



University
of Glasgow

Cunningham, Anna P. (2016) *Volunteering for the Commonwealth Games: what can realist synthesis contribute to health policy making?* PhD thesis.

<http://theses.gla.ac.uk/7305/>

Copyright and moral rights for this thesis are retained by the author

A copy can be downloaded for personal non-commercial research or study

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the Author

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the Author

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given

**Volunteering for the Commonwealth Games:
can realist synthesis contribute to health
policy making in a meaningful way?**

**Anna P. Cunningham
MSc DipIT MA(Hons)**

**Submitted in fulfilment of the requirements of the Degree of
Doctor of Philosophy**

School of Social and Political Sciences

College of Social Science

University of Glasgow

2015

Volume 2: appendices

Contents: Volume 1

Abstract	page 1
List of tables	page 7
List of figures	page 8
Acknowledgements	page 10
Declaration	page 11
Introduction	page 12
Chapter 1: Different approaches to research evidence synthesis	
1.1 Introduction	page 14
1.2 The evolution of evidence synthesis	page 15
1.2.1 Choice of synthesis techniques	page 16
1.2.2 Meta-analysis and the traditional Review	page 17
1.2.3 Narrative synthesis	page 22
1.2.4 Realist synthesis	page 25
1.3 How the three techniques fit within a systematic review framework	page 27
1.3.1 Establishing the review question	page 29
1.3.2 Delineating the protocol	page 30
1.3.3 Selection of methodology	page 31
1.3.4 Searching the literature	page 32
1.3.5 Critical appraisal	page 33
1.3.6 Data synthesis	page 34
1.3.7 Writing up	page 35
1.3.8 Questions of validity	page 36
1.4 Summarising the systematic review typologies	page 37
1.4.1 The case for a realist synthesis of 2014 Games health inequalities	

	impacts	page 42
1.5	Conclusion	page 43
 Chapter 2: Major sports events and the need for a lasting legacy		
2.1	Introduction	page 44
2.2	The rise of major sports events: from ‘festival’ to ‘legacy’	page 46
	2.2.1 Developing the festival	page 46
	2.2.2 Developing the legacy	page 49
2.3	Contextualising event legacy: Glasgow and the 2014 Games	page 53
2.4	Contextualising event legacy: the policy background to 2014	page 58
2.5	Contextualising event legacy: how it relates to health	page 62
2.6	Critiquing the 2014 legacy	page 64
2.7	Determining outcomes: the potential of realist synthesis for 2014	page 66
 Chapter 3: Exploring understandings of health inequalities		
3.1	Introduction	page 68
3.2	Exploring the links between the 2014 Games legacy and health	page 68
3.3	Social determinants of health and the concept of health inequalities	page 69
	3.3.1 Social determinants of health	page 69
	3.3.2 Health inequalities	page 72
	3.3.3 Theories underpinning health inequalities	page 73
	3.3.4 Health policy approaches to health inequalities	page 76
3.4	The 2014 Games legacy and health inequalities	page 82
3.5	Narrowing the focus: pathways to change	page 83
3.6	Realistic questions and realist answers	page 93

Chapter 4: Methods and findings I: preliminary model building	
4.1 Introduction	page 97
4.1.1 A note on referencing	page 97
4.2 First steps in the review	page 98
4.3 Establishing the baseline theories	page 102
4.3.1 The scoping search	page 102
4.3.2 Theory 1: role accumulation	page 106
4.3.3 Theory 2: community involvement	page 108
4.3.4 Theory 3: asset building	page 109
4.4 Checking the baseline theories	page 112
4.5 Theory development: stakeholder interviews	page 113
4.6 Summarising the early findings: the emergence of a disconnect	page 119
4.7 Preparing to move forward	page 125
 Chapter 5: Methods and findings II: testing the model	
5.1 Introduction	page 127
5.2 Setting out the search strategy	page 128
5.2.1 Conducting the search	page 129
5.3 Building the quality appraisal process: assessing relevance	page 134
5.4 Building the quality appraisal process: assessing rigour	page 136
5.5 Conclusion	page 143
 Chapter 6: 2014 volunteering: providing employability skills and widening social networks?	
6.1 Introduction	page 145
6.2 Providing employability skills: how reliable is the evidence?	Page 147
6.2.1 Providing employability skills: a mechanism which benefits all volunteers?	page 151
6.2.2 Relationships between volunteering,	

	employment and health	page 158
	6.2.3 Summing up the evidence about employability skills	page 161
6.3	Widening social networks	page 161
6.3.1	Improved social networks: how reliable is the evidence?	Page 162
6.3.2	Improved social networks: a mechanism which benefits all volunteers?	page 172
6.3.3	Relationships between volunteering, social networks and health	page 177
6.3.4	Summing up the evidence about improved social networks	page 179
 Chapter 7: 2014 volunteering: maintaining social roles and engaging communities?		
7.1	Introduction	page 181
7.2	Providing social roles: how reliable is the evidence?	Page 181
7.2.1	Providing social roles: a mechanism which benefits all volunteers?	page 190
7.2.2	Relationships between volunteering, social roles and health	page 194
7.2.3	Summing up the evidence about social role identities	page 196
7.3	Community engagement: how reliable is the evidence?	page 196
7.3.1	Community engagement: a mechanism which benefits all volunteers?	page 201
7.3.2	Relationships between volunteering, engagement and health	page 207
7.3.3	Summing up the evidence about community engagement	page 208
 Chapter 8: Realist synthesis: unearthing useful evidence on health inequalities?		

8.1	Introduction	page 210
8.2	Health inequalities and the 2014 volunteering legacy	page 212
8.3	The contribution of realist synthesis to the volunteering legacy critique	page 215
8.4	Summing up: is realist synthesis a useful tool for the policy community?	page 221
References		page 223
Bibliography		page 241

Contents: Volume 2

Appendix 1: Initial document analysis from scoping search	
(Volume 1, Chapter 4)	page 6
Appendix 2: Relevance analysis	
(Volume 1, Chapter 5)	page 19
Appendix 3: Rigour analysis	
(Volume 1, Chapter 5)	page 63

