within the boundaries of the realist technique. **Figure 18** (below) illustrates the inherent difficulty of the realist approach to quality appraisal, contrasting it with the types of checklist and standardised question commonly applied to both quantitative and qualitative primary research in, for example, meta-analytic or narrative reviews.

Figure 18: Differences in appraisal methods for realist reviews.

QUALITY APPRAISAL FOR NON-REALIST REVIEWS USING QUANTITATIVE PRIMARY RESEARCH	QUALITY APPRAISAL FOR NON-REALIST REVIEWS USING QUALITATIVE PRIMARY RESEARCH	QUALITY APPRAISAL FOR REALIST REVIEWS
1. Is the research original (or does it add to the existing knowledge base)?	1. Are the research questions clear?	1. Can the primary research assist with clarification of the specific explanatory challenge faced by the review?
2. Who is the study about (is it representative, was it recruited fairly, who was excluded)?	2. Are the research questions suited to qualitative enquiry?	2. Does the evidence cited in the primary research support the inferences taken from it in the review synthesis?
3. Was the study designed sensibly (what is being compared, what outcomes are measured and how)?	3. Are the sampling, data collection and analysis methods all clearly described?	*SOURCE: Pawson (2006)*
4. Did the authors strive to avoid or minimise systematic bias?	4. Is there sufficient evidence to support the claims being made?	
5. Was the study blind?	5. Are the data, interpretations and conclusions clearly integrated?	
6. Were preliminary statistical questions addressed?	6. Does the paper make a useful contribution to the knowledge base?	
7. Do the numbers stack up?	7. Has consideration been given to the transferability of findings?	
8. Was the study influenced by external events which could affect reporting and interpretation of results?	8. Has the author's conceptual and / or theoretical standpoint been explicitly acknowledged?	
SOURCES: Greenhalgh (2001) and Petticrew & Roberts (2006).	*SOURCES:* Dixon-Woods M, Shaw RL, Agarwal S, Smith JA. 'The problem of appraising qualitative research.' *Quality & Safety in Health Care* 2004 June 1;13(3):223-225 and Oakley (2000).	

In order to address this difficulty, the decision was taken to develop a list of criteria specific to this review which would aid the quality appraisal process. The reasons for this were threefold. First, it was a pragmatic decision which would clarify how decisions about primary research quality were made in the context of this review. Second, it was an exercise which helped to focus the researcher's attention on the specific pieces of evidence to be incorporated into the review, and any caveats about their reliability which might need to be appended. Last, it was felt that taking this step would simplify the exercise of trying to describe a non-linear process in a linear way.

Criteria were sought which were either universal in application (Greenhalgh, 2001; Petticrew & Roberts, 2006; University of Glasgow, 2012) or were pertinent to the realist focus on context, mechanism and outcome (Wong et al., 2013), with the intention that, where the quality of the research which had given rise to a particular piece of evidence was poor, this would be made explicit in the synthesis. In total, nine criteria with the potential to facilitate the quality appraisal process were identified:

1. Was the sample representative, and of whom / what?
2. Were steps taken to eliminate, or acknowledge, bias?
3. Was the research design appropriate to the chosen method?
4. Was there sufficient breadth / depth of contextual description?
5. Had the programme mechanisms been explicitly unpacked?
6. Had the underlying programme theory been identified?
7. Were sampling, data collection and analysis well described?
8. Was there sufficient evidence to support the authors' claims?
9. Had the (potential or actual) influence of external events been accounted for?

These criteria were then applied to each of the sixty-four papers which had been assessed as relevant to the review, and the results tabulated for ease of reference. The full analysis is provided in Appendix 3. For each paper, the potential contribution to the review was identified before being subjected to the nine criteria in order to identify any areas where caveats about the reliability of the evidence would need to be applied.

The process of assessing the rigour of the sixty-four papers proved to be useful as a means of highlighting areas where the evidence would need to be signposted as having come from studies which lacked some level of technical description (for example, a number of authors did not explicitly acknowledge their research design, methods or data collection strategies (Newman et al., 1985; Cattan & Hogg, 2011)). The full process is illustrated in **Appendix 3** (Volume 2, page 57).

The task for the evidence synthesis (presented in **Chapter 6**) was then to explore these groupings, looking for commonalities or regularities in how the programme mechanisms functioned across different contexts, and then relating them back to the 2014 volunteer programme and the claims which had been made for its potential legacy successes.

5.5 Conclusion

The purpose of this chapter has been to set out the methods for conducting a realist review, and to describe the ways in which these methods were applied to the current review. The complexity of the realist method has been foregrounded, but in describing the iterative processes of the literature search and the straightforward approach to assessing the quality of the collated primary research (in terms of both relevance and rigour), the inherent logic of the method has also become clearer. By searching more intensively, and considering carefully the relevance of each piece of evidence to the theory to which it is being applied, the unconventional approach to the assessment of rigour makes more sense.

Over the course of **Chapter 4** and **Chapter 5**, papers for inclusion in this review have been selected, checked for relevance to the topic, and assessed for rigour, following the non-linear approaches of the realist technique for each process. This has provided a high degree of confidence that the papers on which the review is based are able to make a positive contribution to the consideration of *whether, how and in what contexts*, the planned approaches to volunteering as

part of the 2014 Games were likely to impact on the health of different socio-economic groups across the population of Glasgow.

Chapter 6

2014 volunteering: providing employability skills and widening social networks?

6.1 Introduction

This chapter begins the process of critically synthesising the literature on each of the four theories identified as underpinning the potential of the Games volunteer programme to impact on the health of different socio-economic sub-groups across the population of Glasgow. The synthesis will also inform the discussion, in a later chapter, around where the Games volunteer programme sits within a wider health policy committed to reducing health inequalities. The four theories were that:

1. Volunteering for the Games would provide participants with means to gain substantive skills which will help them find (and keep) employment.

2. Volunteering for the Games would provide participants with means to widen their social networks, giving them better access to social resources and community support dependent on the social contexts in which they are living.

3. Volunteering for the Games would provide participants with means to maintain and / or retain valued social roles, again depending on their (participants') social contexts.

4. Volunteering for the Games would provide the means to encourage greater engagement between individuals and their wider communities, promoting greater community involvement, depending on community context.

Figure 19: Mechanisms of Games volunteering.
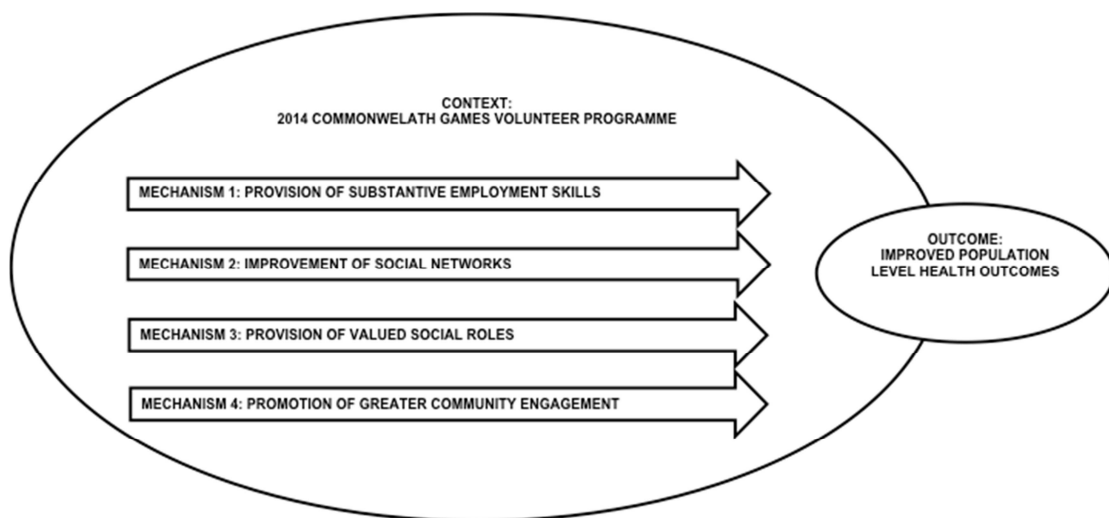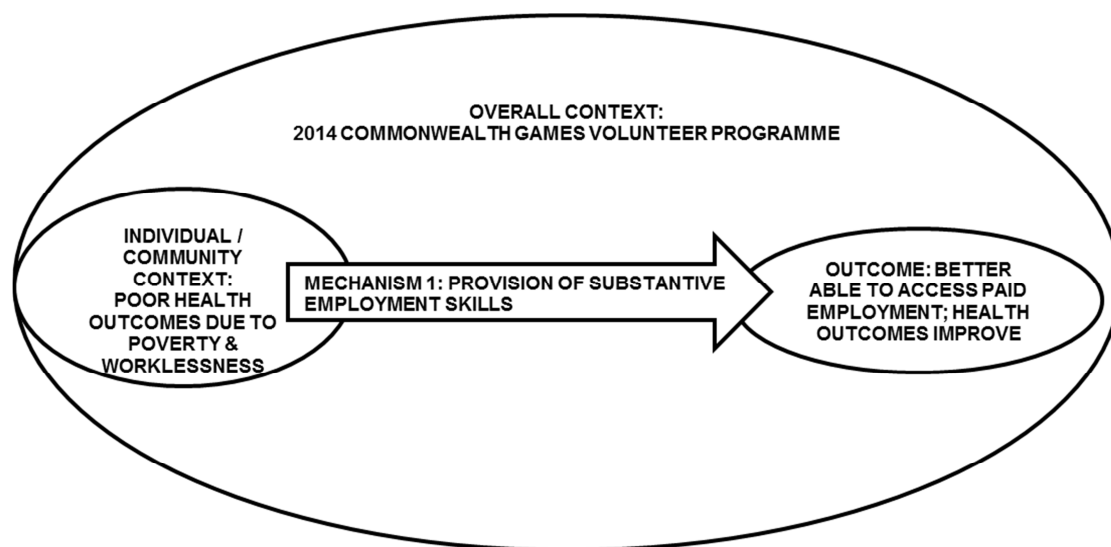
Figure 19 illustrates how, according to the legacy documents, these theories were intended to be operationalised as mechanisms, to bring about improvements in population level health outcomes in the Games period and beyond.

With a substantial amount of evidence to synthesise, the theories about employability skills and widened social networks are discussed here, beginning with an appraisal of the reliability of the evidence for each theory. The theories concerned with social roles and greater community engagement will be explored in the same way in **Chapter 7**. In these two chapters, the focus will be on unpacking which, if any, population groups are likely to accrue health benefits from the operationalisation of these theories as programme mechanisms, how this might happen and in what circumstances. A discussion of how this sits within wider health policy and is likely to impact on health inequalities is presented in **Chapter 8**. To avoid confusion with the realist synthesis references used so far, the papers relating to each of the four theories were given references which tied them to the theory; for example, the employability theory papers were annotated as ET1 – ET6, the social network papers were annotated as SN1 – SN25 and so on.

6.2 Providing employability skills: how reliable is the evidence?

It was theorised, as **Figure 20** illustrates, that the Games volunteer programme would provide participants with a pathway to paid employment, which would then enable them to access a greater range of social resources.

Figure 20: intended outcome of increased employability.

Six studies were identified which dealt with the relationship between volunteering and the provision of employability skills. Of the four UK (ET3, ET4, ET5, ET6), and two US (ET1, ET2) studies, five (ET1, ET2, ET4, ET5 and ET6) employed qualitative and one (ET3) quantitative research designs. ET1 and ET2 utilised a review format to focus critically on commonly held beliefs that volunteering impacts positively on health, anti-social behaviour and occupational achievement; although they did not look in any detail at the potential for different impacts from different types of volunteering, they did acknowledge that *"...not all volunteering is the same"* (ET1, p. 145). Neither paper was explicit about the methods used to conduct the review; however, while ET1 gave considerable detail about the ways in which its contributory studies were conducted, ET2 did not and appeared less robust than the same author's work in the earlier paper. A review format was also utilised by ET4 and ET6, both of which focused explicitly on the potential impacts of volunteering on social life, including its impact on worklessness through the provision of skills

training. As with ET1 and ET2, neither paper was explicit about the methods used to conduct the review; both papers were, however, clear on the mechanisms they were testing which focused on the ways volunteering might boost employability. In both ET4 and ET6, despite the lack of methodological explicitness, the authors' findings were well supported by examples from the literature.

ET3 and ET5 looked at the impact of volunteering on the employment prospects of particular population sub-groups, this time in the form of primary studies rather than evidence reviews. In both cases, methods, sampling and data collection were well described, and potential limitations of the work were acknowledged. ET3, for example, noted that the single outcome measure they used (length of time claiming unemployment benefits) may have limited the generalisability of their findings by masking the more complex impacts of volunteering on the individual.

Based on the quality appraisal criteria identified and described in **Chapter 5**, review papers ET1, 3, 4, 5 and 6 were deemed to be sufficiently robust that the evidence from these papers being incorporated into *this* review would be able to support the inferences being made from them (Pawson, 2006). While the findings detailed in ET2 largely supported those of the other authors, it was less clear how these findings had been arrived at; consequently, the findings from this paper were only referred to where they were supported by the findings from the other papers included in the review.

Table 7 (below) illustrates the breakdown of the six papers, including study type, country of origin and whether each paper satisfied the rigour criteria identified and tested in Chapter 5.

Table 7 Rigour assessment: employability theory.

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
ET1	Wilson, J & Musick, M (1999): "The effects of volunteering on the volunteer" *Law and Contemporary Problems* 62;4:141-168	Qualitative: literature review; methods not made explicit. No detail on sampling or methods of analysis.	USA	**Context**: volunteer lilfeworlds, focusing particularly on sociodemographics – eg age, ethnicity, education. **Mechanism**: improvement of social networks as a factor in accessing employment. **Outcome**: better social networks and better integrated communities.	Lack of clarity around the review methodology and sampling techniques. This detail is, however, included for the individual primary studies consulted. Despite this, evidence fragments from primary studies are well described and well supported. All other rigour criteria are satisfied.
ET2	Wilson, J (2000): "Volunteering" *Annual Review of Sociology* 26:215-240	Qualitative: literature review ;methods not made explicit. No detail on sampling or methods of analysis.	USA	**Context**; organisational. Focus is on volunteering encouraged and supported in school environment. **Mechanism**: promoting higher work aspirations through increased social ties. **Outcome**: greater social ties; engagement carries over to adult life.	Lack of clarity around sampling and methodology; no greater detail given about the included studies. Lack of clarity not balanced by detail about included studies. Less robust than same author's work in ET1. All other rigour criteria are satisfied.
ET3	Hirst, A (2001) *Links Between volunteering and Employability* UK Government Research Brief available at http://www.education.gov.uk	Quantitative: statistical analysis. Detailed information on sampling, data sources and statistical methods.	UK	**Context**: lifeworld circumstances of unemployment benefits claimants. **Mechanism**: increased social ties as a result of volunteering. **Outcome**; small, positive effect for those with most limited social connections at baseline.	Single outcome measure is length of time claiming unemployment benefits. May mask more complex impacts of voluntarism on the individual. Despite this, findings are well supported and well evidenced from the data. All other rigour criteria are satisfied.
ET4	Corden, A & Ellis, A: "Volunteering and employability: exploring the links for incapacity benefits claimants" *Benefits* 40;12:112-118	Qualitative: review of evidence on benefits of voluntarism for incapacity benefits claimants. Clear information on sample; less detail provided around methods used.	UK	**Context**: lifeworld circumstances of incapacity benefits claimants. **Mechanism**: impact on social skills and confidence as a precursor to job applications. **Outcome**: more confident individuals but no evidence to support voluntarism as key to gaining employment.	Lack of explicitness around methods used to conduct the review. Despite this, theories are well supported by evidence from the literature. All other rigour criteria are satisfied.
ET5	Baines, S & Hardill, I (2008): "'At least I can do something': the work of volunteering in a community beset by worklessness" *Social Policy and Society* 7;3:307-317	Qualitative: thematic analysis of focus groups and life history interviews. Rich detail about sample and methods used.	UK	**Context**: lifeworld circumstances of volunteers living in a deprived urban area with high unemployment. **Mechanism**: improved self-confidence and social engagement. **Outcome**: more integrated, engaged community but no evidence to support increased employment as a result of volunteering.	Single case study design limits generalisabilty; authors tend to over-generalise. Despite tendency to over generalise, findings are well evidenced from the data and well supported by wider literature. All other rigour criteria are satisfied.
ET6	Paine A E, McKay S, Moro D:	Qualitative: presented as	UK	**Context**: lifeworld contexts of different	Volunteering question in survey data was narrowly

Table 7 Rigour assessment: employability theory.

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
	Does volunteering improve employability? Evidence from the British Household Panel Survey Third Sector Research Centre, available at http://www/tsrcnews.org.uk	a review of the evidence; unclear whether lit review or more systematic. No detail on sampling or analysis methods.		socio-demographic groups. **Mechanism:** better employment prospects as a result of wider social networks. **Outcome:** better engaged and integrated communities. No evidence of significant impact on employability.	focused, which may have influenced respondents' answers. Limitations explicitly acknowledged. Findings well evidenced and supported by wider literature. All other rigour criteria are satisfied.

6.2.1 Providing employability skills: a mechanism which benefits all volunteers?

In the literature generally, employability is ill defined, with different commentators promoting different facets of the concept depending on their (commentators') purpose. It is variously described as a set of substantive skills necessary to undertake a particular form of employment (Higher Education Academy, 2014), a set of personal skills and attributes necessary to approach work in the right way (University of Edinburgh, 2011) and the ability to get and keep a job (UK Commission for Employment and Skills, 2008). It is the first of these definitions which is embraced by both the Games legacy documents, which suggested that *"volunteers will also gain skills... which they can then use to benefit their work, family and community life"* (Glasgow City Council, 2008, p.9), promising that the volunteer programme would be *"aimed at helping unemployed people or those who have few or no qualifications by providing them with a stepping stone into work..."* (Scottish Government, 2008, p.54). The Scottish Government's *Volunteering Strategy* (2004), also implied that improved employability is a *prima facie* outcome of volunteering for young people by positioning improved opportunities for skills development as a key outcome indicator of the strategy (p. 6) and emphasising that *"volunteering can help provide a route into employment, education or training..."* (p8). *If* the Games volunteer programme imparts substantive work skills training to unemployed individuals, it is possible that they might see their health outcomes improve, but this is contingent on moving directly from the volunteer programme into jobs with salaries with a living wage (Marmot et al., 2008).

In terms of the population groups which might benefit from the provision of substantive employability skills, the papers included in this review focused predominantly on young adults, with ET3 and ET4 widening the focus to include anyone who was in receipt of unemployment benefits. There was a strong suggestion that adolescents and young adults were likely to gain improved self-confidence, social skills and social networks from volunteering (ET1 – ET6), but that *"there is little reliable social science evidence to support the idea that volunteering actually helps people find jobs or improves the quality of those*

jobs" (ET1, p162). ET6, for example, sought *"to address...whether volunteering can help people improve their position in the labour market"* by *"explor[ing] the effect of volunteering on the move from being out of work into work, on retention of people in employment, and on progression within employment in terms of increases in wage rates"* (p.3). The authors found that, of all the reasons underpinning a motivation to volunteer, employability or career development was not the most prevalent. Young people and individuals with no formal qualifications were less likely to volunteer than those who were older and / or better educated and, crucially, levels of volunteering were far higher among those already in paid employment than among those who were not. The authors suggested that, *"despite the attention that has been paid to the potential link between volunteering and employability"* (p.18) the majority of volunteers viewed volunteering as additional or alternative to paid employment; volunteering was viewed as a mechanism for the practical application of their beliefs about providing care and support for people in need of help rather than for finding work. This, ET6 contended, reflected a different mindset among volunteers, who tended to be more altruistic in their motivations and less driven by the prospect of financial gain - a finding which echoed the work of other studies such as ET4 and ET5. Indeed, the evidence was more suggestive of paid employment being a spur to volunteer activity rather than the other way round (ET1, ET2, ET6). Volunteering, it was argued, only impacts tangentially on individual employment prospects by helping people to widen their contacts with dissimilar people who may be able to give them information about upcoming vacancies in particular sectors (ET1, ET6).

There was no suggestion in any of the review papers that volunteers felt they had gained any substantive skills or had received any job-specific training as part of their volunteer work. In terms of individuals claiming welfare benefits, for example, who would arguably have a great deal to gain from volunteer programmes which gave them the opportunity to gain substantive work skills, both ET3 and ET4 demonstrated that benefits claimants who undertook voluntary work actually took *longer* to find work than their non-volunteering counterparts. ET3, for example, was commissioned by the UK Labour government in 2001 to find evidence to support the policy commitment to encouraging volunteering as part of a wider welfare to work strategy. The

author surveyed individuals who had been in contact with the Employment Service between July 1999 and June 2000 in order to establish whether benefits claimants who volunteered were likely to find work more easily than those who did not. ET3 demonstrated clearly that this was not the case; among the JSA claimants surveyed, those who *did not* volunteer secured paid employment much more quickly than those who did, despite a perception among JSA claimants who volunteered that their activities were supporting their efforts to find work. In the context of worklessness, the mechanism which encouraged these JSA claimants to perceive an improvement in their employment prospects was the boost to self-confidence and informal social networks provided by voluntary activities rather than the acquisition of specific skills; a finding replicated in ET4 and ET6.