Appendix 1: Initial document analysis from scoping search

Year	Paper	Context	Mechanism	Outcome	Underlying theory
1985	Newman S, Vasudev J, Onawola R: "Older volunteers' perceptions of volunteering on their psychological wellbeing" <i>Journal of Applied Gerontology</i> 1985;4:123-127	Programme context: educational in so far as the programmes involved older adults volunteering in schools. Social context: varied by life experience. All volunteers ≥ 55yo, but from range of educational backgrounds.	Provision of structure; social connections (with different generation); engagement / attachment; developing new significant relationships.	Improved self-reported life satisfaction - enrichment / rejuvenation / meaning; improved feelings about the self - feeling worthwhile; coping with trauma; no noticeable change in mental health; no reports of feeling worse.	Volunteering improves self-reported mental health outcomes by providing volunteers with structured social roles to replace those which may have been lost (eg due to retirement).
1996	Kretzmann J, McKnight J P: "Assets-based community development" <i>National Civic Review</i> 85;4:23-29	American inner city communities, contextualised in the popular psyche using overwhelmingly negative images - poverty, crime, unemployment, welfare dependency, gangs, drugs.	Traditional - "needs map": focuses on needs, deficiencies and problems of inner city communities. Alternative - "capacities map": focuses instead on capacities, abilities and assets of communities.	Local people become active rather than passive participants in the community development process. Communities have more influence on the policies and programmes which directly affect them. External resources are utilised more effectively where the community itself has defined when and why they should be sought.	A capacity focused, assets-based approach to community development gives people back a sense of pride, purpose and place. Individuals become active agents in the improvement of their communities and are less likely to be defined by their needs than by the contribution they are able to make to community life.
1997	Page-Adams D, Sherraden M: "Asset building as a community revitalization strategy" <i>Social Work</i> 42;5:423-433	Asset accumulation shown to be applicable and beneficial at both individual household and wider community level.	Creation of individual development accounts (matched savings scheme) to encourage home ownership, education and small business development. Proposal derived from	Positive associations with health through adulthood and old age; +ve effects on life satisfaction and self efficacy, -ve effects on depression and alcohol abuse. +ve associations with economic security -	That encouraging the building up and maintenance of assets can have beneficial effects for poor people - better health, economic stability and a concomitant reduction in welfare dependency, and improved

Appendix 1: Initial document analysis from scoping search

			wider body of evidence suggesting beneficial effects of encouraging asset accumulation at both household and community level.	holding assets reduces welfare dependency. Associated with higher social status for women, both in the home and community, and may offer some protection against domestic violence. +ve relationship between parental asset holding and child educational attainment.	educational attainment among their children.
2000	Van Willigen M: "Differential benefits of volunteering across the lifecourse" <i>Journal of Gerontology</i> 2000; 55B: S308-S318	Programme context: the organisational context within which volunteering is undertaken. Social contexts: the varying lifecourse stages of volunteers.	Provision of social roles; promotion of primary group ties; attachment; social integration; engagement with society.	Older volunteers reported an increased sense of life satisfaction, with the reverse being the case for younger volunteers.	The roles which individuals maintain within society are important to continued physical and mental wellbeing; volunteering contributes to this by facilitating the retention of social roles and motivating people to be more active by getting out and about more.
2000	Wilson J: "Volunteering" <i>Annual Review of Sociology</i> 26: 215-240	Concentrates on the contexts in which volunteering takes place - organisational, community and regional.	Provision of structure; opportunity to learn new skills; opportunity to build social ties.	Better self-reported life-satisfaction, self esteem and self-reported health; some evidence for reduced mortality rates among volunteers; increased support for the concept of caring for the less fortunate as a social responsibility; reductions in anti-social behaviour.	That by presenting individuals with the opportunity to learn new skills, meet new people and remain active and connected, volunteering has a positive impact on health outcomes and mortality rates. Health also positively impacted by lower crime rates and a greater sense of community integration.

Appendix 1: Initial document analysis from scoping search

2001	Thoits P A; Hewitt L N: "Volunteer work and well-being" <i>Journal of Health and Social Behaviour</i> 42;2:115-131	Volunteer lifeworlds.	Motivation to stay active and connect with others; provision of positive role identity.	Increased sense of wellbeing (self-reported) although the study notes that those with pre-existing good mental and physical health are more likely to volunteer than those without.	Volunteering has the potential to impact positively on health outcomes, but with the caveat that this is more likely to be among a pool of volunteers who did not report significant health issues prior to volunteering.
2002	Luoh M-C; Herzog A R: "Individual consequences of volunteer and paid work in old age: health and mortality" <i>Journal of Health and Social Behaviour</i> 43;4: 490-509	Volunteer lifestage; specifically focusing on retirement.	Maintenance of social contacts and involvement; maintenance of physical activity levels; supporting core beliefs and values (eg need to contribute towards welfare and wellbeing of others).	Increased social contact and maintained sense of positive social identity; improved health and wellbeing across the spectrum from self-reported health to objective measures of wellbeing; maintained or increased levels of physical activity.	That health is maintained by giving older adults the opportunity to stay involved in their communities, helping them adapt to major life changes by maintaining their place in wider society.
2002	Hauert C; De Monte S; Hofbauer J; Sigmund K: "Volunteering as red queen mechanism for co-operating in public goods games" <i>Science</i> 296:1129-1131	Community context of volunteer service provision.	Opportunities to co-operate with others working towards a common goal.	Improved health outcomes for the largest pool of people obtained through co-operation.	More people make more gains when they co-operate than acting alone; volunteering provides the means for large scale co-operation among communities, leading to the potential for maximum gains among the largest number of people.
2002	McKenzie K; Whitley R; Weich S: "Social capital and mental health" <i>The British Journal of Psychiatry</i>	Community and wider social contexts within which social capital is created; sub-contexts include family, friends,	Social capital provides the structures which bond, bridge and integrate different social groups (rules, roles,	Outcomes and mechanisms often inter-dependent: collective efficacy can be an outcome of increased trust which is also an	By encouraging people to co-operate within and between their communities, maximum gains in health (among other areas of social

Appendix 1: Initial document analysis from scoping search

	181:280-283	work colleagues and cultural communities.	precedents) leading to the production of co-operative behaviour to benefit the maximum number of group members.	outcome of collective efficacy. Links can be horizontal (between communities / groups) and vertical (influenced by local and national government policy). Strong social links lead to better self-reported health and lowered mortality rates.	life) can be made for the maximum number of people.
2003	Morrow-Howell M; Hinterlong J; Rozario P A; Tang F: "Effects of volunteering on the well-being of older adults" <i>Journal of Gerontology</i> 58B;3:S137-S145	Organisational context within which volunteering takes place; lifestyle stage of the individual volunteer.	Opportunity to create and maintain social roles; increased and improved social networks; access to greater social resources; emotional gratification; role enhancement.	Improved health and wellbeing; improved social integration; potential unintended outcome of role strain as individuals struggle to balance competing roles such that they end up gaining no meaningful benefit from any of them.	Maintaining perceived useful roles within society is beneficial to health; caveats of role strain and self-selection bias (ie those who are healthier and better social integrated are more likely to volunteer).
2003	Mathie A, Cunningham G: "From clients to citizens: asset-based community development as a strategy for community driven development" <i>Development in Practice</i> 13:5;474-486	Community and international level development.	Focus on potential contributions from individuals and community organisations to drive development from within the community. Enhancing capacity of those previously excluded from the decision making process.	Implied rather than explicit - paper is scoping the potential of ABCD - better connected, more resilient communities which gain their strength from empowered and engaged citizens.	That adopting an AB approach empowers individuals to contribute to their communities and reduces dependence on external aid (both financial and other resources).
2003	Musick M A; Wilson J: "Volunteering and depression: the role of psychological and social resources in	Spaces between paid employment, leisure activities and family responsibilities in the lifeworld of the	Motivates action in accordance with personal value systems; provides an access point to psychological resources	Reduction in depressive symptoms among the elderly - finding not replicated in those <65yo. Better general mental	That mental health is improved / maintained by allowing people to feel better about themselves for having done something to

Appendix 1: Initial document analysis from scoping search

	different age groups" <i>Social Science & Medicine</i> 56:259-269	individual volunteer.	(self-esteem, self-efficacy) - " <i>volunteering generates positive cognition and thereby counters negative moods like depression and anxiety</i> " (p260); provides an access point to social resources, reducing the potential distress of isolation; boosts feelings of empowerment.	health accrued across age groups; greatest benefit where volunteering viewed as an extension of individual choice.	benefit their fellow citizens. Reductions in depressive symptoms among the elderly possibly because they are more likely to find themselves battling social isolation than their younger counterparts?
2003	Danson M : <i>Review of research and evidence on volunteering</i> Volunteer Development Scotland, 2003	Wider social context of volunteering.	Volunteering offers flexibility, empowerment and the chance to utilise individual skills and competences for the greater good. Potential negative mechanisms - hidden transport costs, perceived benefit traps, lack of realisation among less educated / low skilled that they could have a role to play; mobility; language problems.	Difficult to recruit the less well informed to volunteering due to enduring image of vol as a middle class activity; social exclusion agenda gets ignored if organisations lack funding; people need to feel welcomed by the organisation in order to want to participate and keep participating.	While volunteering can have positive impacts in volunteers' lives, there are also a number of hidden barriers which need to be addressed in order to recruit and retain the people who might benefit the most from becoming volunteers - eg low skilled / unemployed who might struggle with transport costs or perceive volunteering as exploiting the unemployed.
2003	Pearce N; Davey Smith G : "Is social capital the key to health?" <i>American Journal of Public Health</i> 93;1:122-129	Communities in which individual volunteers live, work and volunteer.	Policy interventions promoting improved levels of social capital.	Social networks and their indicators (capacity to motivate individuals to volunteer, trust among community members) strongly linked to mortality - weaker social networks / lower social capital in deprived areas.	People less likely to engage in volunteering where job security is low and the social welfare safety net has been eroded. Positive outcomes can only be expected where the focus is not just on individual health behaviours but also the context in

Appendix 1: Initial document analysis from scoping search

					which they take place; otherwise interventions are likely to fail in the face of a culture of victim blaming.
2004	Greenfield E A; Marks N F: "Formal volunteering as a protective factor for older adults' psychological well-being" <i>Journal of Gerontology</i> 59B;5:S258-S264	Individual lifeworlds and lifestages of volunteers.	Volunteering provides a compensatory source of activity to counter social role reduction and build resilience - effectively operates as a protective barrier in the face of social role loss.	Reduced role identity absence and an enhanced and reinforced sense of self among volunteers.	Volunteering can result in better mental health outcomes in older people where it offers them the chance to replace lost social roles (eg post-retirement or after children have left home) and maintain their sense of identity within the wider community.
2004	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 Experience Corps model" <i>Journal of Urban Health</i> 81;1:64-78	Organisational context within which volunteering takes place; lifestyle stage of the individual volunteer.	Promoting activity and social engagement into later life (utilising high value social capital of older adults); promoting increased cognitive, social and physical activity; opportunity to 'give back' to the community by helping the next generation to progress.	Increased social, cognitive and physical activity indicating the potential of volunteering to mitigate against disability, dependency and dementia in later life; increased feelings of self-esteem; increased feelings of being integrated within communities. Also unintended (though welcome) outcome of increased educational attainment and reduced behavioural issues in participating schools - the volunteer programme benefited more sectors of society than simply the one it was set up to investigate.	Physical and mental health can be positively impacted by giving individuals the tools to remain active, maintain social contacts and build new links within their communities.

Appendix 1: Initial document analysis from scoping search

2004	Mansuri G, Rao V: "Community-based and -driven development: a critical review" <i>The World Bank Research Observer</i> 19:1; 1-39	Local communities	Channelling development assistance; use of community social capital to organise and enable participation in the development process; active involvement of community in design and implementation; negative mechanism - design and implementation often externally driven or facilitated, leading to a focus on delivering externally set targets.	Reversal of power relations such that the poor are given agency and voice; unintended outcome - implementers' objectives can be about evidencing successful delivery, marginalising the poor whose needs and expectations are considered too difficult to achieve	Assets-based community development theory linked to the use of social capital.
2005	Lum T Y; Lightfoot E: "The effects of volunteering on the physical and mental health of older people" <i>Research on Aging</i> 27:31-55	Volunteer lifestage.	Opportunity to engage with productive social roles; access to social networks and resources.	Better self-reported physical health; lower reported rates of depressive symptoms; higher functioning levels; lower premature mortality; slower declines in health; no impact on rates of clinical diagnosis of physical conditions, although probable positive effect on coping mechanisms post-diagnosis.	By allowing people the chance to maintain their social roles and build on their social networks, self-reported physical and mental health outcomes improve, with documented slowing down of declining health in later years. Volunteering does not prevent ill health occurring, but gives volunteers access to more social resources to help them cope if they do become unwell.
2005	Li Y; Ferraro K F: "Volunteering and depression in later life: social benefit or selection process?" <i>Journal of Health and</i>	Old age.	Provision of formal structure - continuance of social roles and sense of being valued - greater social linkage = better mental health (cf	Reduced depressive symptoms among older adults - volunteering offsets role loss and relieves stress at times of crisis; less disordered	That those with multiple social roles have higher levels of physical and emotional health than those without - subject to the caveat regarding role strain

Appendix 1: Initial document analysis from scoping search

	<i>Social Behaviour</i> 46:68-84		Durkheim). Opportunities for greater social integration; facilitation of social support networks and interactions; opportunities for fulfilment and self-validation.	functioning; bolstering of psychological wellbeing; greater satisfaction with social support mechanisms.	identified by Morrow-Howell et al. Also unclear whether self / social selection at work - is it that individuals who are less depressed volunteer, or do depressed individuals seek out roles which will allow them to have a higher level of social interaction?
2005	Mathie A, Cunningham G: "Who is driving development? Reflections on the transformative potential of asset-based community development" <i>Canadian Journal of Development</i> 26:1;175-186	Local community.	Mobilisation and sustenance of community economic development; specific individuals who catalyse the development process; mobilisation of social networks.	Realisation of community priorities - eg building roads, reforestation (for winter fuel); land acquired for co-operative crops.	Application of assets-based community development linked to the utilisation and expansion of existing social networks.
2005	Narushima M: "Payback time: community volunteering among older adults as a transformative mechanism" <i>Ageing and Society</i> 25;4:567-584	Community setting within which volunteering takes place taking into account the exclusion of senior citizens from community life.	Transformative learning - transforms consciousness of / commitment to community in so far as 'helping the needy' as a specific personal choice boosts feelings of self-esteem. Duality / reciprocity - putting existing skills to good use - "connecting productive activity with human need to create social arrangements that maximise life chances for	More older people become volunteers; increased self-awareness in terms of social perspective and behaviour change, and new insights into ways of dealing with personal issues.	Volunteering gives people the chance to learn more about their communities and how they can integrate into them more effectively. This in turn boosts self-esteem and self-awareness, motivating people to make behavioural changes which can benefit themselves and those around them.