Mechanisms supporting improvements in the social networks of volunteers do, as will be discussed in the next section, have the potential to have a positive impact on health, and may also have an important function in improving *access* to jobs, but there is no suggestion in any of the papers reviewed here that they had any impact on the provision of substantive work skills. ET3, ET4 and ET6 did stress, however, that although this subset of claimants *did* find work eventually, on average they continued to claim benefits for around eight weeks longer than their non-volunteering counterparts (ET3). Within the context of unemployment, then, volunteering was intended, at policy level, to operate as a mechanism for the acquisition of employability skills which would enable benefits claimants to move into paid work reasonably quickly, a theory which was remarkably similar to that underpinning the Games volunteer programme and illustrated in **Figure 20** (above). As **Figure 21** (below) illustrates, however, what actually happened illustrates the complexity of volunteering as a mechanism to target worklessness. People who volunteered felt more confident in finding out about and applying for jobs, but did not experience any kind of accelerated pathway into employment, or to promotion, as a consequence of substantive skills gained through their voluntary activities.

Figure 21: Impacts of volunteering on employment without skill enhancement.

CONTEXT:
POPULATION WITH MIXED EMPLOYMENT STATUS

POPULATION CONTEXT:
IN EMPLOYMENT

MECHANISM 1: VOLUNTEERING PROVIDES NO SKILLS TRAINING.

OUTCOME:
REMAIN IN EMPLOYMENT

POPULATION CONTEXT:
UNEMPLOYMENT

MECHANISM 1: VOLUNTEERING PROVIDES NO SKILLS TRAINING.

OUTCOME:
REMAIN UNEMPLOYED
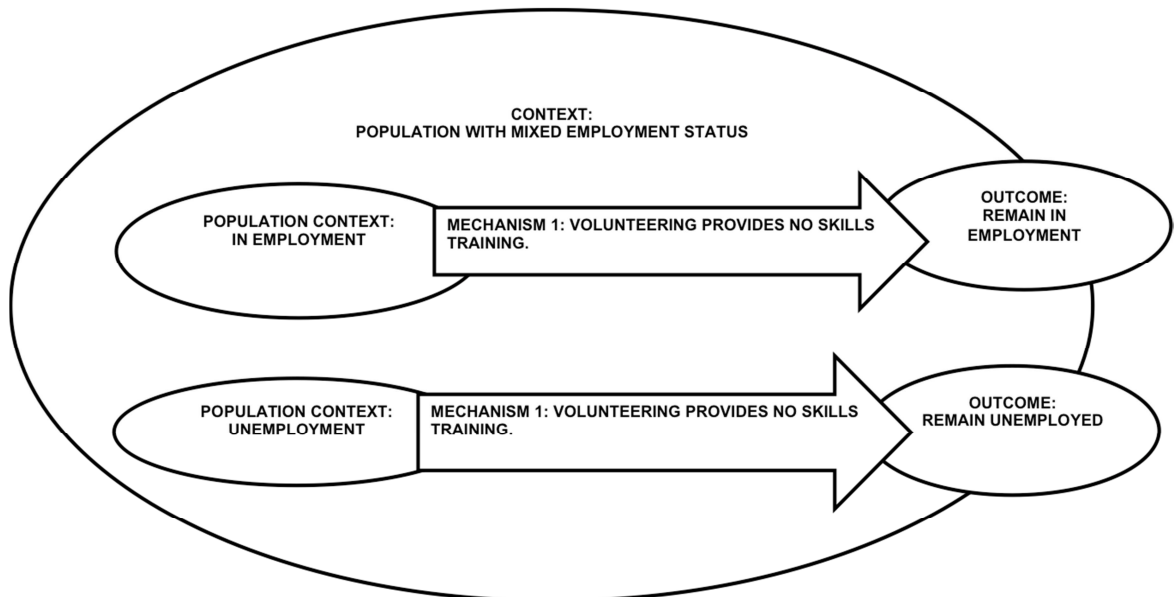
The increased length of time spent on benefits by volunteers was also found to extend to incapacity benefits claimants. ET4 found that the alteration of benefit rules to allow disabled or chronically unwell claimants to undertake voluntary work without suffering financial penalties (in the form of suspension of benefit) had not resulted in more incapacity benefit claimants moving into paid work following a period of volunteering. One reason for this was that, although any voluntary activity had to be assessed as suitable for someone medically unfit or unable to undertake a paid position, benefits advisers tended to be wary of promoting volunteering as a step towards employment, concerned that claimants would turn to volunteering long-term to 'avoid' taking up a paid post (ET4, p. 114).

Regardless of the motivations of the disabled person wishing to volunteer, or of whether there was any potential to gain substantive skills, voluntary activities would not be assessed for client suitability if an individual's benefits advisor perceived volunteering to be the preserve of those unwilling, rather than unable, to undertake paid work. Ultimately, the findings of ET4 echo those of ET3, in that they found that incapacity benefits claimants who *had not*

participated in volunteer work, in common with their able-bodied counterparts, were twice as likely to have moved off incapacity benefits and into employment as those who *had* volunteered. This finding was echoed by ET5, which found that only three of the twenty four participants in their study viewed their voluntarism as a boost to their employment prospects. These three felt that they had gained significantly in terms of self-confidence and social contacts rather than any specific employment skills. In this study volunteers had been able to accrue administrative skills, but this had been piecemeal as experienced administrators had shown them how to undertake various procedures; it was neither explicitly labelled, nor thought of, as formal skills training of the type envisaged by the Games legacy documents.

The argument that volunteering does not provide the substantive skills training necessary to secure paid employment permeates the literature being reviewed. ET1 and ET2 demonstrated that, in the context of unemployment, it was mechanisms unrelated to skills training, such as the opportunity to boost self-confidence and improve social networks, which had the greatest potential to impact positively on employment prospects. The evidence pointed to any potential gains in employability being connected to increased self-confidence and social contacts rather than the specific skills training promised by the Games legacy documents. ET1, for example, posited that it was more likely to be membership of and / or association with particular societies and organisations which directly impacted on employment prospects. By becoming involved with voluntary organisations, individuals widened their access to different strata of the community, thereby enlarging their social networks to include others from different socio-economic backgrounds who might be able, or willing, to provide information about upcoming job vacancies. ET1 demonstrated that these benefits were not equally distributed, and would not be accrued by all volunteers, because the ways in which individuals accessed social networks to improve their employment prospects was heavily contingent on their existing circumstances. People from less affluent socio-economic backgrounds, for example, would be more likely to face significant barriers to participation in volunteer programmes (ET1; ET6). These findings were echoed in the other review papers, which bore out the heavily context-dependent nature of the theory that volunteering can facilitate access to employment.

ET2, for example, demonstrated that the likelihood of an individual engaging with volunteer work increased as his or her employment status increased; this was shown to be a facet of both self- and social- selection, with those in higher status jobs being more inclined to volunteer and also more likely to be approached by organisations who would like them to volunteer. Despite the lack of robustness in the way the evidence was gathered in ET2, the complex relationship between employment status and propensity for volunteering was also made explicit in the other review papers, which lent greater support to these arguments.

The evidence around who would be most likely to benefit from improved employability skills as a result of the 2014 Games volunteer programme demonstrated clearly that there is a disconnect between the evidence from the literature, the legacy documents and the *Volunteering Strategy.* The literature has demonstrated that people who engage in volunteering took *longer* than their non-volunteering counterparts to secure paid employment, while the 2014 legacy documents stressed that by taking part in the Games volunteer programme young people in particular would gain substantive skills which would enable them to secure a place in the labour force in the post-event period. The *Volunteering Strategy,* too, focused heavily on the benefits of encouraging young people to volunteer in order to gain substantive job skills as a precursor to entering the workforce. The disconnect is illustrated by the differences between **Figure 20**, which showed how the employment skills mechanism was theorised to work, **Figure 21**, which illustrated what actually happened when unemployed individuals engaged in voluntary activities and **Figure 22** which illustrates how failing to provide substantive skills training translates to the 2014 volunteer programme.

Figure 22: Intended vs. unintended impacts of Games volunteering on employment and health

CONTEXT:
POPULATION WITH MIXED EMPLOYMENT STATUS

INDIVIDUAL / COMMUNITY CONTEXT:
IN EMPLOYMENT; INDIVIDUALS HAVE SKILLS NEEDED FOR VOLUNTEER ROLES

MECHANISM 1: VOLUNTEERING PROVIDES NO SKILLS TRAINING.

OUTCOME: IMPROVED HEALTH OUTCOMES FOR MOST AFFLUENT

INDIVIDUAL / COMMUNITY CONTEXT:
UNEMPLOYMENT; INDIVIDUALS DO NOT HAVE SKILLS NEEDED FOR VOLUNTEER ROLES

MECHANISM 1: VOLUNTEERING PROVIDES NO SKILLS TRAINING.

OUTCOME: WORSE OR STATIC HEALTH OUTCOMES FOR LEAST AFFLUENT

What this suggests for the Games programme is that, were substantive skills training to be offered as part of the volunteering programme, those who would be most likely to benefit, in the context of their employment status, would be the more affluent, better educated individuals who are already in paid employment, and already in possession of the skills required for specific volunteer roles, such as first aid staff, sports officials and brand protection representatives[17].

The likelihood of individuals living in a context of unemployment or low-skilled work gaining any specific job training from the programme was further diminished by the decision by the Games Organising committee (OC) not to provide any specific skills training as part of the volunteer programme (source: stakeholder interviews). The key stakeholders interviewed in **Chapter 4** were remarkably candid about how this would impact on the ability of Games-time volunteers to access stable, paid employment in the post-event period, admitting that *"there are certain criteria…practical stuff that you've got to be*

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[17] Details about skilled volunteer roles on offer taken from stakeholder interviews.

able to commit to over the course of the Games" (Interviewee 2, referring to the time commitments which would exclude, for example, current JSA claimants from volunteering as they would not be able to evidence jobseeking behaviours during their time as Games volunteers). This interviewee also alluded to the plan for the Organising Committee (OC) to hold back a proportion of the volunteer roles for employees of their 'top tier' sponsors, companies who wanted to be able to show that their support for the event had been more than financial; clearly, these roles would not then be available for the individuals described as being *"furthest from volunteering"*. Volunteers coming to the event with no particular skills or qualifications would be streamed into the more general elements of the programme, which would have provided them with few opportunities to improve their employability skills.

The legacy aspiration that volunteering for the Games would act as a direct causal mechanism to provide unemployed people, and particularly young, unemployed people, with the substantive skills to enable them to gain paid employment in the post-event period is thus not supported. The evidence from the literature suggests that, even if skills training *had* been offered as part of the Games volunteer programme, it would be the more affluent, employed and better educated members of the Glasgow population who would benefit the most, rather than the unemployed, low skilled people at whom the programme was ostensibly aimed. This outcome was supported by the stakeholder interviews which, although limited in number, highlighted the decision to recruit only skilled individuals for skilled roles, with the provision of any substantive training as part of the programme ruled out on the basis of cost.

6.2.2 Relationships between volunteering, employment and health

Figure 19 illustrated how it was hypothesised, in the Games legacy, that the four theories underpinning the volunteer programme would be operationalised as pathways to improved health outcomes. **Figure 22** demonstrated that, without the provision of skills training, volunteering for the Games would not lead to any changes in employment status among the unemployed, potentially supporting the status quo in terms of their likely health outcomes. By actively recruiting individuals who already have a reasonable range of employment

skills, and who are likely to already be in work, it is likely that health outcomes will improve only for this particular group and might actually worsen for those who lack the resources to access job training without help.

The relationship between employment status and health is well established in the literature (Wilson & Musick, 1999; Marmot et al., 1991; Marmot, 2005; Marmot et al., 2008; Bambra, 2010). Using employment pay grade as a contextual proxy for social class, for example, Marmot and colleagues have demonstrated that individuals in low status, poorly paid jobs have higher all-cause mortality than their counterparts in higher-status roles (Marmot et al., 1991; Marmot, 2005). ET3 demonstrated the policy level thinking which framed employment as the best route out of poverty and towards better health, with volunteering cast as a useful way to gain the skills necessary to move into work. This line of reasoning was described in more detail in ET4, which demonstrated the emergence, at policy level, of explicit links between unemployment, poverty and health, and the potential of volunteering to impact positively on all three.

Potential impacts of the Games volunteer programme on population-level health outcomes are contextually constrained, however, in two respects. First, by the increasing individualisation of the rhetoric around worklessness (Noguera, 2005; Bambra, 2010; Newman, 2011), and second by the progressive embedding of a work-focused ethic in welfare reform policy (Newman, 2011). ET6, for example, reinforces the risks inherent in placing too much responsibility for worklessness onto individuals, expanding on Bambra's (2010) contention that the *"continued individualisation of responsibility for employment"* (ibid, p.214) did little to help people enter, or re-enter, the labour market. Indeed, by focusing exclusively on the ability of the individual to gain employability skills, ET6 argues that too much emphasis is placed on *"locat[ing] both the problem and the solution on the supply side of the labour market, which may be insufficient to tackle unemployment as they make little impact on the structural causes of unequal labour market opportunities"* (ET6, p17).

Increasing individualisation, then, takes little or no account of the structural determinants of health (Townsend et al., 1992; Dahlgren & Whitehead, 2006). Framing the provision of employability skills as an important step on the

pathway to the paid employment which will alleviate the effects of poverty on the health of individuals and communities is thus unhelpful. Employment is only likely to have a positive effect on health if the financial rewards are sufficient to enable a healthy lifestyle without recourse to additional state support (Newman, 2011), which would require the will, at policy level, to legislate for fairer wages (Marmot et al., 1991; Marmot et al., 2008; Dahlgren & Whitehead, 2006). Thus, even if the Games volunteer programme was offering participants the opportunity to develop substantive job skills, in and of itself this would be unlikely to have any impact on reducing unemployment or on improving population level health outcomes.

This leads into the second constraint on the ability of the employability skills mechanism to have any tangible impact on health outcomes in workless contexts. Following the decision that the programme would not provide skills training to participants, the population group who are likely to benefit most from Games volunteering is that which includes people living in contexts of reasonable affluence, good education and, crucially, paid work. As **Figure 22** illustrated, these are the people most likely to be recruited for the programme, as they already possess the skills required to undertake the most important volunteer roles (such as sports refereeing or first aid provision); the caveat here is that, although their health may well benefit it will not be as a result of their volunteer experience providing them with any new skills. The people who could arguably have benefited most from a volunteer programme which imparted substantive skills training, that is those with no jobs and few or limited skills, are unlikely to see any change in their health outcomes; these are the people least likely to be recruited to the Games programme for anything other than superficial roles for which no specific skills training was ever intended.

Thus, taking into account the evidence from the papers reviewed here, and from the stakeholder interviews which confirmed that no skills training would be offered as a substantive part of the 2014 Games volunteer programme, there is no support for the theory that the employability skills mechanism will operate to improve the health of any population groups.

6.2.3 Summing up the evidence about employability skills

Interrogating the theory that employability skills gained in the course of Games volunteering would impact on employment as a first step to improving health outcomes in all employment contexts has illustrated two very distinct portrayals of the potential impact of event volunteering. On the one hand, the Games legacy aspiration (which is closely aligned to the Scottish government's *Volunteering Strategy*) that participation in the event as a volunteer will act as a mechanism for unemployed young people to enter the labour market, replete with skill sets gained in the course of their volunteering activities. On the other, there is the evidence from the literature which demonstrates that volunteering acts as a pathway into paid work for only a very small proportion of volunteers; the evidence shows that far from giving people new skills with which to find work, it is those already living in a context of paid work, and in possession of particular skill sets, who chose (or were chosen) to volunteer (ET1, ET3, ET4, ET5, ET6, stakeholder interviews).

The disjunction between the legacy aspirations and the reality presented by the evidence is unlikely to be resolved easily, if at all. In realist terms, the *'who, how and in what circumstances'* of one is more or less the complete opposite of the other: the legacy aspired to bringing about real employment gains for young, unemployed people by providing them with the substantive skills to help them find jobs, yet the volunteer programme was subsequently adapted in such a way that no skills training will be offered to any volunteers. It is not impossible that volunteering for the Games will help some people to find jobs by other mechanisms, but the theory that the programme will influence employability through the provision of skills training does not stand up to scrutiny.

6.3 Widening social networks

The employment prospects of unemployed Glaswegians will not be positively impacted by the provision of employability skills as part of the volunteer programme, but this is not to say that their employment prospects or their health outcomes will not be influenced by some other mechanism of

volunteering. The employability skills literature suggested that for some people, there was a perception that volunteering aided their endeavours to find work by improving their network of social contacts, a finding which tied in with the second theory of the Games programme, that health outcomes would be improved by providing participants with the opportunity to widen their social networks.

6.3.1 Improved social networks: how reliable is the evidence?

Definitions of social networks are contested, with a lack of consensus on what is meant by the term and what the impacts of such networks might be (Cattell, 2001; Szreter & Woolcock, 2004a; Ryan et al., 2008), and this was reflected in the ways in which the twenty-five papers approached the concept. This confusion is echoed in the legacy documents (Glasgow City Council, 2008; Scottish Government, 2008), which equate improved social networks (creating stronger bonds between individual and community) with improved social capital (working together to achieve some collective benefit from a given situation), in itself a contested concept (Forrest & Kearns, 2001; Szreter & Woolcock, 2004a; Koniordos, 2008). The definition supported by the legacy documents is of social networks as entities which will allow people to benefit *their work, family and community life"* (Glasgow City Council, 2008, p.6) and to *"develop and enhance relationships both in Scotland and across the Commonwealth"* (Scottish Government, 2008, p.20). This focus on relationship building and its potential to facilitate access to different resources, which echoed the work of Cattell (2001), Forrest and Kearns (2001) and Ryan (2008), led to the development of the theory that volunteering for the Games would enable participants to widen their social networks (that is, expand or improve their social relationships) in order to gain better access to social resources, which might in turn have a positive impact on their health outcomes. **Figure 23** illustrates how it was posited that this theory would work: by using volunteering to improve their social networks, socially excluded individuals would gain better access to community resources (including health improvement resources) in the Games period and beyond.

Twenty-five papers were identified which dealt with the relationship between social networks and volunteering. Four of the studies were conducted in the UK (SN9, 18, 23 and 24) and nine in the US (SN1, 2, 4, 5, 7, 8, 11, 13 and 21), with the remainder conducted in a range of international settings. There was a high degree of heterogeneity: seventeen used quantitative methods (SN1, SN2, SN5, SN7, SN8, SN11 – 16, SN17, SN19-22 and SN25), seven were qualitative (SN3/ET1, SN4/ET2, SN6, SN9, SN10, SN23 and SN24), and one used mixed methods (SN18). Eight papers dealt with the specific relationship between volunteering and social networks (SN1, SN3/ET1, SN4/ET2, SN5, SN7, SN11, SN16 and SN17), while the remaining sixteen defined social networks as a facet of social capital (SN2, SN8, SN9, SN10, SN12-15 and SN18-25). Only one paper (SN6) considered explicitly how efforts to extend social networks fit with the wider policy agenda.

Figure 23 Intended outcomes of improved social networks.
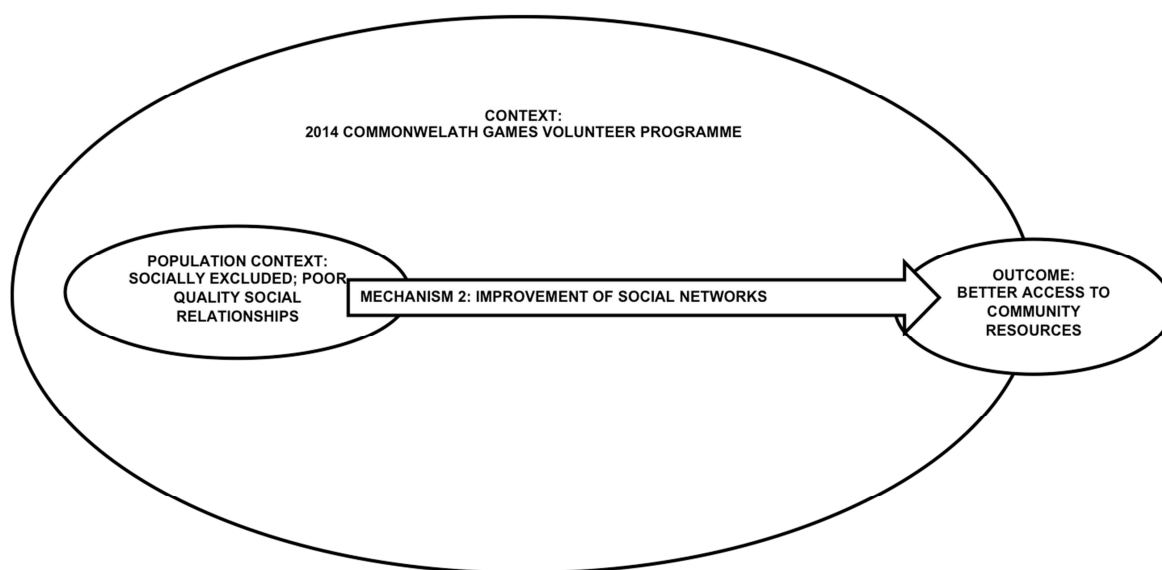
All of the qualitative studies were reviews of evidence pertaining to the relationship between social networks and health; four (SN3/ET1, SN4/ET2, SN9 and SN23) described improvements in social networks as a mechanism of volunteering, with the remaining three (SN6, SN10 and SN24) focusing on how social networks might be improved as part of efforts to improve social capital more generally. None of these papers explicitly delineated the methods used to conduct the reviews, and only the authors of SN6, SN9 and SN23 were open

about the limitations of their studies. In all the studies apart from SN4/ET2 and SN10, however, the findings were well supported with examples from the wider literature; the findings from these two studies were treated more circumspectly in the synthesis.