Appendix 1: Initial document analysis from scoping search

			<i>all members of the community" (p570, cites Hendricks & Leedham 1991).</i>		
2006	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" <i>Journal of Urban Health</i> 83;5:941-953	Organisational context within which volunteering takes place; lifestyle stage of the individual volunteer.	Opportunity to engage with social and generative activities; route to increased cognitive, social and physical activity.	Engagement with generative activities resulted in high rates of volunteer retention; increased activity was noted across all three outcome measures; increased or maintained functional ability among volunteers.	Being able to engage with their communities across generational divides promoted better physical and mental health by motivating people to become more physically and mentally active.
2007	Matsuba M K; Hart D; Atkins R: "Psychological and social-structural influences on commitment to volunteering" <i>Journal of Research in Personality</i> 41:889-907	Volunteers' structural lifeworlds (SES / demographics / personality / identity / values / social relationships); organisational context within which volunteering takes place.	Engagement with moral identity of the volunteer - by doing something that 'fits' with moral standpoint, volunteers are able to maintain and build on their social networks. Cyclical - volunteering expands social networks; expanded social networks provide greater opportunities to volunteer.	Greater confidence in and control of social identity; increased social participation.	Commitment to volunteering is the result of personal qualities such as values, identity and / or social relationships.
2008	Brown R; Novotny V; Danson M: "Older people and employment in Scotland: policy trends	Scottish labour market; Scottish welfare policy and the prevailing view of older adults as welfare dependant.	Comparing work vs volunteering among older adults - both are motivated by a perceived loss of social ties and role	Increased sense of wellbeing into old age from maintained strong social ties and feelings of social utility.	Health is positively impacted by continuation of social ties; however, for many older people volunteering is not an option

Appendix 1: Initial document analysis from scoping search

	and current policy approaches" <i>Scottish Affairs</i> 65:67-77		identity.		- need to remain in paid work in order to maintain social ties due to pensions shortfall and potential financial problems as they age.
2008	Jirovec R L; Hyduk C A: "Type of volunteer experience and health among older adult volunteers" <i>Journal of Gerontological Social Work</i> 30;3-4:29-42	Organisational context of volunteering; volunteers' social backgrounds - education / income level / employment status.	"Busy ethic" - volunteering offers the chance to stay active and involved as individuals grow older.	Better health outcomes up to a maximum number of hours volunteered and subject to the programme meeting the needs of volunteers - where it does not, no health benefits are derived as volunteers experience low morale and no boost to self esteem.	The type of volunteering, its relevance to the needs of the individual volunteer and the number of hours volunteered all have a significant impact on whether or not positive health benefits accrue to older volunteers.
2008	Borgonovi F: "Doing well by doing good: the relationship between formal volunteering and self-reported health and happiness" <i>Social Science & Medicine</i> 66:2321-2334	Organisational context of volunteering with a particular focus on volunteering with faith-based groups.	Opportunity to build empathy - by acting, or being seen to act, in accordance with expressed religious principles and personal morality; social support from like-minded individuals;	Increased self-reported happiness regardless of SES when volunteering undertaken under the aegis of a religious group or institution.	Health is positively impacted by the provision of peer led support from like minded individuals from a starting point of shared values and morality.
2008	Boyd C P, Hayes L, Wilson R L, Bearsley-Smith C: "Harnessing the social capital of rural communities for youth mental health: an asset based community development framework" <i>Australian Journal of Rural</i>	Rural communities.	Promoting cohesive community responses to youth mental health issues at grassroots level; facilitating development of relationships which focus on the inclusion of marginalised groups; identification of networks which can contribute to the initiative; building	Potentially positive mental health outcomes where this is the focus of the initiative; potential also for lower crime rates and more cohesive communities. Unintended outcomes where key personnel leave at implementation stages or where strategic champion	Assets-based community development and its linkages to social capital.

Appendix 1: Initial document analysis from scoping search

	<i>Health</i> 16:189-193		and maintenance of intra-organisational relationships.	is not engaged at the outset.	
2011	Danson M; Whittam G: "Scotland's Civic Society v England's Big Society? Diverging roles of the VCS in public service delivery" <i>Social Policy and Society</i> 10;3:353-363	Political environments and institutions.	Market failure - encourages state intervention and the provision of policy led programmes; conversely, market creation where a particular need is identified within a community and addressed by the third sector; creating social cohesion and combating exclusion as part of the Big Society agenda; desire to reduce the role of the state in everyday life.	Increasing reliance on the third sector to provide public services - cost saving where individuals can be persuaded to become the agents of change within their lives rather than relying on state support.	Motivation to volunteer is underpinned by market forces - voluntary sector is used as a substitute for the state, using volunteers to deliver public services and saving money for the state. ? Increasing reliance on third sector = tacit acknowledgement that people have become alienated from the common good in pursuit of wealth and status.
2011	McDougle L M; Greenspan I; Handy F: "Generation green: understanding the motivations and mechanisms influencing young adults' environmental volunteering" <i>International Journal of Voluntary and Non-profit Marketing</i> 16:325-341	Specific environment of eco-volunteering; lifestage of volunteers.	Opportunity to make a personal manifestation of environmental concerns and act according to personal belief systems; functionalist mechanisms - opportunity to express values, learn more about the world and achieve personal growth. **Motivations and mechanisms can overlap - interact in complex ways - ultimate drivers are altruistic and egoistic**	Feelings of having made a difference; enhanced self-esteem; perception of personal growth; greater integration with like-minded individuals who can provide peer support.	Role building within society; environmental volunteers are motivated by the chance to make a difference to the wider world around them as well as within their own communities.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
1981	Schaefer C, Coyne J C, Lazarus R: "The health-related functions of social support" <i>Journal of Behavioural Medicine</i> 4; 4: 381-406	Study seeks to explore the relationship between different types of social support and physical and mental health outcomes. Study respondents not involved in any social programme, and consequently social support is not discussed in terms of its influence on programme participation or programme outcomes.	N/A - study did not explore any type of social programme. Sample was drawn from the general population.	Social support mechanisms are explored independently of lifeworld context; the authors focus on the perceived benefits of different types of social support.	Overall, not relevant to the current review.	Exclude.
1984	Chambre S M: "Is volunteering a substitute for role loss in old age? An empirical test of activity theory" <i>The Gerontologist</i> 24; 3: 292-298	Study explores how participation in voluntary programmes can impact the health and wellbeing of older adults by providing them with substitute social roles to replace societal functions which have been lost (eg work, raising a family).	Programme impacts are discussed at both social group and individual level, with the social group being defined as 'older adults' (aged 60+). Comparisons are made with social groups of different ages, and between genders and levels of educational attainment.	The study finds, unexpectedly, that social role retention is not a critical influence for older adults volunteering. Clearly demonstrates the links between context and mechanism, and illustrates how the mechanism operates counter-intuitively for this social group.	Overall, this paper is relevant to the current review, given that it refutes one of the principal theories underlying the 2014 Games volunteer programme.	Include
1985	Newman S, Vasudev J, Onawola R: "Older volunteers' perceptions of volunteering on their psychological wellbeing" <i>Journal</i>	Paper explores participant perceptions of the ways in which the mechanisms of voluntary activity have impacted on their mental wellbeing. The provision of structure (in everyday life), social connections (across	Programme impacts are discussed at the level of the social group (older adults) and of the individual (including testimony from individual volunteers).	Paper explicitly demonstrates how volunteer programme mechanisms interact with context (particularly that of the individual lifeworld) to influence the outcomes	Relevant to the current review. The authors consider principal theories of the 2014 programme (that participation in voluntary activity promotes engagement	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	<i>of Applied Gerontology</i> 1985;4:123-127	and between generations) and the potential for greater engagement with the wider community are all identified and explored.		(in this case, better self-reported mental health among older adults).	and the building of wider social networks). Interactions between context and mechanisms, and the effect these interactions have on programme outcomes, are made explicit.	
1986	Rohs F R R: "Social background, personality and attitudinal factors influencing the decision to volunteer and level of involvement among adult 4-H leaders" <i>Nonprofit and Voluntary Sector Quarterly</i> 15:87-99	Paper explores mechanisms of indirect relevance to the current review, investigating 'who' volunteers and 'why'. The author finds that age and previous knowledge of the organisation are key factors in the decision to volunteer with the 4-H organisation.	Programme impacts are discussed at the organisational level. The author suggests that better knowledge about the type of person likely to volunteer and their motivations for doing so will help the organisation recruit and retain adult volunteers.	The author does explore the interactions of individual volunteer lifeworlds on the motivation to volunteer, although this is not always explicit.	Overall, this paper is partially relevant to the review. While not discussing the specific mechanisms of interest, it does have something to say about what motivates individuals to become involved with volunteering.	Include.
1996	Kretzmann J, McKnight J P: "Assets-based community development" <i>National Civic Review</i> 85;4:23-29	The paper explores the mechanism of community engagement, and how this can best be operationalised to drive regeneration and community development from within the community.	The level of impact is that of deprived communities (characterised as having high levels of poverty, crime, unemployment, welfare dependency, gangs and drug problems). Illustrates how the community engagement mechanism can be implemented to reduce	Paper demonstrates an explicit link between the context (deprived communities), the mechanism (greater engagement) and the outcome (improved communities).	Although the paper does not speak directly to volunteer programmes, it does have something to say about the process of community involvement in improvement and regeneration programmes.	Include