Of the seventeen quantitative studies, six (SN8, SN11, SN13, SN17, SN19 and SN25) failed to give explicit details about how the analysis had been conducted. Ten were empirical studies (SN1, SN12, SN14-19, SN21, SN22, and SN25) and the remaining seven were secondary analyses of existing data sets (SN2, SN5, SN7, SN8, SN11, SN13 and SN20). The samples used were representative of population sub-groups rather than whole populations; for example, young adults and older adults were viewed as discrete groups, although the age ranges for each varied between studies. Findings were generally well evidenced; five papers (SN15, SN17, SN20, SN21 and SN22) did not explicitly detail any potential limitations in the applicability of their findings, and this was highlighted as these studies were incorporated into the synthesis.

Only one of the studies (SN18) investigated the impact of improved social networks using a mixed methods approach, combining a statistical analysis of survey data with a qualitative analysis of in-depth interviews. Neither analytic technique was made explicit, and the authors did not acknowledge any limitations of their work, despite a tendency to over-generalise from a small sample of young people volunteering in a very specific setting. Overall, in only two papers (SN4 and SN10) were the conclusions poorly supported by the evidence cited; appropriate caveats were thus appended to this evidence as it was incorporated into this review.

A breakdown of the twenty-five papers including study type, country of origin and whether each paper satisfied the rigour criteria identified and tested in Chapter 5, is illustrated in **Table 8** (below).

Table 8 Rigour assessment: social network theory

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
SN1	Janoski, J; Musick, M; Wilson, J (1998): "Being volunteered? The impact of social participation and pro-social attitudes on volunteering" *Sociological Forum* 13;3:495-519	Quantitative: longitudinal statistical analysis using linear regression.	USA	**Context**: Education – initial interviews with high school seniors followed up (i) in their 20s and (ii) in their 30s. **Mechanisms**: socialisation vs. practical experience of social situations. **Outcome**: Both mechanisms valid; practical experience encourages later volunteering but socialisation into civic attitudes also important.	Study relies on a limited definition of volunteering (acknowledged by the authors); may be focused too tightly on single-cause volunteering. Potential bias from a primary study which focuses solely on socialisation (also acknowledged). Potential biases and limitations openly acknowledged. Conclusions are well supported by the evidence cited. All other rigour criteria are satisfied.
SN2	Musick, M. A; Herzog, A. R; House, J. S (1999): "Volunteering and mortality among older adults: findings from a national sample" *Journal of Gerontology: SOCIAL SCIENCES* 54B;3:S173-S180	Quantitative: statistical analysis using Cox proportional hazard regression.	USA	**Context**: Lifeworld of older adults (≥65yo). **Mechanism**: increased social integration. **Outcome**: increased social integration for older adults post-retirement leads to improved (self-reported) health and wellbeing. Modifying effect from taking on too many voluntary commitments.	Individuals who volunteered for specific organisations might have had fundamental differences from those volunteering for different organisations, but data were insufficient for authors to test for this. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited. All other rigour criteria are satisfied.
SN3 / ET1	Wilson, J; Musick, M (1999): "The effects of volunteering on the volunteer" *Law and Contemporary Problems* 62;4:141-168	Qualitative: review of research literature. Methods not made explicit.	USA	**Context**: volunteer lifeworlds, focusing particularly on sociodemographics – eg age, ethnicity, education. **Mechanism**: improvement of social networks as a factor in accessing employment. **Outcome**: better social networks and better integrated communities.	Lack of clarity around the review methodology and sampling techniques. This detail is, however, included for the individual primary studies consulted. Despite lack of methodological clarity for the review, evidence fragments from primary studies are well described and well supported. All other rigour criteria are satisfied.
SN4 / ET2	Wilson, J (2000): "Volunteering" *Annual Review of Sociology* 26:215-240	Qualitative: overview of theories of volunteering. Methods not made explicit.	USA	**Context**; organisational. Focus is on voluntarism encouraged and supported in school environment. **Mechanism**: promoting higher work aspirations through increased social ties. **Outcome**: greater social ties; engagement carries over to adult life.	Lack of clarity around methodology; no greater detail given about the included studies. This is not balanced by detail about included studies. Less robust than same author's work in SN3. Evidence from this study needs to be signposted with appropriate caveats. All other rigour criteria are satisfied.

Table 8 Rigour assessment: social network theory

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
SN5	Luoh, M-C; Herzog, A. R (2002) "Individual consequences of volunteer and paid work in old age: health and mortality" *Journal of Health and Social Behavior* 43;4L:490-509	Quantitative: statistical analysis using multinomial logistic regression.	USA	**Context**: Lifeworld of older adults. **Mechanism**: retained social involvement (via active social networks). **Outcome**: improved (self-reported) health and wellbeing among those who volunteered to maintain social contacts.	Study based on observational data – mitigated by data being longitudinal and controlling for pre-existing health conditions; limited variables available in primary data to test for causality between volunteering and health. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited. All other rigour criteria are satisfied.
SN6	Fyfe, N. R; Milligan, C (2003): "Out of the shadows: exploring contemporary geographies of voluntarism" *Progress in Human Geography* 27:397-413	Qualitative: review of literature on developments in voluntarism. Methods not made explicit.	UK and USA	**Context**: volunteering situated within the policy sphere of "advanced capitalist states" (p397). **Mechanism**: provision of social welfare activities. **Outcome**: paper considers the social networks as an aspect of social capital, and how these networks are exploited by the policy community to increase third sector provision of welfare services – no specific outcome is sought.	Limited to the social-geographical perspective, although the authors acknowledge that a wider range of perspectives and methodological approaches is needed in future research on the topic. Paper provides useful background to the links between voluntarism, social networks and policy rather than specific evidence for causal relationships. All other rigour criteria are satisfied.
SN7	Morrow-Howell, N; Hinterlong, J; Rozario, P. A; Tang, F (2003): "Effects of volunteering on the well-being of older adults" *Journal of Gerontology SOCIAL SCIENCES* 58B;3:S137-S145	Quantitative: statistical secondary data analysis combined with statistical analysis of interview data.	USA	**Context**: Lifeworlds of older adult volunteers. **Mechanism**: improving levels of social integration by widening social networks. **Outcome**: improved wellbeing; increases in hours spent volunteering bring about greater increases in wellbeing.	Dataset did not allow the authors to unpick the problem of social causation vs. social selection. At best, the authors can only show that the two concepts are interdependent. Limitations are openly acknowledged. The conclusions are well supported by the evidence, with the caveat that the relationship between volunteering and wellbeing is mediated by the personal and social resources of individual volunteers. All other rigour criteria are satisfied.
SN8	Musick, M. A; Wilson, J (2003): "Volunteering and depression: the role of psychological and social resources in different age groups" *Social Science &*	Quantitative: statistical analysis.	USA	**Context**: Lifeworlds of younger and older adults. **Mechanisms**: (i) improvement of psychological resources; (ii) greater social integration through widened social networks. **Outcome**: Depressive symptoms were mediated only in older adults, and only when increased	Only one measure of psychological resources was included; results may have been more comprehensive if other measures had been included. Limitations are openly acknowledged. Conclusions are well supported by the evidence, with the authors providing appropriate caveats where the results are equivocal. All other rigour

Table 8 Rigour assessment: social network theory

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
	Medicine 56:259-269			social interactions were formal rather than informal.	criteria are satisfied.
SN9	Danson, M (2003): *Review of Research and Evidence on Volunteering* Volunteer Development Scotland, 2003.	Qualitative: review of qualitative. Methods not made explicit.	UK	**Context**: National – situates volunteering in a Scotland-wide context. **Mechanism**: volunteering as a route to active citizenship (leading to more responsive public services and tackling poverty and exclusion). **Outcome**: governments have failed to take account of uneven distributions of opportunity, capacity and ability of/for volunteer work.	Different studies define volunteering differently, making direct comparison of benefits and barriers difficult. Limitations openly acknowledged. Paper provides background for policy-level thinking about voluntarism, and also looks at the barriers to achieving policy plans. All other rigour criteria are satisfied.
SN10	Pearce, N; Davey Smith, G (2003): "Is social capital the key to inequalities in health?" *American Journal of Public Health* 93:122-129	Commentary on quantitative studies.	USA and UK	**Context**: social policy. **Mechanism**: increased social capital as a negative mechanism at community level; potentially ineffective and overloading community resources. **Outcome**: development not automatically good for health if generated wealth not equitably shared. Social networks conceptualised as the individual level variant of social capital; individual health may be improved, but this will not automatically lead to community level benefits.	Lack of clarity around the review methodology and sampling techniques; no greater detail given about included studies. Limitations are not acknowledged and lack of clarity around review methods not balanced by greater detail on included studies. Evidence from this study needs to be signposted with appropriate caveats. All other rigour criteria are satisfied.
SN11	Matsuba, M. K; Hart, D; Atkins, R (2007): "Psychological and social-structural influences on commitment to volunteering" *Journal of Research in Personality* 41:889-907	Quantitative: statistical modelling.	USA	**Context**: lifeworld of US adults. **Mechanisms**: (i) personality type; (ii) social-structural factors. **Outcome**: a model which suggests that commitment to volunteering is a product of enduring qualities of the individual coupled with his/her situation within social structures.	Definitions of civic obligation potentially too narrowly focused; measurement of specific personality traits might have been better than using broad personality types; global measures of social structures potentially too broad. Limitations openly acknowledged. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited. All other rigour criteria are satisfied.
SN12	van Hooijdonk, C; Droomers, M; Deerenberg, I. M; Mackenbach, J. P; Kunst, A, E (2008): "The diversity in associations	Quantitative: statistical analysis using Poisson regression models.	Netherlands	**Context**: wider community. **Mechanism**: improved social capital. **Outcome**: the relationship between social capital and health changes depending on the make up of the community, the specific health outcome of interest and the location of the	Limitations openly acknowledged. Echoes SN10 in conceptualising social capital as a community level mechanism; provides useful insights into the way social capital operates at this level. Findings are well supported by the evidence cited. All other rigour criteria are satisfied.

Table 8 Rigour assessment: social network theory

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
	between community social capital and health per health outcome, population group and location studied" *International Journal of Epidemiology* 37:1384-1392			community.	
SN13	Carpiano, R. M (2008): "Actual or potential neighborhood resources and access to them: testing hypotheses of social capital for the health of female caregivers" *Social Science and Medicine* 67:568-582	Quantitative: statistical analysis.	USA	**Context**: Neighbourhood (community) level. **Mechanism**: levels of access to social networks and community resources. **Outcome**: social network resources can be drawn on to augment personal economic, cultural or symbolic capital, but access to social networks is unequal, with some individuals being excluded entirely.	Study has limited ability to account for wider political processes that impact on communities; cross-sectional data limit ability to make causal inferences; limitations of social capital measures; use of census tracts as proxies for actual neighbourhoods may have skewed the data. Limitations openly acknowledged. Conclusions are well supported by the evidence cited. All other rigour criteria are satisfied.
SN14	Moore, S; Daniel, M; Gaubvin, L; Dubé, L (2009): "Not all social capital is good social capital" *Health & Place* 15:1071-1077	Quantitative: statistical analysis using estimating equations.	Canada	**Context**: Individual lifeworlds and social circumstances. **Mechanism**: education – specifically, whether level of educational attainment influences accumulation of social capital. **Outcome**: Social capital (and social networks) not evenly distributed. Lower educational attainment equates to narrower networks and reduced volume of social capital. Different pathways to accessing social capital, dependent on level of educational attainment.	Cross-sectional data limits ability to make causal inferences; sample exclusively composed of volunteers – contained few individuals with low levels of educational attainment. Limitations openly acknowledged. Conclusions are well supported by the evidence cited and the empirical results. All other rigour criteria are satisfied.
SN15	Griffiths R; Horsfall J; Moore M; Lane D; Kroon V; Langdon R: "Building social capital with women in a socially disadvantaged community"	Quantitative: statistical cross-sectional analysis.	Australia	**Context**: socio-economically deprived community. **Mechanism**: building stronger social networks (among women in the community). **Outcome**: strong social networks alleviated the worst effects of deprivation and offered some protection against the worst effects of	No limitations explicitly acknowledged; however, the fact that the sample consists exclusively of women means that the views expressed may not reflect the views of the whole community. Limitations are not acknowledged by the authors; nevertheless, the findings are well supported by the evidence cited. All other rigour criteria are

Table 8 Rigour assessment: social network theory

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
	International Journal of Nursing Practice 15:172-184			inequalities.	satisfied.
SN16	Antoni G D: "Intrinsic vs extrinsic motivations to volunteer and social capital formation" *Kyklos* 62;3:359-370	Quantitative: statistical analysis. Specific techniques not described.	Italy	**Context**: individual lifeworld. **Mechanisms**: intrinsic motivations vs. extrinsic motivations – author seeks to improve understanding of the relationship between associational membership and social networks. **Outcome**: intrinsic motivations have a positive effect on the formation of social networks.	Study does not investigate the determinants of intrinsic motivations, or the relationship between these and the way particular voluntary organisations operate. Limitations openly acknowledged; conclusions are well supported by the evidence cited and the empirical results. All other rigour criteria are satisfied.
SN17	Fujiwara Y; Sakuma N; Ohba H; Nishi M; Lee S; Watanabe N; Kousa Y; Yoshida H; Fukaya T; Yajima S; Amano H; Kureta Y; Ishii K; Uchida H; Shinkai S: "REPRINTS: effects of an intergenerational health promotion programme for older adults in Japan" *Journal of Intergenerational Relationships* 7;1:17-39	Quantitative: statistical analysis.	Japan	**Context**: volunteer lifeworld. **Mechanism**: creation of broader social networks. **Outcome**: higher social network scores and higher self-rated health outcomes accrued to intensive volunteers compared to those who only volunteered occasionally.	Limitations are not acknowledged by the authors; nevertheless, the findings are well supported by the empirical evidence cited. All other rigour criteria are satisfied.
SN18	Kay T; Bradbury S: "Youth sport volunteering: developing social capital?" *Sport, Education and Society* 14;1:121-140	Mixed methods: statistical analysis allied to unspecified qualitative method.	UK	**Context**: Lifeworlds of young sports volunteers. **Mechanism**: opportunities to broaden social networks and increase "social connectedness". **Outcome**: evidence of positive experiences of interacting with others and developing social skills greater sense of altruism and citizenship among programme participants.	Limitations are not acknowledged by the authors; nevertheless, the findings are well supported by the empirical evidence cited. All other rigour criteria are satisfied.
SN19	Iwase T; Suzuki E; Fujiwara T; Takao S; Doi H; Kawachi I: "Do bonding and bridging social capital have	Quantitative: statistical analysis.	Japan	**Context**: participant lifeworlds. **Mechanism**: broader social networks and increased social interaction. **Outcome**: improved self-rated health among those who had increased their interactions with	Cross-sectional data makes causal attribution difficult; self-rated health and social capital information collected on same questionnaire – may have introduced common method bias; people in poor health may have been less likely to volunteer

Table 8 Rigour assessment: social network theory

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
	differential effects on self-rated health? A community based study in Japan" *Journal of Epidemiology and Community Health* 66:557-562			people from a more diverse range of backgrounds.	and to participate in the study. Limitations openly acknowledged; conclusions are well supported by the evidence cited and the empirical results. All other rigour criteria are satisfied.
SN20	Zambon A; Morgan A; Vereecken C; Colombini S; Boyce W; Mazur J; Lemma P; Cavallo F: "The contribution of club participation to adolescent health: evidence from six countries" *Journal of Epidemiology and Community Health* 64:89-95	Quantitative: statistical analysis using multi-level logistic regression.	Europe and North America	**Context**: individual lifeworlds. **Mechanism**: broadened social networks as a result of participation in clubs and associations. **Outcome**: improved health outcomes for individuals who participate in clubs and associations – no improvement in population level health outcomes.	Limitations are not acknowledged by the authors; nevertheless, the findings are well supported by the empirical evidence cited. All other rigour criteria are satisfied.
SN21	McNamara T K; Gonzales E: "Volunteer transitions among older adults: the role of human, social and cultural capital in later life" *The Journals of Gerontology Series :: Psychological Sciences and Social Sciences* 66(4):490-501	Quantitative: statistical analysis using random effects pooled time series methods.	US	**Context**: individual lifeworlds. **Mechanism**: improved social and / or human capital (including broadened social networks). **Outcome**: increased volunteer commitment and motivation; health and social benefits for older volunteers.	Limitations are not acknowledged by the authors; nevertheless, the findings are well supported by the empirical evidence cited. All other rigour criteria are satisfied.
SN22	Ward P R; Meyer S B; Verity F; Gill T K; Luong T C N: "Complex problems require complex solutions: the utility of social quality theory for addressing the social determinants of	Quantitative: statistical analysis using multivariate logistic regression.	Australia	**Context**: individual lifeworld – specifically, socio-economic status. **Mechanism**: better networks (as part of a general increase in social cohesion). **Outcome**: better quality of life among those whose networks were improved.	Limitations are not acknowledged by the authors; nevertheless, the findings are well supported by the empirical evidence cited. All other rigour criteria are satisfied.

Table 8 Rigour assessment: social network theory

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
	health" *BMC Pubic Health* 11:630				
SN23	Cattan M; Hogg E; Hardill I: "Improving the quality of life of aging populations: what can volunteering do?" *Maturitas* 70 (2011) 328-332	Qualitative: review of role of volunteering in improving quality of life. Methods not made explicit.	UK, USA, Canada, Japan	**Context**: older adult lifeworlds. **Mechanism**: improved quality of life (as a facet of improved social networks) **Outcome**: improved quality of life among older adults whose networks were improved as a consequence of volunteering.	Heterogeneity of primary studies makes determination of causality difficult. Limitations openly acknowledged; conclusions are well supported by the evidence cited and the empirical results. All other rigour criteria are satisfied.
SN24	Afridi A: *Social networks: their role in addressing poverty* (summary report) Joseph Rowntree Foundation, available at http://www.jrf.org.uk	Qualitative: methods not made explicit.	UK	**Context**: policy level. **Mechanism**: improved social networks. **Outcome**: specific outcome not defined – paper is a review and looks at the consequences of poor social networks (increased social exclusion) as well as the benefits (better quality of life and improved individual health outcomes).	Limitations are not acknowledged by the authors; nevertheless, the findings are well supported by the empirical evidence cited. All other rigour criteria are satisfied.
SN25	Ashrafi E; Montazeri A; Mousavi M; Vaez-Mahdavi M R; Asadi-Lari M: "Influence of sociodemographic features and general health on social capital: findings from a large population-based survey in Tehran, Iran (Urban-HEART).	Quantitative: statistical analysis.	Iran	**Context**: individual lifeworld. **Mechanism**: creation of social capital **Outcome**: *"respondents with better health showed higher levels of social capital"* (p797). Authors attempted to show which components of social capital had the greatest effect on health; found that all components varied by age, gender and level of education.	Questionnaire only administered to one individual in each household rather than everyone; authors were unable to differentiate between social selection and social causation. Limitations openly acknowledged; conclusions are well supported by the evidence cited and the empirical results. All other rigour criteria are satisfied.

6.3.2 Improved social networks: a mechanism which benefits all volunteers?

In addition to the lack of consensus around how social networks should be defined, the papers being reviewed also demonstrated a lack of consensus around which population subgroups were likely to benefit from improvements in their social relationships, and in what contexts any benefits might occur. There was no suggestion, for example, that every individual with an increased number of social contacts would benefit equally, with SN12 arguing that *"...one cannot automatically assume that all resources in all neighbourhoods and communities are available to all residents"* (p. 578). Fourteen papers (SN 2, 5, 7, 8, 12, 13, 17, 19 and 20-25) found that volunteers who had broadened their social networks as a result of voluntary activity reported better physical and mental health, but this was context dependent and these individuals did not necessarily fully represent wider populations. SN12, for example, acknowledged that *"[r]esidents living in the same neighbourhood tend to be comparable in terms of demographic and socio-economic characteristics as opposed to residents of other neighbourhoods"* (p. 1389), while SN2, SN5, SN7 and SN8 focused on population groups such as younger or older adults, or individuals who volunteered for specific organisations, such as churches or hospitals. Seven of the papers found that any improvements in health as a result of increased social networks were heavily dependent on pre-existing factors, such as the socio-economic position of the participant and the extent of his or her social network before any voluntary activity was undertaken. SN2, for example, demonstrated that the people with the most to gain were those whose social networks were the most limited prior to volunteering; these were not, however the people who most likely to see their networks of social contacts develop as a result of volunteering. Barriers, identified by SN4 and SN9 as the lack of spare time and money to facilitate a commitment to volunteering, meant that it was individuals living in contexts of higher socio-economic status who were more likely to be able to fit volunteering into their lives, and to be able to exploit the opportunities that this gave them in terms of widening their pool of social contacts and their access to resources (SN4, p. 23; SN9, p. 31, where unemployment, long term illness and a lack of qualifications are all identified as further barriers to volunteering).