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
			negative aspects of community life as residents become increasingly involved in policy decisions and resource allocations which affect them.		Relevant to the review as 2014 volunteering is aimed at improving communities as well as individual lives.	
1997	Page-Adams D, Sherraden M: "Asset building as a community revitalization strategy" <i>Social Work</i> 42;5:423-433	Paper discusses programme mechanisms of indirect relevance to the review. Shows how supporting individuals to accumulate assets which will allow them some control over their futures can have a positive impact on home ownership, education and business development. By encouraging these impacts, benefits can be accrued to mental health outcomes, individual self-efficacy, women's social status and educational attainment (which in turn can influence health outcomes, health inequalities and levels of citizenship).	Programme impacts are largely focused at community level. Although there is some discussion of positive impacts on smaller groups within communities (eg gender specific groups), the main focus is on the overall benefits to wider communities which asset accumulation can support.	Demonstrates a clear link between the contexts in which asset accumulation programmes are embedded and the ways in which the mechanism operates.	Encouraging and engaging people at individual level, firmly grounded within the wider community context, can have positive effects. Does not speak directly to volunteer programmes, but does have something to say about the interactions of context and mechanism.	Include
1995	Fries C: <i>Learner needs and demands in multimedia training</i> http://hdl.handle.net/10068/133861	Paper explores the potential of multimedia training as a useful tool for large companies who need to train staff across geographical locations. The mechanisms described are those which	Programme impacts are discussed at the level of the organisation, in terms of how such a training method can be cost and time effective. Also considers the response of individual	Links between context and mechanism are clear, but the paper does not explore any of the contexts, mechanisms or outcomes of interest to	Overall, this paper is not particularly relevant to the review. It does consider the beneficial effects of gaining employment	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
		contribute to the utility of the training method.	learners to a more interactive learning style.	the review.	training, but this is aimed at people who are already in work rather than those with low or no skills who are struggling to enter the labour market.	
1996	Garrison J W: “Brazilian NGOs: from grassroots to national civic leadership” <i>Development in Practice</i> 6; 3: 250-254	Paper explores the community engagement mechanism, describing how a grassroots citizen campaign grew into a powerful organisation dedicated to fighting hunger and unemployment in Brazil.	Project impacts are discussed at community and national level. The paper demonstrates how the community engagement mechanism was operationalised to teach people how to be good citizens and become more involved in the policy making process, directly impacting on circumstances of extreme socio-economic deprivation.	Paper demonstrates clearly how the mechanism interacted with different levels of context, resulting in a powerful organisation of citizen activists.	Overall, this paper is relevant to the current review as it demonstrates clearly how mechanisms of community engagement can be operationalised to have a direct, beneficial impact on the health and wellbeing of the wider community and national populations.	Include.
1998	Uslaner E M: “Social capital, television and the ‘mean world’: trust, optimism and civic participation” <i>Political Psychology</i> 19; 3: Special Issue: Psychological Approaches to Social Capital 441-467	Minimal: paper focuses on optimism as a predictor of civic engagement; social networks are peripheral to the study, which does not consider other motivations to volunteer. Does not really have a great deal to contribute to the discussion around how the mechanisms of interest are likely to operate in the context of	Study impacts are focused at the individual level, concluding that increased television viewing is not directly responsible for individuals’ reluctance to become involved in volunteer programmes.	Interactions of context and mechanism are limited to a consideration of the ways in which optimism impacts on individual decisions to volunteer.	Minimal: paper explores the notion that television has decreased peoples’ motivation to participate in civic projects by presenting a “mean” view of the world.	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
		the 2014 Games.				
1998	Janoski T; Musick M; Wilson J: “Being volunteered? The impact of social participation and pro-social attitudes on volunteering” <i>Sociological Forum</i> 13;3:495-519	Considers the mechanisms of socialisation and tests whether being motivated to volunteer while at school has a lasting impact on the likelihood of volunteering in later life.	Programme impacts are considered at individual, organisational and community levels. Authors find that encouraging young people to develop pro-social attitudes to community engagement via school community service programmes has a lasting effect on attitudes and commitment to volunteering across the lifecourse.	Interactions between the encouragement of pro-social behaviour and the contexts in which this occurs (individual lifeworld, school setting, wider community) is explicitly set out.	Overall, the paper has something to contribute to the discussion around what motivates people to become involved in volunteering and what motivates them to continue to volunteer as they get older.	Include.
1999	Clary E G; Snyder M: “The motivations to volunteer: theoretical and practical considerations” <i>Current Directions in Psychological Science</i> 8:156-159	Paper explores the mechanisms which persuade people to undertake volunteer activities, focusing on the motivational potential of social role provision. Has something to contribute to the discussion around why individuals volunteer, which has a bearing on who volunteers and under what circumstances.	Impacts are discussed at the individual level.	Interactions between context and mechanism are reasonably clear.	Overall, paper does have some relevance to the review in terms of its potential contribution to the discussion around who volunteers and why.	Include.
1999	Musick M A; Herzog R A; House J S: “Volunteering and mortality among older adults: findings from a	Paper considers the potential of volunteer activity to offer protective effects against premature mortality among older people, thus having a	Impacts are considered at the social group (older adults) and individual levels.	Interactions between mechanism (volunteer activity) context (older adults in society) are clearly demonstrated, as is the influence of	Overall, this paper is relevant to the review as it considers volunteer activity as a mechanism for health outcome	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	national sample” <i>Journal of Gerontology</i> 54B;3;S173-S180	positive effect on health outcomes.		these interactions on outcome (reduced premature mortality among the target group).	improvement and explores the circumstances in which this can happen for a specific population sub-group.	
1999	Wilson J; Musick M: “The effects of volunteering on the volunteer” <i>Law and Contemporary Problems</i> 62;4:141-168	Paper explores the mechanisms of social capital and civic engagement in the context of the volunteer lifeworld. Demonstrates how these mechanisms operate in lifeworld contexts to improve health outcomes and levels of citizenship.	Paper demonstrates how volunteer programmes can impact at both the individual and societal level.	Demonstrates explicitly how the identified mechanisms of volunteering operate within lifeworld contexts to achieve the outcomes of interest.	Overall, this paper is relevant to the current review as it illustrates clearly developed theories about how the mechanisms of volunteering operate in specific contexts to improve health outcomes and levels of citizenship.	Include.
2000	Baehre K, Beer D, Hamburg I, Junge L: <i>Further training for women for changing enterprises: a computer based learning module</i> http://hdl.handle.net/10068/219848	Paper explores the pros and cons of a computer-based approach to the provision of training for women in the workplace. Deals with the employment training mechanism, but not as an explicit part of a social programme designed to help people into work.	Training programme impacts are discussed at the individual level.	Demonstrates how the programme operated in the individual lifeworld context, but not explicitly. Does not discuss whether the programme mechanism impacted in any way on health or citizenship.	Overall, this paper is not relevant to the current review. The programme being investigated is aimed at people who are already in employment and has no bearing on wider health and citizenship outcomes.	Exclude.
2000	Scheuffle D A; Shah D V: “Personality strength and social capital: the role of dispositional	Paper considers the role of social capital in promoting civic participation. Although the role of social capital is a mechanism of interest to the	Paper considers the impact of social capital on civic participation at both the individual and wider community levels.	Paper does show how social capital and individual traits can interact to promote civic participation, but	Overall, this paper is of only borderline relevance to the review. It does have something to say	Borderline exclude - keep to one side for reference.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	variables in the production of civic participation” <i>Communication Research</i> 27:107-131	review, it is discussed here as a by product of individuals’ personality traits rather than as an aspect of a specific social programme designed to deliver set outcomes.		links between the mechanism and its wider contexts are unclear.	about the role of social capital in promoting engagement, but not in the context of a social programme specifically designed to bring this about.	
2000	Grube J A; Piliavin J A: “Role identity, organisational experiences and volunteer performance” <i>Personality and Psychology Bulletin</i> 26:1108-1119	Paper focuses on the development of “a theoretical framework to understand performance and retention of volunteers” (p1108). Does this buy interrogating the potential of volunteer activity to provide individuals with a clearly defined role identity.	The authors consider the impacts of volunteering at both the individual level (whether or not the provision of a defined social role boosts volunteer activity) and the organisational level (how volunteer identities can be marketed to potential volunteers).	Clearly demonstrates how the mechanism of social role provision operates within both contexts, albeit not as part of a specific social programme.	Overall, relevant to the current review due to the explicit description of the operation of social role provision in recruiting and retaining volunteers.	Include.
2000	Weitzman E R; Kawachi I: “Giving means receiving: the protective effect of social capital on binge drinking on College campuses” <i>American Journal of Public Health</i> 90;12:1936-1939.	Considers the way in which the social capital mechanism offers specific protective effects against risky health behaviour (binge drinking). Potentially relevant to the review in terms of the potential of social capital to offer some protection against harmful behaviours, albeit not in the context of any explicitly defined social programme.	Impacts of high levels of social capital discussed at the individual level.	Demonstrates clearly how the mechanism operates in individual lifeworld contexts to reduce harmful health behaviours.	Overall, minimally relevant to the review. Social capital is not investigated as a mechanism of any particular social programme, but as a concept which develops in well-socialised college students. However, the way the mechanism operates in a specific context is clearly defined.	Borderline exclude - keep to one side for reference.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
2000	Van Willigen M: "Differential benefits of volunteering across the lifecourse" <i>Journal of Gerontology</i> 2000; 55B: S308-S318	Paper investigates how social role provision and the opportunity for greater social integration and engagement operate within volunteer programmes to bring about better (self-reported) health outcomes	Impacts are discussed at the individual level, illustrating the different impacts felt by people at different stages of the lifecourse.	Demonstrates explicit linkages between the mechanisms of interest and the contexts in which they operate to bring about improvements in (self-reported) health and wellbeing.	Relevant to the review; shows how two of the mechanisms of interest in the Games programme have operated within other types of volunteering programmes.	Include
2000	Wilson J: "Volunteering" <i>Annual Review of Sociology</i> 26: 215-240	Paper focuses on the mechanisms of skills development, improvement of social networks and the provision of structure within the volunteer lifeworld.	Impacts are discussed at organisational (the organisation within which volunteering takes place), community (the community in which the organisation is based) and regional (the wider region within which the community is situated) levels.	Paper explores the interactions of context and mechanism to produce self-reported and independently measured improvements in health outcomes and reductions in mortality rates among those who volunteer. These outcomes are situated within the organisation, community and region within which the volunteer activity takes place.	Paper relevant to the review - shows clear links between the operation of mechanisms within contexts, and how these interactions impact on outcomes.	Include.
2001	Small N, Rhodes P: <i>User involvement and the seriously ill</i> (summary report) Joseph Rowntree Foundation; available at	Report focuses on the ways in which user involvement (in this case individuals with serious medical conditions) can improve health services. Does not touch on any of the mechanisms or outcomes of interest to the review.	Impacts of user involvement are discussed at the individual and organisational (health care services provider) level.	Explores how user involvement operates within the lifeworld context of individual patients to precipitate change.	Overall, not relevant to the review as does not touch on any of the mechanisms or outcomes of interest.	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	http://www.jrf.org.uk					
2001	Thoits P A; Hewitt L N: "Volunteer work and well-being" <i>Journal of Health and Social Behaviour</i> 42;2:115-131	Paper discusses the ways in which volunteering provides a platform for participants to remain active, precipitating positive role identities and an enhanced sense of (self-reported) wellbeing.	Impacts are discussed at the level of the individual volunteer lifeworld.	Demonstrates explicitly how the mechanisms operate within individual lifeworld contexts, with the potential for unintended outcomes. Authors contend that those already enjoying good mental and physical health are more likely to volunteer.	Relevant to the review - demonstrates clearly how the operation of the mechanisms of interest in individual contexts can result in unintended outcomes.	Include.
2001	Cameron A, Harrison L, Burton P, Marsh A: <i>Crossing the housing and care divide</i> (summary report) Joseph Rowntree Foundation available at http://www.jrf.org.uk	Paper discusses ways to promote inter-agency working in the housing and community care sectors. Does not touch on any of the mechanisms or outcomes of interest to the review.	Impacts are described at the organisational level.	Focus is on how to promote and support this type of working rather than on isolating contexts and mechanisms which contribute to its success.	Overall, this report is not relevant to the review.	Exclude.
2002	Townsley R, Howarth J, Graham M, LeGrys P: <i>Promoting the involvement of people with learning</i>	Peripherally relevant to the mechanism of improved employment skills. Paper investigates strategies for promoting greater involvement of people with learning difficulties in the	Impacts are reported at individual and organisational levels.	Paper outlines the ways in which the project supported the development of enhanced employment skills; however, these skills were described in	Overall, the paper is not relevant to the review as it does not describe how the learning disabled service users' skills were enhanced by	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	<i>difficulties in staff recruitment</i> (summary report) Joseph Rowntree Foundation available at http://www.jrf.org.uk	process of recruiting support workers.		relation to the practitioners supporting the project and / or being recruited rather than the service users.	participation in the project. It is also focused on skills development for those already in employment rather than for those seeking to enter the labour force.	
2002	Silverman E, Lupton R, Fenton A: <i>Attracting and retaining families in new urban mixed income communities</i> (summary report) Joseph Rowntree Foundation, available at http://www.jrf.org.uk	Report looks at different mechanisms for attracting families in different income brackets to new urban developments. Tangentially relevant to the operation of social network mechanisms, but does not focus on this explicitly.	Impacts are described at the community level.	Paper describes how different mechanisms for attracting families to new developments operate in different community contexts, but these mechanisms are not explicitly relevant to those being investigated by the review.	Overall, the paper is only tangentially relevant to the review, although may be relevant to more detailed discussions of the ways in which social networks operate.	Borderline exclude - keep to one side for reference.
2002	Luoh M-C; Herzog A R: "Individual consequences of volunteer and paid work in old age: health and mortality" <i>Journal of Health and Social Behaviour</i> 43;4: 490-509	Paper focuses on the ways in which volunteer activity promotes the improvement of social networks and of individual physical activity levels.	Impacts are discussed at the individual level.	Paper demonstrates explicitly how individual life experiences and life circumstances influence the operation of the programme mechanisms.	Relevant to the review - shows explicitly the contribution of volunteering in a specific context to individual health outcome improvement.	Include.
2002	Hauert C; De Monte S; Hofbauer J; Sigmund K:	Demonstrates how community co-operation can lead to advantageous	Impacts discussed at the community level	Shows that co-operation can result in better health or the	Of interest, but ultimately not relevant to the	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	"Volunteering as red queen mechanism for co-operating in public goods games" <i>Science</i> 296:1129-1131	outcomes, but does not explicitly delineate the mechanisms by which this happens.		majority, but lacks specificity and explicitness in describing how contexts and mechanisms interact.	research question in terms of either mechanism or outcome.	
2002	McKenzie K; Whitley R; Weich S: "Social capital and mental health" <i>The British Journal of Psychiatry</i> 181:280-283	Paper focuses on the range of contexts within which social capital can be created - community, family, work and cultural communities. Not specifically related to any kind of social programme.	Impacts of social capital are discussed at the individual and community levels.	Shows the interdependency of context and mechanism, and the ways in which strong social links can benefit health. Does not show how these links might be created as part of a specific social programme designed to impact on health outcomes, health inequalities or levels of citizenship.	Only peripherally relevant to the review, but may be of interest in a deeper exploration of how social capital is created.	Borderline exclude - keep to one side for reference.