Running through these papers, and articulated particularly well in SN6 and SN7, is the interdependence of social causation and social selection. Individuals living in contexts of the greatest social exclusion, who could benefit the most, are often the furthest away from volunteering opportunities and have the fewest resources to exploit; a concept also alluded to in the stakeholder interviews. Where well-being was supported by strong social integration, volunteering was enabled, which then enabled greater wellbeing in a self-reinforcing cycle (SN7, p. S142). One population sub-group often excluded from wider society which was extensively investigated was older adults, with a number of studies (SN2, SN5, SN7, SN8, SN11, SN17, SN19, SN21 and SN23) looking at the potential benefits of volunteering for the health outcomes of this group. The term "older adults", however, was ill defined (SN23). For SN2 and SN8, the term included adults aged 65 years and older, while for SN5 and SN17 the age limit was extended to include those aged over 60 years. SN5 failed to define any lower age limit, while SN 21 included all adults aged 50 years and over. SN2, for example, demonstrated that some protection against premature mortality was enjoyed by older adults (≥ 65 years old) who volunteered for up to 40 hours over the course of a year (averaging out at just under an hour a week), and that this effect was stronger for older people whose social networks had been limited prior to undertaking voluntary work. The authors of SN5 agreed up to a point; they also found positive health benefits accrued to "much" older adults who increased their networks of social contacts as a result of volunteering, although they defined 'moderate' volunteering a little more widely at up to 100 hours over the course of a year (around two hours per week). SN21 suggested that the older people who benefited most were those who also provided informal voluntary care to other, older relatives; however the authors did not specify whether there was any age limit attached to this finding and it is unlikely (although not impossible) that very elderly people would be acting as primary caregivers for even older relations.

The studies focusing on people whose dominant life context was old age, then, found that volunteering did have the potential to positively influence health and wellbeing in later life as a result of increasing the number of social contacts in participants' lives. This was mitigated, however, by individuals' personal and social resources before they started volunteering. The older people who stood

to benefit the most, identified by SN2 as those whose social interactions were the most limited at the start of volunteering, were also those least likely to volunteer when faced with the financial and opportunity barriers identified in SN4 and SN9. In common with the papers on employment theory, the papers focusing on social networks found that the people most likely to volunteer were those with a good income, high standard of education and good access to the resources which would allow them to exploit wider social networks (SN5, SN7, SN8, SN11 and SN19).

Other studies focused on gender and ethnicity in order to establish whether these had any effect on either the growth of social networks or the likelihood of volunteering. SN12, the only study to have used population level health statistics, found that contrary to previous work in the USA, levels of ethnic diversity in a particular neighbourhood had very little effect on overall health outcomes. This finding was mediated by the authors' assertion that findings of health effects varied widely depending on the health outcome being investigated, the population group affected and its location. SN13, too, found no evidence among female caregivers in Los Angeles to suggest that ethnicity had any bearing on the effects of social networks on either health or the motivation to volunteer. The author argued that, while social networks were an important means of augmenting personal and social resources, the issue of access to opportunities to widen social networks remained one which was rooted in pre-existing socio-economic circumstances. Studies of specific ethnic groups, such as SN17 and SN19 which focused on older Japanese adults, also found that accruing benefits from enlarged social networks was dependent on the individual's pre-existing health and socio-economic circumstances, which affected the likelihood that they would volunteer in the first place. No authors explicitly considered whether the type of volunteering undertaken was likely to have an influence on the creation of social networks. Although some authors indicated that more research in this area would be welcomed (for example, SN13, SN14, SN17 and SN21), across all the papers, volunteering was conceptualised as a homogenous activity which was likely to bequeath the same benefits regardless of the organisation for which it was undertaken.

The underlying commonality which these papers all demonstrated was that within any given population subset, not all members would benefit equally, in terms of health and access to social resources, from improvements in their social networks.

Across all the subgroups studied, those with the most to gain were those with the smallest, least effective social networks before any commitment was made to volunteering (SN2, SN5, SN7, SN8, SN11-13, SN17, SN19, SN22, SN24 and SN25); but these are not inevitably the people most likely to volunteer. Having diminished social networks, in combination with living in poverty, was shown to be a significant predictor of social exclusion (SN2, SN5, SN7, SN8, SN11-13, SN17, SN19, SN22, SN24, ET4 and ET6), but simply providing people with opportunities to widen their social networks and gain connections with a more heterogeneous social mix (SN19, 22, 24) did not automatically improve their health. For this to happen, *"social networks would need to be able to effect wider changes in resource distribution across society – not only for those living in poverty."* (SN24, p.10); but policy level interventions which ignore this bigger picture in favour of action on poor health targeted at the individual have been shown to have the potential to cause more harm than good (SN10). Despite the concerns about how SN10 was conducted, the authors were able to show that, as income inequalities increase, community level social capital and individual level social networks stagnate or reduce, potentially leading to polarised communities and localised victim blaming, neither of which is conducive to improving individual socio-economic circumstances or health. SN9 also demonstrated that utilising volunteering as a vehicle for the improvement of social networks could be counter-productive in that government policy promoting volunteering generally fails to account for the uneven distribution not just of social resources, but also of opportunities, willingness and ability to engage in volunteer programmes.

The evidence, then, broadly supports the legacy assertion that improving social networks is an important mechanism of volunteering in terms of its potential impact on health, but with the caveat that positive impacts are likely to contribute to sustaining existing inequalities in access to social resources, as illustrated in **Figure 24** (below). No support was found for the legacy assertion

that everyone who volunteers stands to benefit from the greater number of social contacts they are likely to make from taking part in the Games volunteer programme. Within and across different population subgroups such as the elderly, adolescents, women and men, and assuming no change in resource or income distribution as a result of network improvement, the evidence suggests that the greatest benefits would accrue to those who had the greatest networks to start with. As SN9 demonstrates, and the stakeholder interviews bore out, however, these are precisely the people who are least likely to have volunteered for the 2014 programme because of the (often invisible) barriers to their participation. These include a perceived lack of opportunity, an inability to bear the hidden costs of volunteering (both in terms of time and money) and because people living in poor socio-economic circumstances are (or perceive themselves to be) outwith the information loop concerned with volunteering opportunities, whether because of low literacy or because they lack the skills which particular organisations seek (SN9).

Figure 24: intended vs unintended impacts of Games volunteering on social networks
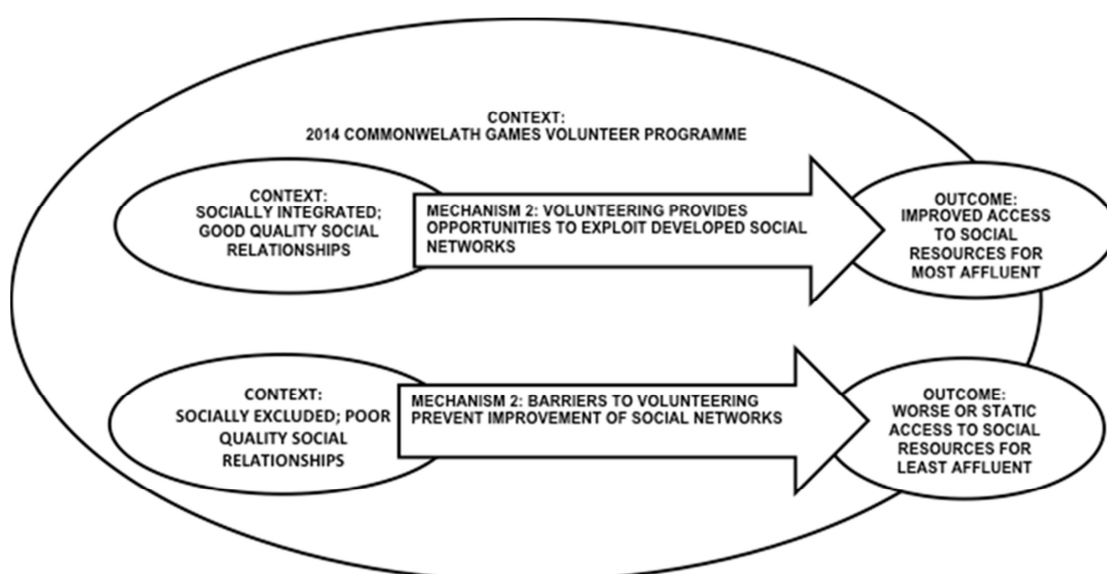
6.3.3 Relationships between volunteering, social networks and health

Given that the social networks mechanism is only likely to prove successful for the population subgroups with the resources to take advantage of it, the next step is to consider the potential of the mechanism to make tangible impacts on the explicitly stated legacy outcome of improved population health.

The majority of the papers included in the review (23 out of the 25) considered, in some way, the relationship between improved social networks and improvements in health outcomes, a relationship which is well documented throughout the literature (Nicolson, 2012; Schnittiger et al., 2012; Schaefer et al., 1981; Giordano & Lindstrom, 2011; Kim & Kawachi, 2006). Among the various population sub-groups studied (women, adolescents and older people), the evidence was supportive of a positive relationship, with participants whose social networks had been extended as a result of volunteering reporting better physical and mental health. SN2, for example, demonstrated that *"the effect of volunteering on mortality differed depending on the level of social integration of the respondent"* (p. S179), finding that the protective effect was strongest for older adults who had limited social networks at the start of their volunteering activity. SN5 supported this finding, demonstrating that *"volunteer work performed for at least 100 annual hours by Wave 3* [of the study from which their dataset was drawn] *were related to subsequent good health and survival by Wave 4, even after pre-existing health status…and other potential confounding factors were controlled"* (p. 502). SN17 also found that *"[s]elf-rated health of the intensive participants of the intervention group was better than that of the controls for 21 months"* (p. 35), adding that *"…the frequency of interchange with friends and acquaintances of the same generation among volunteer group member* [sic] *increased significantly during the initial nine months"* (p. 36). SN17 was one of only two studies which undertook an independent, objective assessment of participant health status at baseline and at the conclusion of the study (the other was SN5) and the only study to include a control group, where participants were forbidden from undertaking any voluntary activity for the duration of the study, lending the findings more credence. In all the other studies, improvements in health were self-rated by

participants which is less robust, given that there was no pre- or post-measure and no comparator.

In addition to a consensus on the protective effects of improved social networks, the review papers were also broadly in agreement on the dependence of this effect on the socio-economic and socio-demographic circumstances of individual participants. SN22, for example, found that *"…notwithstanding the relatively positive picture of social quality in Australia, there were systematic differences in social quality between population groups. This was most pronounced for people on lower incomes…"* (p. 636). This finding was reinforced by SN24 which found that *"…class differences are observable not just in the composition of people's social networks, but also to some extent in people's behaviour within social networks"* (p. 10), and further elucidated that *"[t]aking full advantage of the opportunities that social networks might create may also be problematical for those who lack other resources…[t]he transaction costs of utilising network opportunities therefore differ from person to person, and in this regard it may be the case that social networks best assist those who are already well-equipped to help themselves"* (p. 11).

Across all the review papers, the consensus was, therefore, that any improvements in health outcomes were to be found at the individual level, suggesting that the over-representation of those with the worst health which would be needed to achieve a population level impact (Dahlgren & Whitehead, 2006; Marmot, 2005) had not been achieved. It was also found that improvements in health and / or wellbeing were largely self-reported, and that no studies had specifically set out to include individuals with poor health at baseline, although in some studies background social deprivation appeared to have been used as a proxy for poor health (SN15, 16, 17). Studies also commented on the difficulty of establishing the direction of causality, and of disentangling social selection from social causation (SN7, 13, 14, 19 and 23). Overall, the evidence from the literature suggested that while using volunteering to promote improvements in social networks can accrue benefits for some individuals, across all population subgroups the individuals who could benefit the most due to existing health issues and social isolation are the individuals least likely to be able to navigate the barriers to volunteering

identified in SN9. The evidence does not, therefore, support the legacy assertion that the Games programme will accrue positive improvements in health outcomes across the whole Glasgow population. It is likely that some individuals will see improvements in their overall health; Games volunteers who are in employment, older, well-educated and financially secure will be better able to exploit potential improvements in their existing networks of social contacts in order to facilitate their access to health improvement resources. Younger, unemployed people who lack formal educational qualifications are unlikely to see any change in their current circumstances; it is less likely that they will have been able to negotiate the barriers inherent in the 2014 recruitment programme, and consequently less likely that they will have been able to volunteer for the Games at all.

6.3.4 Summing up the evidence about improved social networks

This section set out to interrogate the theory that increasing social networks as a result of participating in the Games volunteer programme would result in improved population level health outcomes within the Glasgow population. The evidence demonstrates that there is some potential for health outcome improvements to be seen at the individual level, but that any such improvements are likely to be restricted to the individuals who already have the resources at their disposal to exploit the opportunities presented by increasing their social contacts. The most deprived individuals, who suffer from the worst health, are less likely to benefit. Indeed, they are shown to be less likely to participate in programmes designed to improve their social networks as they lack the resources, opportunities and abilities to surmount the barriers to taking part (SN4, SN6, SN9). In terms of the Games programme, the evidence on social networks supports the evidence on employability skills in demonstrating that the people who could benefit the most will actually benefit the least as they are less likely to have been able to successfully negotiate the obstacles to their participation which were inherent in the programme recruitment process.

Overall, while it is possible that some individuals will see improvements in their long term health as a result of their experiences as Games volunteers, the theory that by improving social networks the 2014 programme will impact

positively on population level health outcomes without increasing health inequalities across the whole of Glasgow does not stand up to scrutiny.

Chapter 7

2014 volunteering: maintaining social roles and engaging communities?

7.1 Introduction

The previous chapter unpacked two of the theories underpinning the Games volunteer programme: that it would provide participants with tangible employability skills, and that it would enable the most deprived and excluded individuals among the Glasgow population to expand their social networks. In both cases, the successful operation of the mechanisms would, theoretically, lead to measurable improvements in population level health outcomes (Glasgow City Council, 2008; Scottish Government, 2008) and reductions in health inequalities. The evidence, however, demonstrated that the people most likely to be engaged by these mechanisms of the Games volunteer programme were not the most deprived and excluded members of the population. The barriers to participation faced by these groups (Danson, 2003), and a lack of effort to actively recruit marginalised groups and a retraction of initial plans to provide tangible employment skills training as part of the programme (source: stakeholder interviews), meant that the principal beneficiaries were likely to be those people already in possession of the resources and skills to enable them to make the most of such opportunities as Games volunteering provided.

A further two theories underpinning the Games volunteer programme have to be explored: that participation would allow individuals to maintain and / or retain valued social roles, and that volunteering for the Games would promote greater engagement between individuals and their wider communities. The purpose of this chapter is to apply the same techniques to these two theories, to ascertain whether they stand any greater chance of achieving measurable improvements in population health outcomes.

7.2 Providing social roles: how reliable is the evidence?

As **Diagram 7.1** illustrates, it was theorised that the provision of a mechanism to combat social isolation among individuals who had lost a part of their role identity – for example, through loss of work due to unemployment or redundancy, or loss of a caring role due to bereavement or children leaving

home – would facilitate improvements in access to health improvement resources in a similar way to improved social networks. This section will consider the reliability of the evidence which was gathered to investigate whether this mechanism would operate across all population subgroups in all contexts to bring about improvements in population level health outcomes.

Figure 25: intended outcome of the social role mechanism.
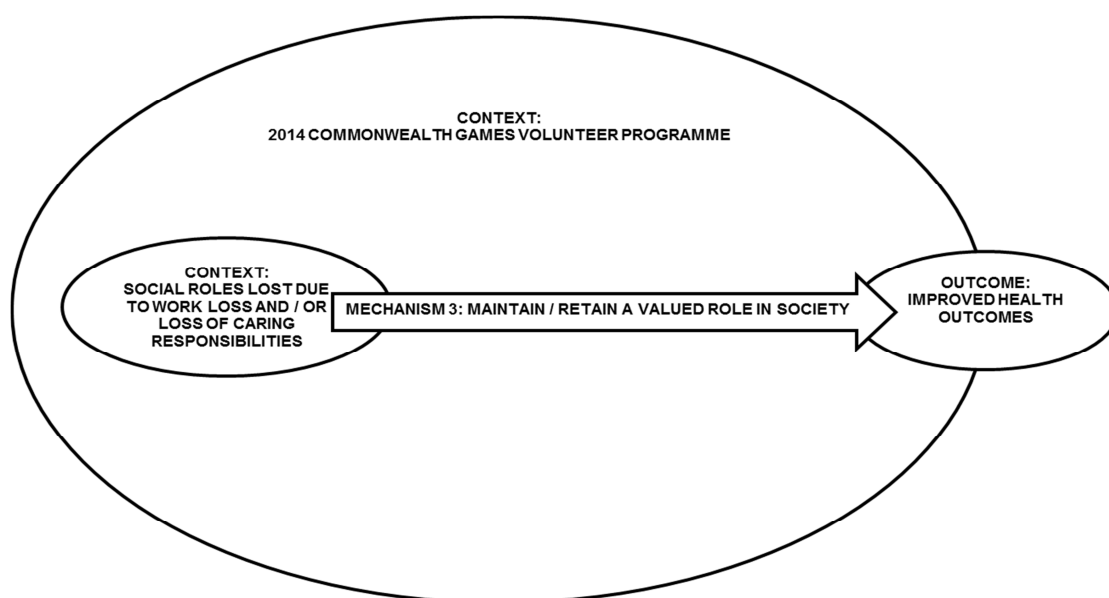
Eighteen papers were identified which dealt with the relationship between volunteering and the provision of a defined, valued social role. Sixteen were conducted in the USA (SR1-11, SR13-14 and SR16-18), one in the UK (SR15) and one in Canada (SR12); fourteen were quantitative (SR1, SR4-11), SR13-14 and SR16-18), three used qualitative methods (SR2, SR12 and SR15) and one was a review (SR3). Of the fourteen quantitative studies, six (SR4, SR6-7, SR9-10 and SR13) used data from the same primary study;[18] this was not felt to be problematic, however, as each of the six approached the problem of assessing the impact of volunteering roles on health from a different angle (for example, an explicit focus on participant age and / or socio-economic status, or on the

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[18] The six studies used data from the Americans Changing Lives study; more information about the original research can be found in House J. S; Lanrz P. M & Herd P (2005) 'Continuity and change in the social stratification of aging and health over the life course: evidence from a nationally representative longitudinal study from 1986 to 2001/2002 (Americans Changing Lives Study) *Journals of Gerontology: SERIES B vol 60B (special issue III)* 15-26.

wider education system). All six focused on older adults (defined by the original Americans Changing Lives (ACL) study as ≥60 years of age), which allowed this review to gain a broad overview of the posited impacts of volunteer roles on this age group. In all but one of these studies (SR7), the authors were open about the limitations of their research, although in all cases, the findings were well evidenced and supported the conclusions which the authors put forward.

Of the remaining eight quantitative studies, five (SR5, SR14 and SR16-18) were primary studies, while SR1, SR8 and SR11 were secondary analyses of existing study data. SR5 was a primary analysis which considered the impact of the volunteer role identity on individuals' role identities more generally, while SR14 investigated the effects of role identity among people who volunteered in a variety of employer-led projects. SR16 suggested that the importance of the volunteer role identity was dependent on attachment to the organisation being volunteered for, while SR17 and SR18 both demonstrated better levels of wellbeing in those who used volunteering as a way of reinforcing their sense of identity as someone who undertakes worthwhile work within the community. The authors of SR14, SR16 and SR17 were all explicit about the limitations of their findings (for example, difficulties in establishing the direction of causation or potential sampling bias), which was lacking in SR5 and SR18. Nevertheless, the findings of all five were well supported by the evidence provided by the authors.

In the secondary analyses, SR1 used data from the Americans Volunteer Study to compare the potential health impacts of having a recognised role as a volunteer on the health of older adults (defined as ≥60 years of age) versus those on younger adults. SR8 used data from the AHEAD study to argue that a combination of a specific volunteer role within a given organisation combined with a sustained time commitment brought about reductions in mortality risks among older people who volunteered, while SR11 looked at the potential impacts of identification with a specific volunteer role rather than simply being identified as a volunteer. Only SR1 failed to openly acknowledge the limitations of the study (the sample was described as nationally representative, but excluded people with disabilities); nevertheless, the findings of all three analyses are well supported by the evidence put forward by the authors.

SR2, SR12 and SR15 all used qualitative methods to investigate the effects of volunteer role provision on older adults. SR2 used descriptive analysis techniques to unpack questionnaire responses and open-ended interviews, while the SR12 used an interdisciplinary framework analysis which was poorly defined (the author gave no information on which disciplines or what type of framework). SR15 was the only qualitative study not to acknowledge any limitations, and also the only one not to explicitly define the methods of analysis. In all three qualitative papers, however, the conclusions presented were well supported by the evidence put forward by the authors.

The only study which was of considerable methodological concern was SR3, which was presented as a functional analysis of motivations to volunteer. The authors gave no information about their sampling or analysis methods, and the findings were unclear and difficult to interpret. The paper appeared to be arguing that motivations to volunteer vary from person to person, with the provision of a specific, context-dependent role enabling people to act on their motivations. This was the only study where it was necessary to highlight methodological concerns as its findings were incorporated into the synthesis; nevertheless, the authors made some useful points about individual response to motivating factors within volunteer programmes, which it was possible to incorporate into the synthesis.

Table 9 (below) illustrates the breakdown of the eighteen papers, the including type of analysis, country of origin and whether the rigour criteria identified in **Chapter 5** were satisfied.

Table 9: rigour assessment: social role theory.

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
SR1	Chambre S M: "Is volunteering a substitute for role loss in old age? An empirical test of activity theory" *The Gerontologist* 24; 3: 292-298	Quantitative: secondary statistical analysis of existing dataset.	USA	**Context:** individual lifeworlds of adults aged ≥ 60 years. **Mechanism:** Provision of a defined social role keeps older adults more active for longer, positively impacting on their health. **Outcome:** volunteering found *not* to be a response to role loss. The author argues that *"…a significant number of elderly volunteers may be volunteers who became elderly…"* (p. 297).	Sample is identified as nationally representative, but excludes anyone with a disability. This limitation is not explicitly acknowledged by the author; nevertheless, the findings are well supported by the evidence cited. All other rigour criteria are satisfied.
SR2	Newman S, Vasudev J, Onawola R: "Older volunteers' perceptions of volunteering on their psychological wellbeing" *Journal of Applied Gerontology* 1985;4:123-127	Qualitative: descriptive analysis of questionnaire responses and open-ended interviews.	USA	**Context:** individual lifeworlds of older adults (age range 55 – 85 years). **Mechanism:** provision of a defined role in the context of structured activity will positively impact on mental health. **Outcome:** older volunteers who had taken on defined, structured roles reported positive mental well being	Sample only included volunteers who were participating in a structured programme; this is openly acknowledged by the author, but not as a limitation. The results are generalised to all older adults, despite the inherent sampling bias. Authors do acknowledge that the lack of rigorous validation of their research instruments limits generalizability. Some limitations are acknowledged by the authors, but the description of the interview and questionnaire results is scant for a qualitative study. This was highlighted in incorporating the study findings into the review synthesis.
SR3	Clary E G; Snyder M: "The motivations to volunteer: theoretical and practical considerations" *Current Directions in Psychological Science* 8:156-159	Quantitative: factor analysis of functional approaches to volunteering. No specific information on the techniques used. .	USA	**Context:** individual lifeworlds: exploring the motivation to volunteer. **Mechanism:** provision of a defined function, or role, in the wider community. **Outcome:** people were motivated to volunteer for a variety of reasons; having a specific role to perform helped them feel better about their own lives in addition to facilitating more altruistic motivations.	No limitations are explicitly acknowledged by the authors. Detail about the wider literature, which might lend extra support to their findings, was sparse. The lack of information about the wider evidence base, and the lack of detail around the specific methodology were highlighted in incorporating these findings into the review synthesis.
SR4	Musick M A; Herzog R A; House J S: "Volunteering and mortality among older adults: findings from a national sample" *Journal of*	Quantitative: statistical analysis using Cox's proportional hazards regression.	USA	**Context**: Lifeworld of older adults (≥65yo). **Mechanism:** increased social integration and provision of a valued social role. **Outcome:** increased social integration for older adults post-retirement leads to improved (self-reported) health and wellbeing, potentially as a result of retaining a defined role in society.	Individuals who volunteered for specific organisations might have had fundamental differences from those volunteering for different organisations, but data were insufficient for authors to test for this. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited. All other rigour criteria were

Table 9: rigour assessment: social role theory.

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
	Gerontology 54B;3;S173-S180			Modifying effect from taking on too many voluntary commitments.	satisfied.
SR5	Grube J A; Piliavin J A: "Role identity, organisational experiences and volunteer performance" *Personality and Psychology Bulletin* 26:1108-1119	Quantitative: statistical analysis.	USA	**Context:** volunteer lifeworlds. **Mechanism:** Provision of a specific role identity leads to greater commitment and more hours spent volunteering. **Outcome:** role identity demonstrated to be a predictor of volunteer commitment.	Limitations are not acknowledged by the authors; nevertheless, the findings are well supported by the evidence cited. All other rigour criteria were satisfied.
SR6	Van Willigen M: "Differential benefits of volunteering across the lifecourse" *Journal of Gerontology* 2000; 55B: S308-S318	Quantitative: statistical analysis using least squares regression.	USA	**Context:** individual lifeworlds. **Mechanism:** Maintenance of a specific role (through volunteering) has a positive impact on wellbeing in later life. **Outcome:** improved wellbeing contingent on different factors at different lifestages; having a defined role more important for older than younger volunteers.	Greater availability of nationally representative data may have influenced the results. Measure of volunteering (here as elsewhere) may have influenced the findings. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited.
SR7	Thoits P A; Hewitt L N: "Volunteer work and well-being" *Journal of Health and Social Behaviour* 42;2:115-131	Quantitative: statistical analysis	USA	**Context:** individual lifeworld. **Mechanism:** existing individual characteristics (good health, defined role, positive social values and attitudes) underpin voluntary activity. **Outcome:** individuals with the existing socio-economic resources and personality traits are more likely to volunteer.	Limitations are not acknowledged by the authors; nevertheless, the findings are well supported by the evidence cited. All other rigour criteria were satisfied.
SR8	Luoh M-C; Herzog A R: "Individual consequences of volunteer and paid work in old age: health and mortality" *Journal of Health and Social Behaviour* 43;4: 490-509	Quantitative: statistical analysis using multinomial logistic regression.	USA	**Context**: Lifeworld of older adults. **Mechanism:** retained social involvement via provision of a role identity. **Outcome**: improved (self-reported) health and wellbeing among those whose social identity was maintained	Study based on observational data – mitigated by data being longitudinal and controlling for pre-existing health conditions; limited variables available in primary data to test for causality between volunteering and health. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited. All other rigour criteria were satisfied.
SR9	Morrow-Howell, N; Hinterlong, J;	Quantitative: statistical	USA	**Context**: Lifeworlds of older adult volunteers. **Mechanism**: improving levels of social integration by	Dataset did not allow the authors to unpick the problem of social causation vs. social selection. At

Table 9: rigour assessment: social role theory.

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
	Rozario, P. A; Tang, F (2003): "Effects of volunteering on the well-being of older adults" *Journal of Gerontology SOCIAL SCIENCES* 58B;3:S137-S145	secondary data analysis combined with statistical analysis of interview data.		providing defined social roles. **Outcome**: improved wellbeing; increases in hours spent volunteering bring about greater increases in wellbeing.	best, the authors can only show that the two concepts are interdependent. Limitations are openly acknowledged. The conclusions are well supported by the evidence, with the caveat that the relationship between volunteering and wellbeing is mediated by the personal and social resources of individual volunteers. All other rigour criteria were satisfied.
SR10	Musick, M. A; Wilson, J (2003): "Volunteering and depression: the role of psychological and social resources in different age groups" *Social Science & Medicine* 56:259-269	Quantitative: statistical analysis.	USA	**Context**: Lifeworlds of younger and older adults. **Mechanisms**: (i) improvement of psychological resources; (ii) greater social integration through provision of social roles. **Outcome**: Depressive symptoms were mediated only in older adults, and only when increased social interactions were formal rather than informal.	Only one measure of psychological resources was included; results may have been more comprehensive if other measures had been included. Limitations are openly acknowledged. Conclusions are well supported by the evidence, with the authors providing appropriate caveats where the results are equivocal. All other rigour criteria were satisfied.
SR11	Greenfield E A; Marks N F (2004): "Formal volunteering as a protective factor for older adults' psychological well-being" *Journal of Gerontology* 59B;5:S258-S264	Quantitative: statistical analysis using multivariate regression models.	USA	**Context**: lifeworlds of older adults. **Mechanism:** provision of role identity protects against poor mental health (specifically, among older adults with significant role absences). **Outcome:** "…*being a formal volunteer…moderated the negative effect of having major role-identity absences on respondents' feelings of purpose in life*" (p. S258)	Direction of causality cannot be ascribed with certainty due to cross-sectional study design. Study does not investigate potential protective effects of informal volunteering, nor whether different types of volunteering have the same effects. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited.
SR12	Narushima M: "Payback time: community volunteering among older adults as a transformative mechanism" *Ageing and Society* 25;4:567-584	Qualitative: interdisciplinary framework for analysis.	Canada	**Context**: organisational (participants volunteered for non-profit organisations) and individual lifeworld. **Mechanism:** provision of a defined role mitigates against social exclusion in old age. **Outcome:** older volunteers less excluded – but voluntary activity contingent on other factors such as the proximity of adequate public transport links and the provision of sufficient training by the voluntary organisation.	Data insufficient to ascribe generative outcomes to volunteering rather than accrued life experience. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited.
SR13	Li Y; Ferraro K F:	Quantitative:	USA	**Context**: Volunteer lifeworlds.	Depression only one type of mental ill health –

Table 9: rigour assessment: social role theory.

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
	"Volunteering and depression in later life: social benefit or selection process?" *Journal of Health and Social Behaviour* 46:68-84	statistical analysis using structural equation modelling.		**Mechanism:** provision of a defined role will mitigate against depression / depressive symptoms in older adults. **Outcome:** older adults who gained or retained a role identity through volunteering were less likely to exhibit signs and symptoms of depression.	results cannot be generalised to all mental ill health symptoms. Number of hours and number of organisations volunteered for do not necessarily capture full breadth of the volunteer experience. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited.
SR14	Finkelstein M A: "Dispositional predictors of organizational behaviour: motives, motive fulfilment and role identity" *Social Behavior and Personality* 34;6:603-616	Quantitative: statistical analysis.	USA	**Context:** organisational: participants were employees taking part in workplace volunteering schemes. **Mechanism:** development of a role identity leading to greater citizenship. **Outcome:** development of a role identity (as a volunteer) was correlated with helping and concern motivations.	Direction of relationship between motive strength and motive fulfilment cannot be discerned from this dataset; characteristics of volunteers are not available. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited.
SR15	Cloke P; Johnsen S; May J: "Ethical citizenship? Volunteers and the ethics of providing services for homeless people" *Geoforum* 38:1089-1101	Qualitative: interviews and participant observation.	UK	**Context:** organisational: volunteering in the specific context of emergency service provision for the homeless. **Mechanism:** provision of a defined role as a volunteer satisfies the need to gain something from the altruistic impulse. **Outcome:** motivations found to be more complex; having a defined role in service provision was only a small part of the motivating process.	Limitations are not acknowledged by the authors; nevertheless, the findings are well supported by the evidence cited.
SR16	Laverie D A; McDonald R E: "Volunteer dedication: understanding the role of identity importance on participation frequency" *Journal of Macromarketing* 27:274-288	Quantitative: statistical analysis.	USA	**Context:** organisational: study participants all volunteered for one specific organisation which raised funds to support disadvantaged children. **Mechanism:** volunteering in a clearly defined and valued role improves volunteer attachment and dedication. **Outcome:** identity importance (as a volunteer) integral to motivation and commitment.	Possible sample bias due to opportunistic nature of sampling; study does not investigate the importance of the role played by organisational goals in recruiting and retaining volunteers. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited.

Table 9: rigour assessment: social role theory.

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
SR17	Jirovec R L; Hyduk C A: "Type of volunteer experience and health among older adult volunteers" *Journal of Gerontological Social Work* 30;3-4:29-42	Quantitative: statistical analysis.	USA	**Context:** organisational: older volunteers in a specific (hospital) setting. **Mechanism:** volunteering in a clearly defined role impacts positively on health and wellbeing. **Outcome:** type of volunteering important in improving mental, not physical, health.	Cross-sectional research design limits the inferences which can be drawn about the direction of causality. Also potential sample bias as majority of the respondents were white and female. Potential limitations openly acknowledged. Conclusions are well supported by the evidence cited.
SR18	Borgonovi F: "Doing well by doing good: the relationship between formal volunteering and self-reported health and happiness" *Social Science & Medicine* 66:2321-2334	Quantitative: statistical analysis.	USA	**Context:** organisational: study focuses on volunteering for religious groups and organisations. **Mechanism:** provision of a specific social role increases self-reported health and happiness. **Outcome:** no specific causal link found between role provision as a mechanism of volunteering and increased health / happiness.	Limitations are not acknowledged by the authors; nevertheless, the findings are well supported by the evidence cited.

7.2.1 Providing social roles: a mechanism which benefits all volunteers?

In common with employability skills and social networks, there was a lack of consensus in the literature about what constitutes a social role identity, particularly with regard to the role of the volunteer. Definitions fell broadly into two interpretations of identity: that of the individual identity *as perceived by society* (Goode, 1960) and that of the individual role identity *as perceived by the self* (Callero, 1985; Howarth, 2002). The distinction is subtle but important; in both cases, the labelling of identities is heavily value laden with some (for example, 'mother', 'carer', 'volunteer', 'worker') perceived as being more valued than others (such as 'unemployed', 'smoker', 'alcoholic') at both the individual and wider social levels (Hitlin, 2003). This distinction was evident in the papers being reviewed; the majority focus on how the generic role of volunteer was allied to the way individuals felt their role identity as a volunteer was valued by the wider community (SR3, SR5-11, SR13, SR16 and SR18), while the remainder (SR1-2, SR4, SR12, SR14-15 and SR17) considered the personal role identity of particular kinds of volunteer – for example, where volunteering was for a specific type of organisation such as a cancer society, faith-based group or school.

SR10 was the only paper to explicitly foreground the question of whether it was the homogenous role of volunteer which promoted health benefits, or a more specific role defined by the type of volunteering being undertaken. The authors found that *"...volunteer work is part of a larger complex of work obligations, paid and unpaid..."* (p. 260) and that an individual's commitment to different types of volunteering is likely to change over the lifecourse; *"[a]s the individual's role sets change the meaning and significance of volunteer work might also change..."* (p. 261). By comparing faith-based against secular volunteer activity (and both against no voluntary involvement), SR10 found that although volunteering generally provided some protection against adverse mental health events, volunteers for faith-based organisations accrued greater mental health benefits than their secular counterparts. Positing that membership of a religious organisation more accurately reproduces the personal attachments and caring responsibilities of the family environment, the paper found that *"[r]eligious congregations...help reinforce the value of caring better than secular organisations because of the way social relationships are defined within them"* (p. 268). This finding, indicating the

importance of nurturing social connections among like-minded individuals, was supported by SR15, a study which looked at the motivations of, and benefits accrued to, volunteers providing emergency services to homeless populations. In the context of a dominant Christian culture, it found a *"significant presence of Christian-motivated volunteers"* (p. 1093) who were unanimous in feeling that their faith had influenced their decision to volunteer, and to keep volunteering, albeit to varying degrees. Role identity as a volunteer was important, but in the context of homelessness services the majority of volunteers felt that their principal role identity came from their Christian faith rather than from the act of volunteering in and of itself, which was portrayed by the study participants as a mechanism for the enactment of their moral values. Although it would be dangerous to generalise from this small study sample to all volunteers, the findings of SR15 did seem to support the idea that, by providing participants with a clearly defined identity as church volunteers, faith-based volunteering might provide a greater degree of protection against poor health outcomes than secular volunteering. In terms of the 2014 Games volunteer programme, this seemed to indicate that the social connection mechanism would have the best chance of working if the programme took steps to foster a group identity for volunteers, within which they would be enabled to take on specific, valued roles.

SR10 was also interesting, however, because its findings differed significantly from those of the other studies based on data from the Americans Changing Lives (ACL) study (SR4, SR6-7, SR9 and SR13), which found that the level of benefit accrued from voluntary activity was contingent on individual characteristics rather than on the type of volunteering being undertaken. Being married, in (or retired from) good employment, well educated, well integrated socially and having a good income were all more important predictors of volunteering than whether the role on offer fitted with individual motivations to volunteer (SR6-8, SR9, SR13). While peer group approval was found to be important in decisions about the prestige value of given volunteer roles, when deciding whether to volunteer at all *"...evidence suggests that occupying the role versus not, that is, engagement versus no engagement, is related to wellbeing"* (SR9, p. S142). Motivations to weave volunteering into the individual's existing role identity were *"likely shaped by culture, social class and life experience"* (ibid, p. S143), and this was supported by SR8, which used data from the AHEAD study to show that *"it is possible that the incorporation into one's*

identity of the mere knowledge about donating one's time for a good cause…is sufficient for the beneficial effect…" (SR8, p.505).

Other papers, however, looked more closely at different types of volunteering to consider the health benefits of enhancing the volunteer identity by integrating it into a specific organisation (SR1-2, SR4, SR10, SR12, SR14-15, SR17-18). The findings of this group of papers were broadly in agreement with SR10's argument that socio-economic status affects the way volunteer role identity is perceived, with specific role identities being more sought after by individuals enjoying more affluent socio-economic circumstances. SR17, for example, which focused on volunteer programmes being run in hospitals, found that social class mediated the association between volunteering and wellbeing, arguing that *"[i]ncome generates a high standard of living and the free time needed to participate in volunteer activities…[e]ducation develops abilities crucial to organisational volunteering"* (p. 38); a finding borne out by the other papers considering the role identity impact of undertaking a specific type of volunteering. The paper which considered the greatest spread of different types of volunteer activity (SR12) supported this assertion, finding that whether the volunteer role identity was general or specific, the people most likely to take that identity on board were middle class, well-educated and spoke English as their first language which was at odds with the broad cultural mix of the wider Toronto population. While the *"protective effect of volunteering would be [expected to be] strongest among those with lower levels of social integration"* (SR4, p.S179), it was those from more affluent backgrounds, with high levels of social integration, who actually benefited most from incorporating volunteering into their existing role identity. After considering whether the volunteer identity is adopted by older adults as a proxy for other role identities which have lapsed (for example, a work identity which has been eclipsed by retirement, or a caring role which has gradually dissipated as children have grown up and left home), SR1 concluded that *"the older person who ages optimally is the person who stays active and manages to resist the shrinkage of his social world"* (p.292). The older people in the best position to achieve this were those whose *"gender, income and education"* (p.297) allowed them to create the spaces between their existing life roles (identified in SR10) to take on the additional identity role of 'volunteer', in the process ensuring they enjoyed a useful level of continued social inclusion.

The congruity running through the papers reviewed here was the contextual importance of socio-economic status in determining how the volunteer role identity mechanism was operationalised. There was unanimity on three points. First, that those who could expect to benefit the most from augmenting their role identity through volunteering were the people at the edges of society, whose status in their communities was diminished through poverty, lack of education and the gradual erosion of their identity as work and family commitments were reduced over time. Second, those who actually benefited the most from having a defined identity as a volunteer were those whose socio-economic circumstances meant that they had the financial resources, education and time to exploit their volunteer role to their benefit. Making a contribution to the wider community was important, but its value, the third point on which the review papers were agreed, varied according to the socio-economic position of individual volunteers. Across all social classes, the evidence suggested that the assumption of a generic volunteer identity was sufficient to accrue positive benefits to individuals, regardless of the type of volunteering undertaken; having an identity as a specific kind of volunteer, however, was of greater importance to the more affluent where concerns about the social prestige and acceptability of volunteering for particular causes or organisations came into play. Where **Figure 25** illustrated how the role identity mechanism was hypothesised to work, **Figure 26** illustrates how the mechanism was found to work in practice. It demonstrates the lack of support for the theory that Games volunteering will benefit everyone who takes part, pointing instead to the potential for disproportionate benefits being accrued to those who need them least but are best able to access them.

Figure 26: intended vs unintended impacts of Games volunteering on social role(s).
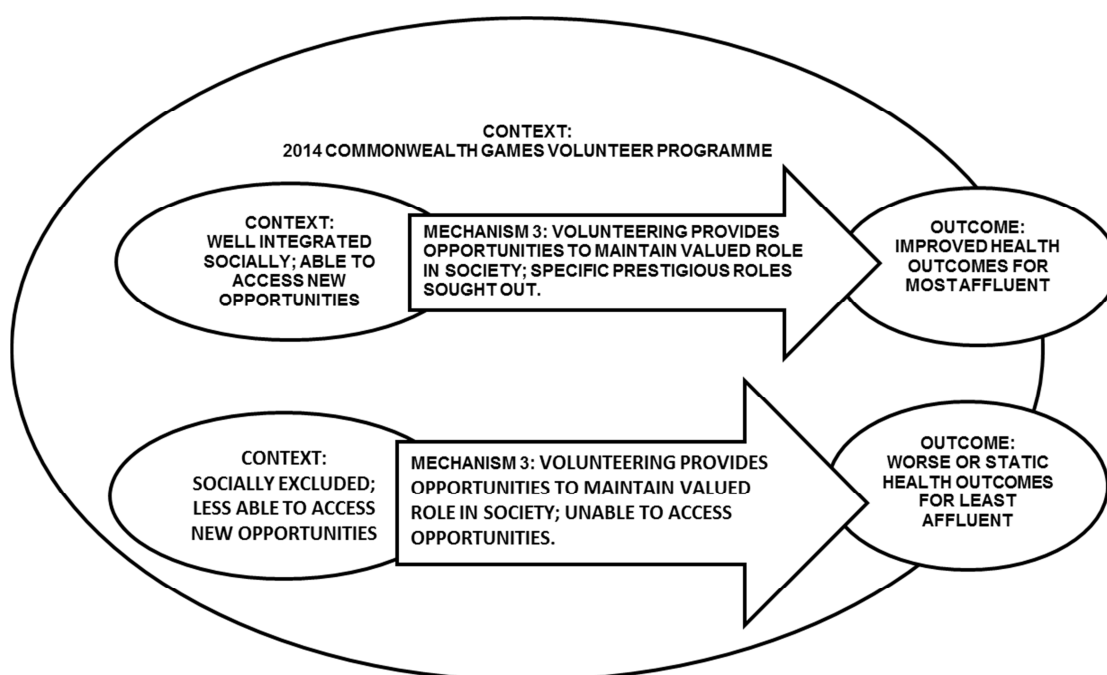
7.2.2 Relationships between volunteering, social role and health

Ten of the papers (SR2, SR6-7, SR9-11, SR13 and SR17-18) explicitly considered the mental health impacts of volunteering and seven (SR4, SR6-9, SR17-18) focused on physical health benefits; five (SR6-7, SR9 and SR17-18) looked at both. Only two papers (SR4, which investigated whether volunteers had fewer mortality risks than non-volunteers and SR17 which considered whether type of volunteer experience influenced health impacts) used objective measures of physical and mental health; the remainder relied heavily on self-reported measures of health and mental wellbeing.

Across both aspects of health (mental and physical), the principal concern was with the question of selection versus direction of causation – were individuals with few depressive and / or physical symptoms more likely to volunteer, or did volunteering contribute to a reduction in health problems? Similarly, there was considerable interest in whether the type of volunteer work undertaken, or the amount of hours volunteered, had any influence on the health benefits accrued, echoing the

findings on social role theory. SR2, for example, demonstrated that only 32% of the volunteers sampled felt that their mental health had improved as a result of their volunteer activities, despite feeling that *"...it enables them to gain a valued role in society , to develop new and meaningful relationships and cope with some of the painful aspects of ageing"* (p. 126). The authors, however, did not assess mental health status at baseline, and given that two-thirds of their sample felt that they had become more satisfied with their lives, and three-quarters said they felt more positive about themselves, it is possible that this cohort of older volunteers did not equate the feelings they expressed about feeling *"useless"* and *"futile"* with poor mental health. Despite the majority of the studies relying heavily on self-reported physical and mental health, with only SR4 and SR17 taking objective measurements of pre-volunteering health status, findings relating to the positive benefits of volunteering for older adults were widespread: *"[n]o matter how volunteering was measured, it was positively associated with life satisfaction and perceived health among older adults"* (SR6, p.S312). Older volunteers were far more likely to accrue health benefits, both physical and mental, than their younger counterparts, with suggested reasons coalescing around the idea that older people were more likely to feel the effects of role loss as they aged so that *"[f]rom the role enhancement perspective, the volunteer role may augment power, prestige and resources, and it may heighten sense of identity..."* (SR9, p.S144).

The power of a defined social role identity is further supported by SR10, which found that *"volunteering is particularly useful for older people because its productive nature offers a way of gaining social approval as well as improved self esteem"* (p. 261). SR10 found that faith-based volunteering, with its focus on caring, was particularly prominent in providing role identities which were both valued by, and of value to, the wider community and beneficial to the mental and physical health of volunteers: *"[t]he more value attributed to the caring role, the more clearly institutionalised that role is, and the more rewarded within the community, the greater the individual benefits to be derived from it"* (p.268). These findings are strongly in keeping with those on social role theory, suggesting a connection between the two. The papers on faith based volunteering, in particular, highlighted this, demonstrating that having a defined role in society was a more powerful mechanism when that role was undertaken within a context (such as a church or other community group) where it was particularly valued.

The evidence shows that there is some support for the theory that the 2014 Games volunteer programme will enable participants to maintain and / or retain valued social roles, but with the caveat that those who benefit most will be, as has been demonstrated for the preceding two theories, those who are socially and economically in a better position to exploit the role identities offered to them. Those who lack the social and financial resources, or who have functional impairments or mental health issues are unlikely to be able to augment their existing role identities by becoming involved in the 2014 volunteer programme.

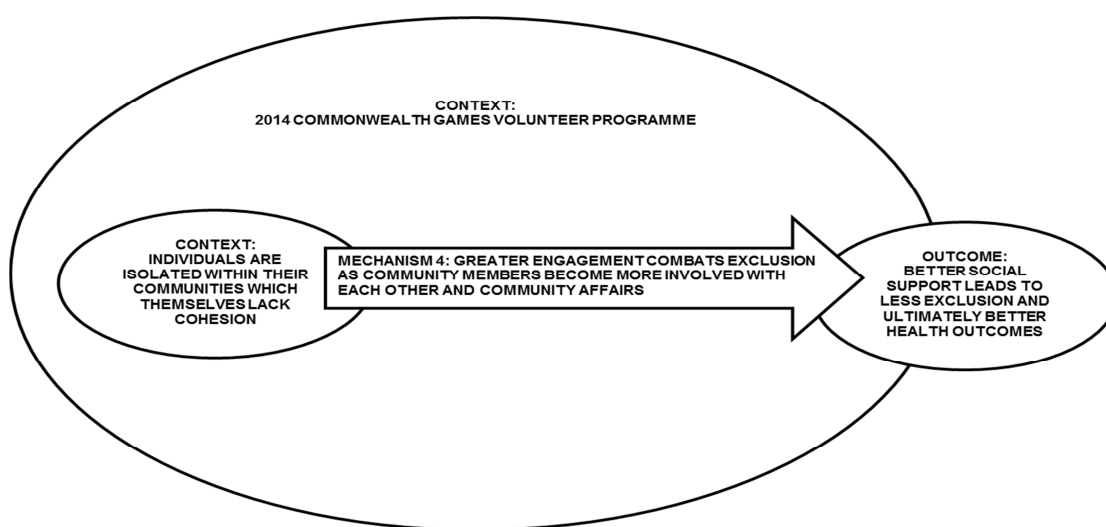### 7.2.3 Summing up the evidence about social role identities

Based on this evidence, it is difficult to separate out whether physically and mentally healthier people volunteer, or whether volunteering promotes better physical and mental health. What these papers do show, however, is that in a context of relative affluence, healthy and well-educated people of all ages are likely to be volunteers. Older people are over-represented within this context because they have the time to better accommodate the demands of an additional role identity; younger adults tend to have less time available once work and family responsibilities have been addressed. It is these older, better educated, more affluent adults who are in the best position to exploit the role identities offered by volunteering and use them to their advantage, giving them self-esteem boosting prestige within their communities and promoting a more positive world view. The less affluent, less healthy, less socially integrated adults who could potentially benefit greatly from a defined, socially valued role identity as a volunteer were less likely to be become involved in volunteering and as such to be able to exploit the benefits of that role identity.

7.3 Community engagement: how reliable is the evidence?

The final theory to be explored is that volunteering for the 2014 Commonwealth Games would promote greater engagement between individuals and their wider communities by building on existing community assets, leading to improved health outcomes at community level. As **Figure 27** illustrates, it was theorised that

greater community engagement would be operationalised as an asset-building mechanism which would, in the longer term, lead to improved health outcomes as communities became better integrated and community members gained better access to social support – for example, through the creation of advocacy networks.

Figure 27: intended outcomes of the community engagement mechanism.

CONTEXT:
2014 COMMONWEALTH GAMES VOLUNTEER PROGRAMME

CONTEXT:
INDIVIDUALS ARE ISOLATED WITHIN THEIR COMMUNITIES WHICH THEMSELVES LACK COHESION

MECHANISM 4: GREATER ENGAGEMENT COMBATS EXCLUSION AS COMMUNITY MEMBERS BECOME MORE INVOLVED WITH EACH OTHER AND COMMUNITY AFFAIRS

OUTCOME:
BETTER SOCIAL SUPPORT LEADS TO LESS EXCLUSION AND ULTIMATELY BETTER HEALTH OUTCOMES

Eight papers were identified which dealt with the impacts of promoting greater community engagement through existing assets, and which illustrated the lack of consensus around how "community engagement" and "community assets" are defined (Tindana et al., 2007; Driscoll, 2008). Five papers (CE1-4 and CE6) used qualitative methods and three (CE5 and CE7-8) were statistical analyses. The papers covered a broad spectrum of interpretations of community engagement: CE1-3 considered how assets-based community development approaches might bring communities together to tackle the impacts of deprivation, CE4 investigated the potential of time banks to promote engagement and diminish social exclusion, CE5 and CE7[19] demonstrated the potential of a volunteer programme which

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[19] Both of these papers were based on data from the same study; this was not considered to be a problem for the review as CE5 presented results from the study pilot while CE7 discussed early findings from the study proper.

encouraged generative activities[20] to promote engagement between different sectors of the community, and CE8, the weakest of the eight papers, investigated whether sports volunteering had the potential to influence community engagement with the political process. Only CE8 was of concern in terms of study quality; the paper failed to satisfy any of the rigour criteria identified in **Chapter 5.** The authors gave no indication of how the study had been conducted, sampled or analysed, and failed to provide evidence of a comparator. The finding that sports volunteers were more engaged in political processes was undermined by a) not knowing whether they were more politically engaged than other types of volunteer or than non-volunteers, b) the narrow definition of political engagement as voting, and c) the existence of a significant body of evidence (acknowledged by the authors) that sports volunteering has little or no effect on wider political engagement. As such, the findings of this study were only referred to when they were supported by the findings of the other studies relating to community engagement.

Table 10 (below) illustrates the breakdown of the eight papers, including type of analysis, country of origin and whether the rigour criteria identified in **Chapter 5** were satisfied.

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[20] Generative activities were defined as activities which maintained their own momentum as people who had engaged in them encouraged others to become involved and carry on the activities within their own section of the community.

Table 10: Rigour assessment: community engagement theory.

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
CE1	Kretzmann J, McKnight J P: "Assets-based community development" *National Civic Review* 85;4:23-29	Qualitative: specific methods not made explicit.	USA	**Context:** geographical – American inner cities. **Mechanism:** engagement with existing community facilities, resources and capacities. **Outcome:** communities better able to drive regeneration and improvement from within.	Paper makes a case for adopting assets-based community development in place of traditional development / regeneration models. No limitations explicitly acknowledged by the authors; lack of clarity around methods used. All other rigour criteria satisfied.
CE2	Page-Adams D, Sherraden M: "Asset building as a community revitalization strategy" *Social Work* 42;5:423-433	Qualitative: specific methods not made explicit.	USA	**Context:** geographical - general context of asset-building programmes. **Mechanism:** engagement with existing resources on multiple levels. **Outcome:** communities better able to drive regeneration and improvement from within.	Paper summarises findings from studies looking at effects of promoting existing assets on both communities and individuals. Authors acknowledge arbitrariness of sampling and data collection methods, but do not explain the analysis methods used. All other rigour criteria satisfied.
CE3	Mathie A, Cunningham G: "From clients to citizens: asset-based community development as a strategy for community driven development" *Development in Practice* 13:5;474-486	Qualitative: specific methods not made explicit.	USA	**Context:** geographical - ABCD programmes generally contextualised within the community environment. **Mechanism:** engagement with recognised, pre-existing community strengths. **Outcome:** communities better able to drive regeneration and improvement from within.	Compares current needs-based development to assets-based approaches. Specific methods are not made explicit and no limitations are acknowledged; all other rigour criteria satisfied.
CE4	Seyfang G: "Working outside the box: community currencies, time banks and social inclusion" *Journal of Social Policy* 33: 49-71	Qualitative: evaluation, specific methods not made explicit.	UK	**Context:** geographical – how asset building programmes are embedded within communities. **Mechanism:** engagement with existing interests and resources. **Outcome:** communities better able to drive regeneration and improvement from within.	Despite a lack of clarity around data collection and analysis methods, the study is well evidenced, although no limitations are acknowledged by the author. All other rigour criteria satisfied.
CE5	Fried L P; Carlson M C; Freedman M; Frick K D; Glass T A; Hill J; McGill S; Rebok G W; Seeman T; Tielsch J; Wasik B A; Zeger S: "A social model for health promotion for an aging population: initial evidence on the	Quantitative: statistical analysis.	USA	**Context:** organisational – how an ABCD programme can be embedded within one facet of a community (here, the education system). **Mechanism:** engagement with existing resources – the knowledge, skills and experience of a specific population sub-group (here, older adults). **Outcome:** better engaged children and	Paper described initial findings from a project engaging older adults with school children to the benefit of both population groups. Study is well documented, well described and well evidenced; all rigour criteria were satisfied.

Table 10: Rigour assessment: community engagement theory.

PAPER	DETAILS	STUDY TYPE	COUNTRY	CMO CONFIGURATION	WERE RIGOUR CRITERIA SATISFIED?
	Experience Corps model" *Journal of Urban Health* 81;1:64-78			older people; children more likely to remain engaged with the education system as they progress through it.	
CE6	Martinson M; Minkler M: "Civic engagement and older adults: a critical perspective" *The Gerontologist* 46;3:318-324	Qualitative: methods not made explicit.	USA	**Context:** individual – how a programme with an overt engagement mechanism is contextualised within the lifeworlds of the target population subgroup. **Mechanism:** engagement with existing knowledge, skills and experience. **Outcome:** more cohesive, engaged community; better able to work together to achieve improvements in community life.	Considers the roles allocated to older adults in civic life and how these roles are defined and underpinned. Lack of clarity around research design and analysis methods; all other rigour criteria satisfied.
CE7	Martinez I L; Frick K; Glass T A; Carlson M; Tanner E; Ricks M; Fried L P: "Engaging older adults in high impact volunteering that enhances health: recruitment and retention in the Experience Corps, Baltimore" *Journal of Urban Health* 83;5:941-953	Quantitative: statistical analysis.	USA	**Context:** organisational – how an ABCD programme can be embedded within one facet of a community (here, the education system). **Mechanism:** engagement with existing resources – the knowledge, skills and experience of a specific population sub-group (here, older adults). **Outcome:** better engaged children and older people; children more likely to remain engaged with the education system as they progress through it.	Second paper from the Experience Corps study, describing benefits of encouraging senior citizen engagement with the wider community via an educational programme. Study was well documented, described and evidenced; all rigour criteria were satisfied.
CE8	Donovan T; Bowler S; Hanneman R; Karp J: "Social groups, sport and political engagement in New Zealand" *Australian Journal of Political Science* 39;2:405-419	Quantitative: statistical analysis	New Zealand	**Context:** specific social sub-groups of a wider community (here, sports clubs). **Mechanism:** engagement with others who hold similar beliefs and values to promote more widespread engagement of these groups with the over-arching political system. **Outcome:** community members more engaged and involved with each other, and more likely to initiate, and maintain, involvement and engagement with the wider political system.	Study is poorly described and poorly evidenced. Authors acknowledge at the outset that their premise has already been disproved by a large body of existing literature, but are still able to prove their hypothesis. No rigour criteria satisfied; little weight attached to the findings of this study.

7.3.1 Community engagement: a mechanism which benefits all volunteers?

The difficulty in pinning down a definition of community engagement lies in the fact that *"casual definitions of "the community" are subject to many interpretations"* (Mullan et al., 2004). The term can be used to describe a geographical neighbourhood, ethnic group, religious group or membership of any other social group; generally speaking, *"the defining characteristic of a community is the common identity shared by its members"* (Tindana et al., 2007). Given that, as the same authors argue, *"communities are not static and may accommodate multiple and even conflicting interpretations of their own traditions and values"* (ibid, p.1451), Green and colleagues suggest that *"'community' should be interpreted broadly as all who will be affected... including lay residents of a local area, service agencies and policy makers"* (Green & Mercer, 2001). With so many potential interpretations of what it means to belong to a community, it follows that there are also different interpretations of what it means to engage with, or be engaged by, a community – community engagement can, potentially, encompass individuals engaging with each other or with other groups, groups connecting with each other or reaching out to individuals, or individuals in one place making connections with other places, or working with communities to generate resistance to the effects of deprivation. This conceptual difficulty was reflected in the review papers, with several different conceptualisations of both 'community' and 'community engagement' represented.

The assets-based community development papers (CE1-3), for example, focused on the idea of community as geographical area in comparing established, needs-based solutions to community development where improvement programmes are designed and implemented by organisations external to the community with approaches which are led by the community and build on existing resources and networks. Instead of promulgating an image of de-industrialised communities as *"needy and problematic and deficient neighbourhoods populated by needy and problematic and deficient people"* (CE1, p.23), reliant on external experts to provide solutions to problems such as worklessness, crime and poor housing (CE3), assets-based approaches change the rhetoric, building on existing positives within these communities to reduce welfare dependency and improve economic security (CE2). By taking careful account of individual and institutional skills and abilities in order

to drive development from within the community, assets-based approaches move away from *"promoting income-generating activities... not synonymous with enhancing the livelihoods of the poor"* (CE3, p.477) and towards development of policies and programmes which account for financial and social vulnerability (CE3) and work with existing assets (which are defined as *"the gifts, skills and abilities of the community's residents"* (CE1, p.25) as well as community associations and institutions) to promote growth and tackle inequalities by strengthening existing networks and resources. The intended effect is that community life will be improved by the people who live in particular areas working together to advance their own community agenda, rather than one which has been externally imposed (eg by local or national government). The ethos behind this type of development work is that, by engaging whole communities and *"mobilising these informal networks"* (CE3, p.476), internally-driven initiatives aimed at development and improvement stand a greater chance of success than improvement initiatives imposed from outside (CE1, p. 25).

The benefits which can be gained from adopting an assets-based approach are, its proponents seem to suggest, more equitably distributed than those from more traditional approaches. By focusing on engagement and supporting 'bottom up' rather than 'top down' change which takes place *within* deprived communities, the effects of positive change are not diluted by the more affluent groups and individuals whose existing resources and social support give them privileged access to other types of improvement initiatives which are targeted at community level. In terms of the Games volunteer programme, for example, the preceding arguments have demonstrated that the greater share of the positive benefits available to participants will be felt by healthier, wealthier individuals who are better able to negotiate the recruitment process and to make the most of the self-development opportunities offered by the programme. The assets-based approach, with its focus on whole community engagement, allows for the over-representation of socio-economically deprived people within the programme (which has been shown to be necessary for inequalities to be successfully targeted (Dahlgren & Whitehead, 2006; Marmot et al., 2008; Krieger, 2011)). The legacy literature is vague about the community engagement potential of the volunteer programme, and takes a much broader view of 'community'; by adopting a focus on the community of Glasgow, rather than on the deprived east end communities where

the Games took place. The lack of provision made to ensure that the latter communities are represented at all unless they are successful in navigating the recruitment process is masked by claims of inclusivity. 2014 volunteering was presented as a programme with which *all* the people of Glasgow were encouraged to get involved, perpetuating the existing rhetoric of it as a problem city which needs external help to enable change. The legacy approach appeared to be incompatible with the ABCD (assets based community development) approach, as the programme was not driven from a grassroots, community-led level.

The assets-based approach was not, however, the only interpretation of community engagement found in the papers being reviewed. The remaining five papers (CE4-8) investigated the potential of different projects to engage with different groups and individuals within geographical communities, and to facilitate these groups and individuals to engage with each other. Anchored, like CE1-3, in a fundamental conceptualisation of communities as geographical entities, the remaining papers also looked at smaller communities within these neighbourhoods. CE4, for example, considered how communities which considered themselves to be excluded from neighbourhood life due to unemployment, lack of income or old age, could engage with time banks to enable them to make a valued contribution to their communities through a scheme which was dependent on a skills currency rather than a financial one. CE4 found that time banks occupied a place on the employment spectrum in the spaces between paid employment (whether formal or informal), training, volunteering and unemployment, with people donating their skills when they had blocks of time to spare and cashing in their time credits when faced with tasks that they lacked the time or the skills to complete. The danger inherent in this approach was that time bank projects might privilege the skills and resources of those in paid employment who had the resources to donate more time and expect more in return. CE4 found, however, that *"time bank co-ordinators successfully targeted particular socially excluded groups of people to join, and 73 percent of respondents* [those who participated in the evaluation] *agreed that their time banks were benefiting the socially excluded in particular"* (p. 62), suggesting that time banks were a particularly useful tool to facilitate significant engagement between socially excluded communities and their counterparts in wider geographical neighbourhoods, and that socially excluded individuals were the ones who would benefit the most from participation.

Older people were also a community of interest for the papers being reviewed; CE4 found that 42% of time bank participants studied were retired, while CE5 and CE7 focused on a project driven by the educational community to promote greater engagement between older people and the younger generation. The Experience Corps® project, piloted in Baltimore before being rolled out to other de-industrialised urban areas in America, sought to bring together senior citizens and school age children by enrolling older people to support literacy development, problem solving and play (CE5, p.66).

The project was designed to facilitate health maintenance and improvement among older adults by engaging them with a project which would be both mentally and physically stimulating, and would also enable them to force and maintain connections with the wider community. In addition to achieving this aspiration, the project was also found to have improved classroom behaviour and school grades as the younger members of the school community engaged and formed bonds with the older people volunteering in their classrooms (CE7). Participation in the Experience Corps® project was contingent on submitting to objective and self-reported health and mental state examinations at baseline, which revealed that none of the volunteers were, or considered themselves to be, in poor health; participants did, however, come from a wide range of socio-economic backgrounds, with disparate levels of income, social integration and education. Repetition of these measures later in the project revealed, however, that individuals whose self-assessed health was 'fair' felt that their physical and mental health had improved as a result of the increased engagement with a community group (in this case, school age children) with which they would not otherwise have had contact. In demonstrating that the children on the receiving end of volunteers' efforts also benefited (in terms of improved grades and reductions in poor behaviour), the study highlighted the potential of volunteering to contribute to fully engaged communities in which all community members stood to gain from volunteer activities – even if they, themselves, were not actively volunteering. Conceived as *"a senior volunteer program designed to have both meaningful social benefits and to offer a community-based approach to health promotion that would attract diverse older adults"* (CE5, p.74), the Experience Corps® project was found to demonstrate that *"it is possible to recruit and retain older adults to this high-intensity volunteer and health promotion program, including a population of older adults at high risk*

for health disparities" (CE7, p.950). CE6 also found that there were positive benefits for senior citizens whose greater engagement with their wider communities had been facilitated by *"both political participation and civic volunteerism"* (p. 319) and by being enabled to *"actively participat[e] in the life of their communities"* (ibid). The authors sound a note of caution, however, about the danger that senior citizens might feel coerced into undertaking voluntary work.

By linking volunteering to the concept of 'positive ageing' found in much of the literature on volunteering in old age, there is significant potential to create the understanding that by rejecting voluntary work, older people are rejecting the chance to make a positive contribution in favour of doing nothing and expecting others to support their ageing process, thus perpetuating an image of older people as a burden on their wider communities (CE6, p.321). CE6 concludes that *"although voluntarism and other forms of civic activity should not be required of older adults, those who are interested in participating should be encouraged and enabled to do so...for low income individuals who wish to participate but for whom there may be economic impediments, the provision of government stipends to make such participation possible should be expanded"* (p. 323). Thus, while there is a danger that the older people most likely to benefit from this type of community engagement will be those in a financial position to take advantage of volunteer opportunities, their less affluent counterparts have the potential to enjoy the same benefits given the financial support to do so.

Only CE8 investigated a community which had come together through a shared interest rather than through commonalities of socio-economic circumstance, looking at the potential for participation in sports volunteering to impact on engagement with both the wider community and political spheres. The authors proceeded with the study despite an acknowledged body of literature indicating that there was no relationship between involvement in sports and increased politicisation; their subsequent finding, that such a relationship did exist, seemed to be based on the conclusion that sports volunteers were more involved in their communities. It was not possible to unpick who this volunteer community were being compared to, and the finding was not thought to be sufficiently robust to support or refute any of the arguments made by the other papers being reviewed.

Promoting greater community engagement, then, is one mechanism of the Games volunteer programme which had the potential to impact positively on the least advantaged members of the Glasgow community, and in particular the disparate communities living and working in the east end of the city. As **Figure 28** illustrates, however, the evidence has shown that for this mechanism to benefit individuals living in deprivation, the initiative in which it is operationalised would have to be conceived, set up and delivered at grassroots level, with community-wide involvement from the very beginning. The 2014 volunteer programme, in contrast, is an externally imposed initiative with little or no implementation-level involvement from the deprived communities in which it was designed to facilitate improvements, indicating that the volunteers who benefit most from participation will be the more affluent members of the Glasgow community who are best able to negotiate the recruitment process and exploit the engagement opportunities made available to them.

Figure 28: intended vs unintended impacts of Games volunteering on community engagement.
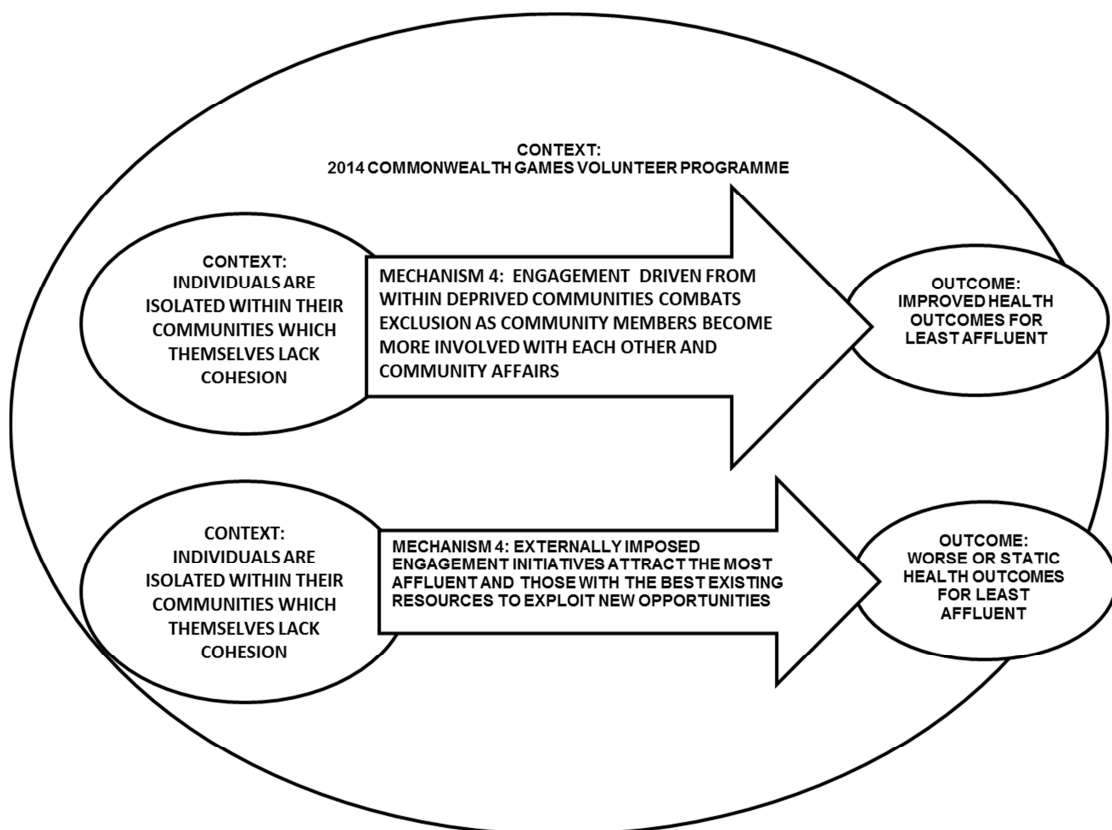
7.3.2 Relationships between volunteering, engagement and health

The community engagement mechanism is operationalised in a manner very similar to that of the social networks mechanism discussed in **Chapter 6**. Both have the potential to impact positively on the health outcomes of disparate population groups, which can also be conceptualised as communities bound together by particular commonalities such as age, gender, ethnicity, religious faith and hobbies or interests (CE3). The difference between them is that while attempts to improve and expand the social networks of Games volunteers was heavily contingent on their underlying socio-economic circumstances (SN2, SN5, SN17), the success of engagement initiatives is heavily contingent on the community context in which they are implemented (CE1-7). The evidence has shown that programmes and initiatives aimed at improving some aspect of a disadvantaged community, such as health outcomes of community members, or access to social resources and jobs, stands a greater chance of benefiting that community if it is driven from within. Where community members, groups and institutions are closely involved in the design and implementation of such programmes, they are more likely to reach the community members who would benefit from them (CE1-3), without the over-involvement of more affluent, external groups. Programmes which are designed externally and implemented with no input from the communities at which they are aimed, and which are opened up to any member of the wider community (for example, the 2014 volunteer programme which was intended to benefit the deprived communities of the east end of Glasgow but which was open to all who wished to apply) are more likely to benefit the health outcomes of individuals and groups who already enjoy some degree of health advantage, whether that be through their level of education, income or social class (CE5-7). Only where externally driven programmes are explicitly rooted in deprived communities, and which set out to recruit the most disadvantaged members of those communities, do they have the opportunity to positively influence the health outcomes of the most deprived (CE4).

Across the papers reviewed here, the consensus was that in order to improve the health outcomes of disadvantaged communities at a level which would have a positive impact on wider population health outcomes, programmes reliant on the community engagement mechanism would need to be either driven from within the

communities they purported to improve, or to recruit exclusively from within these communities. The 2014 volunteer programme, which is externally conceived and implemented and has made no explicit commitment to recruit extensively from within the deprived communities of Glasgow is therefore unlikely to engage positively with these communities. As a result, the communities which are most likely to engage with the programme are the more affluent ones whose members already enjoy the socio-economic advantages which will enable them to utilise the programme as a means of improving their health outcomes. The health of the poorest communities, meanwhile, is likely to either remain static of worsen, as **Figure 28** illustrated.

7.3.3 Summing up the evidence about community engagement

This section set out to explore the community engagement mechanism of the 2014 volunteer programme as one which could potentially bring about improvements in population level health outcomes. The evidence demonstrates that there was some potential for health improvements at community level as a result of the programme, but that these were only likely to be felt if the programme had been driven by or embedded within the specific communities in Glasgow most in need of better health outcomes (for example, in the Bridgeton area of the city, as illustrated in (McCartney, 2010)). By opening up the volunteer programme to anyone who wished to participate, locally, nationally and internationally, it was more likely that the programme will engage with communities (however these are defined) with the social and financial resources to exploit the opportunities that programme participation presents. Given the lack of any explicit engagement between the Organising Committee and the deprived communities in the east end of Glasgow, the theory that participation in the volunteer programme will bring about improved community level health outcomes by promoting greater engagement between individuals and their wider communities across the whole city does not stand up to scrutiny.

All four theories underpinning the 2014 Games volunteer programme have been shown to operationalise as mechanisms which will benefit the health outcomes of the socio-economically affluent at the expense of their more deprived and socially excluded counterparts. The next chapter will look again at how the programme was

theorised to fit with wider Scottish Government health policy, and consider what these findings meant for the potential of Games volunteering to contribute positively to tackling health inequalities in Glasgow, as well as the implications for similar programmes in which might be planned around future major sports or cultural events.

Chapter 8

Realist synthesis: conclusions and reflections

8.1 Introduction

The purpose of this thesis has been to conduct a realist review considering whether, how and in what circumstances the planned approaches to volunteering as part of the 2014 Commonwealth Games would impact on the health of different socio-economic groups across the population of Glasgow. Four theories were identified, which also operated as mechanisms underpinning the Games volunteer programme, all of which had the potential to bring about population level improvements in health outcomes for the people of Glasgow. **Figure 29** illustrates how these programme mechanisms were theorized to interact with the context to lead to health outcomes.

Figure 29: intended outcomes of Games volunteering.
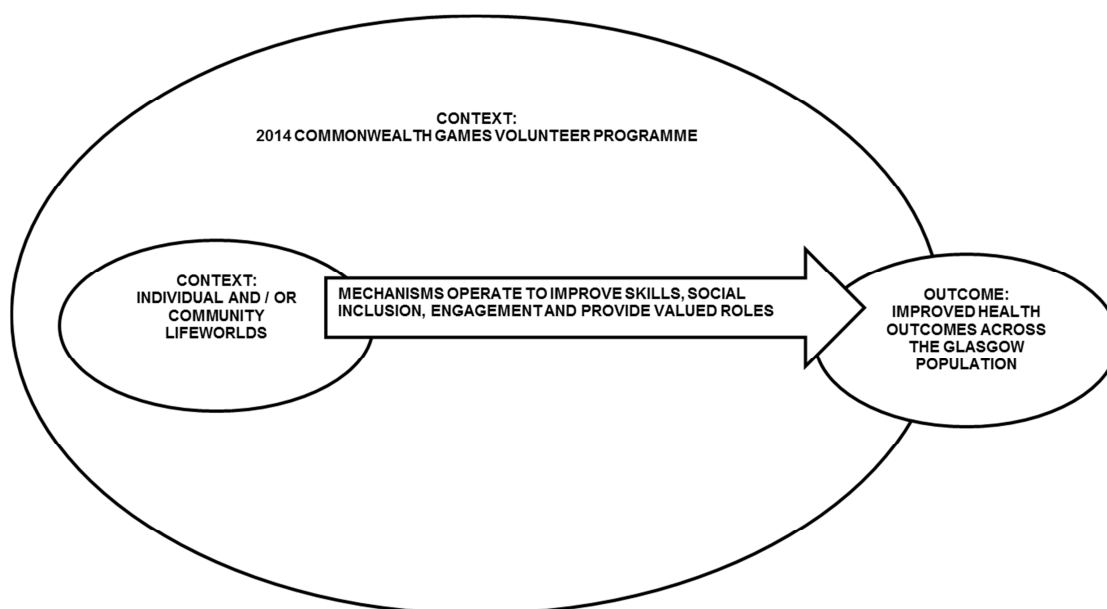
What the review found, however, was that each mechanism of volunteering was heavily contextually constrained; how each worked in practice varied depending on the socio-economic circumstances of the individuals or communities involved (illustrated in **Figure 30**). The mechanisms triggered positive outcomes where

participants came from affluent areas and encountered no major barriers to taking part; the mechanisms triggered either no change or a negative outcome where participants came from deprived parts of the city and were affected by one or more barriers to taking part. The theoretical benefits to health and wellbeing of taking part in voluntary activities were less likely to be felt by members of the more deprived communities in Glasgow; instead, these benefits were more likely to accrue to individuals living in more affluent circumstances, who had the existing social, educational and fiscal resources to fully exploit the opportunities presented to them by 2014 Games volunteering.

Figure 30: intended vs unintended outcomes of Games volunteering
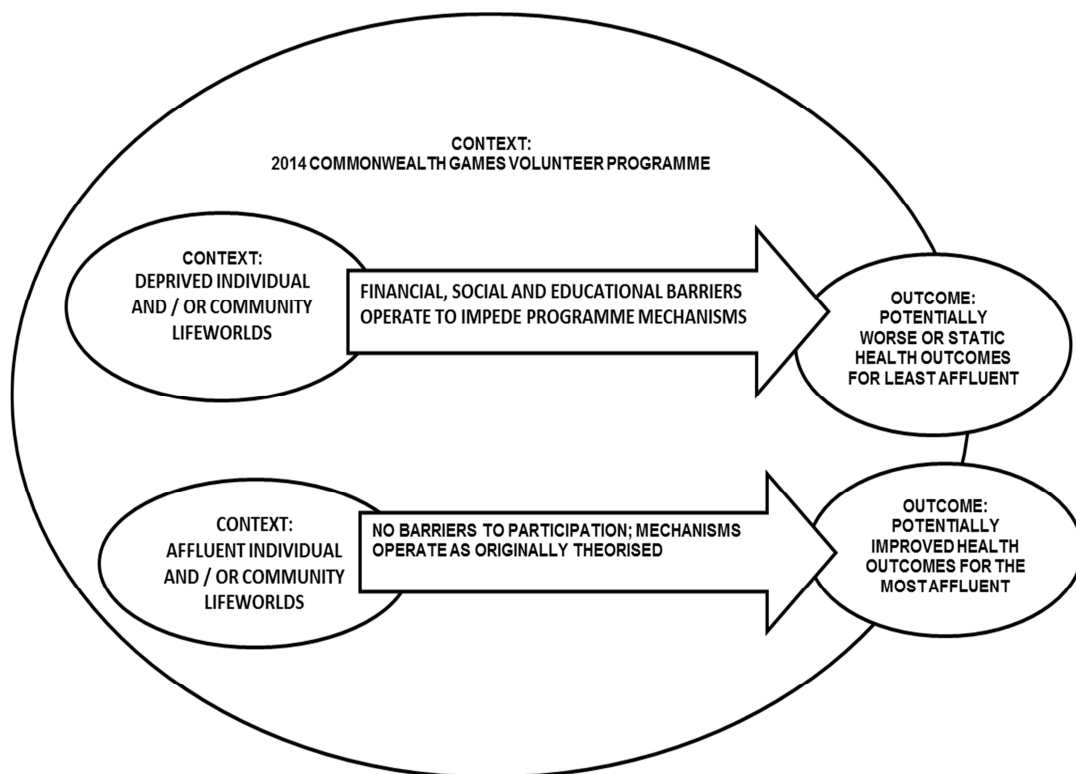
The purpose of this chapter is twofold. First, to investigate in greater detail how the volunteering programme was positioned within wider health policy in order to ascertain the potential effects of the 2014 volunteer programme on health inequalities. Second, the chapter will consider how the realist methodology itself contributed to these findings, and reflect on whether the use of realist synthesis

has foregrounded lessons for the policy community that would not have been made explicit using more traditional review methodologies.

8.2 Health inequalities and the 2014 volunteering legacy

The 2014 Games volunteer programme has been shown to be a complex system which must fit into existing complex systems (Pawson, 2006), such as the life circumstances of individual volunteers and the local and national health landscapes framed by Scottish Government health policy (Scottish Government, 2008; 2010). The over-riding aim of this policy strand is the reduction of health inequalities, an aim conceptualised by the former First Minister as *"a matter of social justice"* (Scottish Government, 2008, p.v); but the primary driver for this focus is not portrayed as the pursuit of a more equitable society, but rather the need for the Government to achieve its *"overall purpose: sustainable economic growth"* (ibid). Framing the need to significantly reduce health inequalities as subsidiary to boosting economic growth initially appears somewhat incongruous, with the former First Minister's comments apparently suggesting that growing the national economy takes precedence over ensuring a more equitable distribution of good health outcomes. It is likely that these comments are underpinned by a sense that growth will solve most problems at a national level through 'trickle down' economics (a perspective known to be problematic (Pickett & Wilkinson, 2010)), and that a healthy population is needed in order to achieve growth.

Equally Well (Scottish Government, 2008; 2010), supports this idea, arguing that the only way to ensure that the majority of people in Scotland reap the benefits of sustainable economic growth is to ensure that they are sufficiently healthy to be able to participate in the creation of that growth. Arguing that *"[p]overty is a key factor in poor health and health inequalities"* (ibid, p.24), the importance of employment as a key mechanism for minimising the negative impacts of poverty is promoted as also being a key mechanism in health policy implementation, underpinned by the theory that *"tackling poverty and deprivation will improve health and contribute directly to...sustainable economic growth"* (ibid, p.24). A key target for the Scottish Government, therefore, is to increase participation in the labour market via good quality jobs as a means of combating poverty. This can only go so far, however; *Equally Well,* for example, is candid about the fact that

the most effective way to target poverty, both among those in work and those who are not, is through redistributive tax and welfare benefits policies, a fact well supported in the health inequalities literature (ibid, p.24; Krieger, 2011; Marmot, 2007; Raphael, 2005). The difficulty for the Scottish Government, at the time the right to hold the event was granted, was that many of the powers to redistribute the wealth generated by sustained, and sustainable, economic growth are retained by Westminster, leaving little option but to find other ways to tackle health inequalities. Echoes of this policy focus can be seen in the Games legacy documents, with *A Games Legacy for Scotland* (Scottish Government, 2008) in particular reinforcing the links between health inequalities and a more vibrant economy, stressing that hosting the Games is an opportunity to ensure *"faster progress towards a healthier nation...and a flourishing economy"* (ibid, p.6).

Despite the tenor of the legacy documents (Scottish Government, 2008; Glasgow City Council, 2008) and the assertions of the event stakeholders that hosting the event would have a positive impact on health inequalities in Glasgow, the four theories underpinning the Games volunteer programme have been shown by this evidence synthesis to be insufficiently robust. None of the mechanisms operated as intended in the context of an unequal city with substantial socio-economic deprivation and, being focused on changing individual health behaviours rather than the redistribution of wealth and community resources, none were able to influence the structural determinants of health. All four had the potential to make some impact on health inequalities in Glasgow, but operational decisions in relation to the programme (for example, the decision only to recruit volunteers who already possessed the skills sought by the organisers) and a volunteer recruitment strategy which failed to take account of the needs of potential volunteers with low literacy or a poor grasp of the English language have contributed to a programme likely to benefit the least deprived most. This is a particularly good illustration of the benefits of the realist synthesis method; by focusing on *who* was likely to benefit from the volunteer programme and *in what circumstances* this was likely to happen rather than on whether or not the programme would achieve its aims across the board, it has been possible to drill down to highlight areas where future, similar, programmes could learn from the 2014 Games and go further to become more inclusive and accessible. A meta-analytic synthesis would have been less able to provide the nuanced detail required

(it is likely that such an analysis would only have been able to show that the programme did not achieve its aims); McCartney's (2010) traditional review was able to show only that there was insufficient evidence for the ongoing public health benefits of major sporting events. Although the latter had, arguably, more scope to include a wider range of primary research, it was still limited by a search strategy focusing on volunteering in a single context. The trade off here is that, although the realist approach opens up a much wider spectrum of primary studies, it is much more difficult to come to a decision on where the saturation point is located and there is a very real risk that depth of knowledge and understanding is sacrificed for breadth. Bearing in mind the importance of context to the realist synthesis, it is important to foreground the understanding that, despite similarities in the organisational aspects of volunteer programmes (for example, in terms of scale, reach and intended participant population), context really is key. It is important to be very clear that, for example, while what worked well for an elderly population in a post-industrial American landscape (Fried et al., 2004) would not necessarily translate wholesale to the post-industrial landscape of Glasgow, there is potential for transferable learning to be achieved by focusing on the interaction of context and mechanism to achieve the outcome of interest. The realist approach is more complex to undertake, and delivers a more complex analysis of how and for whom particular interventions are successful but it is not, to paraphrase Pawson, a panacea for the problems faced by the architects of health (or any other) policy.

It has also been highlighted that the Games volunteer programme was, first and foremost, designed to benefit the event itself, engaging local people in a bid to promote the good things about Glasgow in general and the Games in particular; although the programme has had to fit into wider health policy, it was not designed as a health inequalities reduction intervention. The programme could not, for example, impact on factors such as wealth redistribution, the provision of better quality housing or, to any great extent, the provision of the good quality, permanent jobs needed in the most deprived areas of Glasgow (Dahlgren & Whitehead, 2006; Krieger, 2011; Marmot et al., 2008; Raphael, 2011). In order to make a contribution to health inequalities reduction, the programme would have had to positively discriminate in favour of the most deprived social groups, and offered them recognised, certified, high quality training.   The 2014 Commonwealth Games volunteering legacy, therefore, is unlikely to have any

positive impact on the reduction of health inequalities in Glasgow. This is not to say that the legacy as a whole will not have such an impact; only that this particular strand lacked the capacity to address health inequalities in the city. Again, this illustrates the greater complexity of the answers that can be provided by the realist synthesis method; from a more nuanced understanding of how and for whom the 2014 Games volunteer programme got it right, it is possible to look ahead and make recommendations on how and where future programmes could do better.

Looking beyond the Glasgow event, the findings of this review also provide transferable learning points for future sports and cultural events which are concerned to provide a lasting legacy for their host populations. For a volunteer programme attached to such an event to have a measureable impact on health inequalities, it would have to be designed so as to explicitly recruit the population groups who endure the greatest impacts of health inequalities. This review has shown that failing to do so is likely to result in the greatest benefits of volunteering being felt by the individuals and communities who need those benefits least, given their pre-existing access to the social resources necessary for good health. Given the competing priorities and goals of event organisers, stakeholders and participants, it is likely that any future attempts to reconcile the need to provide an enjoyable, profitable and successful event reliant on the efforts of volunteers for its delivery will prove just as difficult to reconcile with the need to demonstrate a lasting impact on the ongoing effects of health inequalities on deprived groups within the host population. The expectation that a profit-focused event reliant on the recruitment of a cohort of unpaid staff will ultimately contribute to a lessening of the impacts of health inequalities in the wider, host population is a difficult one to realise. In order for it to happen, the volunteer programme would need to be re-designed to take account of the need to contribute to a wider redistribution of wealth and resources – for example, by providing event volunteers with high-quality accredited training which would make them more attractive to local employers post-event. Event organisers would also need to take account of the local job market, and work with local employers to ensure that volunteers would have long term employment options to consider once the event was over.

Similarly, to mitigate the effects of health inequalities at community level, a future event-led volunteer programme would need to work closely with the communities it purported to help; the rhetoric around the Glasgow Games was very much about Scottish Government and Glasgow City Council aims rather than those of prospective volunteers. The provision of world-class sports facilities, for example, is unlikely to contribute to better health in communities which can't afford to use them. Lessons from the assets-based approach to community development could be applied fruitfully if programme organisers engaged more fully at community level, finding out what existing structures and organisations could be adapted and improved, and involving members of the community at every stage. This, in turn, would support the development of stronger social networks among deprived communities, as people were encouraged to join in and work together to bring about tangible improvements to their community resources and environments. In doing so, it is likely that a number of barriers could be dismantled, fostering a real sense of community spirit as people communicated more with their neighbours and worked together to implement change. In terms of social role provision, again future events would need to ensure that volunteers who assumed more prominent community roles during the event had the necessary support in place to continue in those roles over the longer term. These things are all difficult to achieve, particularly in the context of staging an event primarily aimed at promoting an elite activity. If, however, that event purports to leave behind a legacy of better lives for the host population, there needs to be a far greater level of engagement with that population to make sure their voices are heard. Ultimately, organisers of future events need to be much more open and honest about their aims in staging something as big as the Commonwealth Games. At a time of massive public spending cuts, it is no longer enough to simply state that a major sports event will bring health and economic benefits to the host city; in the absence of any hard evidence that this is likely to be the case, there has to be a real effort made to ensure that boosterist claims of future economic and social improvements are achieved. If an event volunteer programme is planned as a public health intervention, it needs to be designed and run as such; if, on the other hand, it is intended principally as a means of keeping down labour costs for the event, it is unwise to claim that participation will be a stepping stone to long-term future employment especially if the local job market is not able to support that.

The task remaining for this thesis is to consider whether realist synthesis was the most appropriate method which could have been used to arrive at these findings, and whether an alternative review methodology would have delivered similar conclusions.

8.3 The contribution of realist synthesis to the volunteering legacy critique

Previous reviews of the potential legacy impacts of major sports events, such as Preuss and Solberg (2006), Weed and colleagues (2009) and McCartney and colleagues (2010) have highlighted *"the general sparsity of directly relevant research evidence"* (Weed et al, 2009, p.7) to confirm or refute the likelihood of events such as the commonwealth Games making positive differences to the lives of host city residents. Particularly in relation to health impacts, Weed's literature searches returned *"no usable evidence…in relation to the direct leveraging of public health (as opposed to physical activity or sport) or of 'active living' or incidental activity from the Olympic games"* (ibid, p. 8), with McCartney's team also asserting that *"there is little evidence that major multi-sports events held between 1978 and 2008 delivered health or socioeconomic benefits for the population of the host country"* (2010, p. 9). Both reviews assert that what evidence there is, is of poor quality and that there are *"large gaps in the range of outcomes evaluated, particularly with respect to health outcomes"* (ibid). In terms of the timing of this review, coming as it does after the 2012 Olympic Games and within the timeframe of the 2014 Commonwealth Games and FIFA World Cup, Weed's and McCartney's findings would seem to suggest that finding further, better quality evidence relating to the health and socioeconomic impacts of major sports events would be unlikely. The challenge for this review has been to take the existing evidence relating to the health impacts of both major, multi-sport events and formal volunteering and to ascertain whether the realist focus on the relationships between context, mechanism and outcome can tell us anything more about the likely impact of the Games volunteer programme on health inequalities.

The transferable learning from this review illuminates where changes would need to be made so that future, similar programmes (whether or not they would be aligned to a major sports event) would be able to make a greater contribution to

the reduction of health inequalities. For example, more could have been done to address barriers to participation; the volunteer recruitment process was limited to online applications (pre-supposing access to the internet and computer literacy) and was only available in English (pre-supposing fluency). Although help was available to prospective volunteers in their local libraries, it is doubtful that in the context of low levels of literacy and / or limited proficiency with the English language a mechanism that relied heavily on people accessing library resources would have had a particularly successful outcome. It would also have made sense for volunteers to have been more actively recruited from more deprived contexts; as chapters 6 and 7 have shown, those furthest from volunteering need the greatest encouragement to take part. Finally, the Games programme would have had a far greater chance of making a meaningful impact on unemployment had volunteers been given access to realistic training opportunities to allow them to gain new, useful, practical skills. Limiting recruitment for particular roles to those who already had the requisite skill set (for example, first aiders) was a missed opportunity to provide shadowing and training opportunities to facilitate personal and career development. In terms of health inequalities, the tendency of the programme to benefit most those who need makes it highly unlikely that it will, once all the post-event analysis has been completed, be found to have made any appreciable impact on the reduction of health inequalities.

Boswell and Cannon define a research critique as *"a mechanism to provide feedback for further improvement"* (Boswell & Cannon, 2011); the critique of a method or methodology is not intended to encompass a comprehensive list of failings, but rather to highlight difficulties and inconsistencies, illuminating ways in which the method or methodology can move forward. The reason for conducting this critique of realist synthesis is to assess its contribution to evidence synthesis, contributing to the knowledge base around the methodology by highlighting its utility to the policy community, taking account of both the strengths and the weaknesses of the methodology.

To provide a meaningful critique of realist synthesis in the context of this review, it is worth reiterating that Weed (2009) concluded that basing Games-related interventions in a festival context would be helpful, while McCartney (2010) concluded that while there was an absence of evidence for the likely success of the

2014 legacy, what evidence there was suggested that there would be few, or no, impacts. Realist synthesis has shown that, despite the paucity of evidence for impacts of major multi-sport events on health inequalities and health outcomes (Weed et al., 2009; McCartney et al., 2010), the evidence for the benefits of volunteering can be drawn into the review in such a way as to contribute meaningfully to the critique of the volunteering legacy impact on health inequalities. This is, simultaneously, both a benefit and a drawback of the method. Focusing on the context, mechanism and outcome combinations of one specific strand of the legacy, opened up a considerably wider pool of primary research than might have been available had a different approach been used. By looking at how context and mechanism were interwoven in a variety of different volunteer programmes, it was possible to directly challenge the legacy inferences that volunteering for the Games was guaranteed to benefit all participants equally. The obverse of this is that access to a wider pool of primary research is only possible if the search strategy is kept as deliberately broad as possible, which is problematic in terms of generating a much larger volume of literature. In contrast to review methodologies with more concrete search boundaries, taking the realist approach runs the very real risk that something important and useful might be missed in the process of working out what is, and what is not, relevant to a methodology underpinned by the idea that everything has potential relevance to the review.

Knowing that a particular programme or intervention did not have an impact is useful, but not helpful without an understanding of why an impact failed to occur. This is where the realist approach is particularly helpful; by unpacking the underlying programme theories, and allowing the reviewer to explore them in a variety of contexts, it is possible to gain a sense of *why* a particular programme did not have the impacts expected of it, and also to gain a sense of how the programme might be adapted to operate more successfully in different contexts. This allows end users of the review to make more informed decisions about how programmes should be implemented, and the degree of flexibility that is likely to be needed to allow practitioners to adapt a given programme to suit local circumstances.

In terms of weaknesses of the method, realist synthesis is undeniably an unwieldy process, the efforts of the RAMESES project (Wong, 2013) notwithstanding. There is

a considerable amount of repetition built into it; for each theory that is unpacked, the literature needs to be mined anew for evidence to either support or negate it, and this takes a considerable amount of time (often in short supply for policy makers who want speedy answers). There is also an unavoidable substitution of breadth for depth; consideration of the ways in which particular mechanisms work across a variety of contexts does not allow for a particularly in-depth analysis of their strengths and weaknesses, resulting in a very broad-brush approach to the evidence synthesis. Thus, while realist synthesis has a valuable contribution to make to the policy process by facilitating the consideration of a much wider range of contexts in which particular programme mechanisms might occur, there also needs to be a caveat that the insights provided are likely to be quite general and may, themselves, need to be subject to further investigation.

From the outset, the realist approach used here has conceptualised the Games volunteer programme as a complex entity which must be slotted into, and find ways to co-exist with, the existing complex entities and systems which define the lives and lifeworlds of all sectors of the host population (Pawson, 2006). The most straightforward approach to conducting a realist review of the evidence pertinent to the legacy promises, therefore, is to isolate each strand (in this case, the volunteer programme), thereby narrowing the field of enquiry while simultaneously opening up a much wider pool of evidence. The *"theory driven, interpretative approach to configuring contextual factors and mechanisms of change related to outcomes"* (Jagosh et al., 2014) of realist synthesis means that the review is not limited by the lack of evidence pertaining to the health and socioeconomic outcomes of volunteering programmes tied to sports participation, but also has recourse to the body of literature dealing with the health and socioeconomic effects of volunteering more generally. In this way, as **Chapter 1** explored, aligning the review with the realist methodology facilitated the unpacking of the commonalities within different types of volunteer programme which involved a wide variety of people to consider not whether the 2014 Games volunteer programme would achieve its stated objectives or not, but which objectives were likely to be achieved, for which population groups and under what circumstances. Where Weed and McCartney focus on the 'succeed / fail' binary, seeking evidence of different levels of impact, and are thus unable to come to definitive conclusions, the realist approach facilitated a more in-depth consideration of

understandings of success and failure. The techniques used here facilitated the use and application of disparate theories to focus on the interactions between context(s), mechanism(s) and outcome(s) such that the generalisability of the resulting findings was more productive in so far as the findings could be applied to other, similar programmes in the future. By focusing on unpacking the theories which underpinned the programme, it was then possible to seek out other types of policy level intervention which had been built around the same, or similar, theories about the potential of volunteering to improve the socioeconomic and health circumstances of respondents.

The difficulty with this widening of the evidence pool was that, for all practical purposes, there was too much evidence for one person to interrogate appropriately within the timeframe of the review, necessitating the introduction of a strategy to limit the amount of primary research recovered. With more traditional systematic reviews, this would have been done in the protocol by laying out explicitly the type of evidence which was to be considered in the review (Petticrew & Roberts, 2006). In terms of a realist review, however, as Jagosh and colleagues (2014) reinforce, *"the underlying logic of the approach makes it antithetical to standardized, predetermined or prescriptive application"* (p.131). Within the methodology itself, there exists the opportunity for the reviewer to make, and explicitly acknowledge, strategic decisions about how to limit the boundaries of the search provided these strategies are explicitly and transparently acknowledged; in this case, the decision was taken to limit policy level interventions and programmes to those which centred around volunteering, given that the body of literature around this type of programme was significant in its own right. Each of the programme theories was also situated within a significant body of literature which highlighted a significant limitation of the methodology. Essentially, the unpacking of complex programme theories promotes an awareness of large, and contested, bodies of literature but inhibits depth of knowledge of these literatures. Depth is sacrificed for breadth, leading to the reviewer gaining a superficial knowledge of a number of areas but no particular expertise on any one theoretical domain.

Making space within the review for expert opinion is another significant departure from tradition for the realist synthesis technique (Pawson, 2006). For the reviewer, this grants a considerable degree of freedom from the process driven constraints of

traditional systematic review techniques; what prevents the realist review from descending into a chaotic collection of opinions is Pawson's insistence (2006) that departures from the planned review process must be explicitly documented to ensure the transparency of the review process. Documenting these departures, however, does not eliminate the potential biases introduced to the evidence pool by the method of setting boundaries for the literature search. Even with the space to make, and document, strategic decisions about the conduct of the literature search, however, the iterative nature of the process can quickly become unwieldy. Given that four theories were identified which underpinned the 2014 Games volunteer programme, the constant re-iteration of searches for evidence of commonality in other types of volunteer programme was found to be particularly onerous, suggesting that in the much faster-paced[21] world of policy analysis conducting a realist evidence review would be somewhat impractical. The critique of impracticality finds some support in the literature, with Wong and colleagues commenting on the need to make the realist synthesis approach much less unwieldy if it is to find a practical application in policy circles (Wong et al., 2013; Wong, 2013).

Getting to grips with what constituted a context and what would be considered a mechanism was also a complicated process. Context, for example, encompassed the contexts in which the Games took place (Glasgow, Scotland, the wider world) as well as contexts in which the volunteer programme would operate (Games venues, the wider city) and the lifeworld contexts of potential programme participants, while mechanisms could be those of the volunteering, of the Games legacy as a whole and artefacts within individual, everyday lives that promoted a positive response to the Games programme. Confusingly, any one piece of evidence can simultaneously be contextual, mechanistic or outcome focused; as the stages of the intervention unfold, the outcome of one part can often become the context for the next; sometimes contexts and mechanisms interact to produce outcomes, and sometimes there is no immediately obvious causal relationship (Pawson, 2006; Wong et al., 2013; Jagosh et al., 2014). For this review, the complexities of understanding the nuanced differences between what could be considered a context, mechanism or outcome and which aspects of the volunteer programme

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[21] "Faster-paced" when the short turnaround times typically afforded to real-world policy analysts is compared to the timeframe of a PhD studentship.

might influence the way in which any given piece of evidence would be thus conceptualised took up a considerable amount of time, something which inevitably slowed down the whole review process and tends to support the critique of impracticality.

There is also an issue around the way in which the research question for the review was arrived at; the focus on unpacking programme theories meant that complex theories about the ways in which the programme operated were beginning to coalesce before the research question had been fully defined and before the relevant literatures had been fully explored. What this meant for this review was that the research questions were not fully defined until half way through the PhD studentship. This created extra work for the reviewer, as the literatures then had to be combed through again once the research questions had been arrived at in order confirm that the questions were answerable within the context of a realist review. It also meant that the investigation of the identified programme theories had the potential to be somewhat superficial; given the number of theories, the large literatures involved and the delay in formulating the final research questions, depth of specialist knowledge was compromised in favour of breadth to try to gain an overview of the myriad ways the programme theories had been implemented in different contexts.

8.4 Summing up: is realist synthesis a useful tool for the policy community?

In the spirit of the realist approach, this is the wrong thing to ask; a more useful question would be *whether, how and in what circumstances* a realist review can be a useful tool for policy makers (Petticrew & Roberts, 2006; Popay et al., 2006; Pawson, 2006). Where there is a need to drill down into a particular initiative or programme, and to get beyond the call for more research inspired by a lack of robust evidence on the efficacy or otherwise of a particular approach, the experience of conducting this review has demonstrated that the realist approach has a great deal to commend it to the policy community.

The difficulties encountered here were as much due to the relative inexperience of the reviewer as they were to the complexity of the method; never having

conducted a review before, there was a considerable amount to learn in terms of the different types of review methodology available and the nuanced differences between each one. Understanding that the principal difference between the realist approach and other methodologies centred around the interplay between context and mechanism to achieve an outcome (whether the expected or unexpected) took time, and the need for this key difference to be understood by the policy community as well as researchers cannot be overstated. A realist synthesis has the potential to be most useful when the policy community has moved beyond "does this work?" to ask the question "could this work here?". Perhaps, for the policy community, the issue is to have clarity and agreement around the question of interest early on, allowing researchers to use the approaches of realist synthesis to focus down on a particular policy challenge. Taking the circumstances around this review as an example, had the brief been to focus on the impacts of the Games volunteering programme on different sectors of society, it would have been possible to move forward with the realist synthesis much more quickly. Part of the delay was working around a wider topic to find an area of interest to drill down into.

 Overall, the review findings went a step beyond existing work considering the potential positive benefits of multi-sports events (Preuss & Solberg, 2007; Coalter, 2007; Weed et al., 2009; McCartney et al., 2010). While in no sense negating the earlier calls for more robust evaluation and research, this review was able to look past conceptualisations of success and failure, and instead consider which components of a particular legacy strand were most likely to meet with success in terms of improving health and tackling health inequalities, which population groups were likely to be most affected and under what prevailing circumstances (a good example of this would have been programme volunteers gaining tangible employment skills and then moving seamlessly into good quality employment). McCartney and colleagues (2010, p.6) concluded that *"[t]here is little evidence that major multi-sport events held between 1978 and 2008 delivered health or socioeconomic benefits to the host country"*. Their review took a whole legacy approach, finding that *"…very little is known about the impacts of previous large scale multi-sport events and, therefore, the possible impacts of future events"* (ibid), but was unable (and was not intended) to drill down further to look at

whether, potentially, *some bits* of the event legacies might have worked for *some people*.

By focusing on one strand of the legacy of particular interest to the policy community, this review has demonstrated the likely health and socioeconomic impacts for particular sectors of the Glasgow population (contexts), how these impacts were achieved by the volunteer programme (mechanisms). The review has also shown how context and mechanism interacted to produce outcomes where the people most likely to accrue long term benefits from Games volunteering were those in employment, with strong social ties and a defined social role; in short, the people least likely to need help to access job opportunities and community-level support. This drilling down into the ways the programme was likely to work in particular contexts provides valuable learning for future events in terms of the need for significant programme re-design in order to make it more accessible – and appealing – to different sectors of the host city population. When contrasted with a more traditional review, such as that of McCartney and colleagues, realist synthesis asks a more nuanced question and delivers more nuanced (and potentially more useful) answers. In light of this, future review commissioners interested in a realist synthesis approach need to consider the following:

1. Be absolutely clear about the question of interest. Review methodologies have moved beyond simply assessing whether or not something works, and it is essential that policy thinking should do the same. Think carefully about exactly what it is that needs to be learned about a particular initiative or intervention.

2. Work closely with the research team, and give them your time when they need it. This will help to ensure that the question of interest is identified at an early stage, and will also help to make sure stakeholder views are incorporated into the review. A difficulty with this review was in the researcher having no involvement with either City Council or Scottish Government stakeholders, which lengthened the amount of time taken to identify the review question and made it almost impossible to secure interviews with individuals in either organisation.

3. Think about the timing of the review. Policy makers typically need
    information quickly, while academic reviews take time. Glasgow, however,
    was working towards bidding for the 2014 Games as early as 2007; arguably,
    it would have been more sensible to commission this review at that time
    when the learning points would have (potentially) been able to have some
    impact on the final volunteer programme.

In conclusion, realist synthesis does have the potential to become a useful tool for
the policy community given its focus on underlying theory and the way it enables
the reviewer to include a much wider pool of evidence than might normally be
expected in a systematic review. For the realist technique (mechanism) to produce
useful insights and recommendations (outcome), however, is highly dependent on
reviewer experience (context) and, potentially, future refinements to the method.

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