2003	Fyfe N R; Milligan C: "Out of the shadows: exploring contemporary geographies of voluntarism" <i>Progress in Human Geography</i> 27:397-413	Paper considers volunteering itself to be a mechanism, integral to the creation of social capital and active citizenship.	Impacts are discussed at the level of the state - authors are interested in how volunteering is operationalised in advanced capitalist nations.	Paper demonstrates clearly how volunteering operates as a mechanism to create social capital and active citizenship. Also highlights the danger that it comes to be seen as a panacea for social problems.	Relevant to the review - considers how volunteering might itself operate as a mechanism, and also considers unintended outcomes.	Include.
2003	Morrow-Howell M; Hinterlong J;	Shows how volunteering can create social roles, increase	Impacts are described at the organisational and	Demonstrates clearly how the mechanisms	Relevant to the review - shows clear	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	Rozario P A; Tang F: "Effects of volunteering on the well-being of older adults" <i>Journal of Gerontology</i> 58B;3:5137-5145	and improve social networks, give volunteers better access to resources by improving confidence, provides emotional gratification and enhances social roles.	individual levels.	operate in different contexts (organisational and individual)n to influence wellbeing. Also demonstrates the potential for unintended outcomes, where volunteers suffer from role strain through taking on too many commitments.	interactions between context(s) and mechanism(s) to impact on the health and wellbeing of participants.	
2003	Mathie A, Cunningham G: "From clients to citizens: asset-based community development as a strategy for community driven development" <i>Development in Practice</i> 13:5;474-486	Paper describes how the mechanisms of social capital and community engagement interact, within different contexts, to promote development from within deprived communities.	Impacts are described at the national and international level, showing how different outcomes can be achieved among communities in different geographical contexts.	Demonstrates how social capital and community engagement interact with the other elements of ABCD to promote community-driven development in different national and international contexts.	Overall, the paper is relevant to the review as it provides a clear description of the ways social capital can be operationalised in different contexts.	Include.
2003	Musick M A; Wilson J: "Volunteering and depression: the role of psychological and social resources in different age groups" <i>Social Science & Medicine</i>	Paper focuses on the potential of volunteer activity to combat social isolation and mental distress by promoting engagement with the wider community and the building of social networks.	Impacts are described at the individual level, situated in the spaces between paid employment, leisure activities and family responsibilities.	Demonstrates how the mechanisms operate in different individual contexts to bring about reductions in mental health symptoms. Comparisons are made across age demographics, which	Shows link between a specific outcome, specific mechanisms and a specific population group.	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	56:259-269			suggest that volunteering may benefit older adults (more likely to be socially isolated) more than their younger counterparts.		
2003	Pattie C; Seyd P: "Citizenship and civic engagement: attitudes and behaviour in Britain" <i>Political Studies</i> 31: 443-468.	Paper discusses how civic engagement and social capital operate as mechanisms to promote increased levels of citizenship in the UK. The effects of the two mechanisms are investigated independently, and in terms of how the interaction of the two might affect citizenship levels.	Impacts are described at the community and national level.	The interactions of the mechanisms are described, and how this relates to the overall national context (in terms of changing citizenship levels across the UK).	Relevant to the discussion of greater citizenship as a projected outcome of the 2014 volunteer programme, and the reasons why Games volunteering alone may not have any discernible impact on levels of citizenship in Glasgow / Scotland in the post-Games period.	Include.
2003	Watson R, Manthorpe J, Andrews J-A: <i>Nurses over 50: options, decisions and outcomes</i> (summary report) Joseph Rowntree Foundation, available at http://www.jrf.co.uk	Paper discusses the impact of employment-related decision making of NHS nurses over the age of 50. Tangentially relevant to the mechanism of employment skills provision, although this is not explored explicitly in the report.	Impacts are discussed at the individual and organisational levels.	Mechanisms are not explicitly pinpointed; the paper is more of a general discussion about the decision making processes of nurses in this age group about whether or not to continue working.	Overall, this paper is not relevant to the review. Does not demonstrate any clear links between context, mechanism and outcome.	Exclude.
2003	Danson M : <i>Review</i>	Paper discusses both positive	Programme impacts are	Shows how	Overall, relevant to	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	<i>of research and evidence on volunteering</i> Volunteer Development Scotland, 2003	and negative mechanisms of volunteering. For example, caveats about hidden costs and language barriers are appended to the potential for skills development.	described at the wider societal level.	volunteering has the potential to utilise and develop individual skills for the greater good. Also demonstrates potential negative mechanisms, such as hidden transport costs, perceived benefit traps, lack of understanding among some groups of the role they could play as volunteers and language problems.	the review - considers both the positive and negative mechanisms of volunteering, and shows clearly that they are contextually dependent.	
2003	Pearce N; Davey Smith G : "Is social capital the key to health?" <i>American Journal of Public Health</i> 93;1:122-129	Paper describes how social capital can be operationalised to bring about community level benefits in the context of different policy-level social interventions.	Impacts are described at the community level.	Clearly demonstrates how social capital can be operationalised in different context to bring about the intended outcomes.	Relevant to the review: shows clear and explicit influence of context / mechanism interactions on the eventual programme outcomes.	Include.
2004	Corden A; Ellis A: "Volunteering and employability: exploring the links for incapacity benefits recipients" <i>Benefits</i> 40;2:112-118	Paper examines how volunteering can be positioned as a route out of social exclusion and into paid work. Relevant to the review as the 2014 programme emphasises the potential for participants to have better chances of gaining paid employment in the post-Games period.	Impacts are discussed at the individual level.	Authors find that the evidence for volunteering as a route into paid employment is mixed, and highly dependent on the individual lifeworld context. Those with the most to gain from volunteering in terms of employability skills	Overall, the paper is relevant to the review because it explores government policy of welfare into work via volunteering, and considers the barriers which prevent those on incapacity benefits from being able to participate.	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
				are likely to be those who face the greatest barriers to participation.		
2004	Seyfang G: "Time banks: rewarding community self help in the inner city?" <i>Community Development Journal</i> 39;1:62-71	Paper examines the concept of reciprocal volunteering as part of a time bank as a mechanism to promote social inclusion and active citizenship.	Impacts are discussed at the individual and community levels, and some consideration is also given to impacts on hosting organisations.	Paper demonstrates how reciprocal volunteering works in specific individual and social contexts to precipitate the outcomes of interest.	Overall, the paper is relevant to the review - demonstrates a clear link between the way mechanisms operate in context and the outcomes achieved.	Include.
2004	Seyfang G: "Working outside the box: community currencies, time banks and social inclusion" <i>Journal of Social Policy</i> 33: 49-71	Paper examines the concept of reciprocal volunteering as part of a time bank as a mechanism to promote social inclusion and active citizenship. Time banks are described as a way to try to re-define the social interpretation of 'valuable work'.	Impacts are discussed at the individual level.	Paper considers how social inclusion mechanisms operate in contexts other than those of a well-defined policy intervention. Demonstrates that the outcomes of non-mainstream programmes can be just as valuable to individual participants.	Overall, the paper is relevant to the review - demonstrates a clear link between the way mechanisms operate in context and the outcomes achieved.	Include.
2004	Cappellari L; Turati G: "Volunteer labour supply: the role of workers' motivations" <i>Annals of Public and Co-operative Economics</i> 75;4:619-643	Paper looks at the effects of financial reward vs no financial reward on the motivation to volunteer. Difficult to infer what the mechanisms of interest are.	Discusses how motivations are perceived at the individual level, but does not discuss any specific impacts of voluntary activity on the individual.	Paper seeks to define a theoretical model to predict whether or not financial incentives are likely to increase volunteer activity. Does not explicitly describe how this mechanism operates in different contexts.	Overall, this paper is only peripherally relevant to the review, although might have something to add to a discussion of the different motivations for volunteering.	Borderline exclude - keep to one side for reference.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
2004	Greenfield E A; Marks N F: "Formal volunteering as a protective factor for older adults' psychological well-being" <i>Journal of Gerontology</i> 59B;5:S258-S264	Paper considers the mechanisms of social role provision, and concomitant resilience building in the face of role loss in the wider lifeworld.	Impacts are discussed at the individual level, and are shown to be dependent on lifeworld circumstances and lifestage.	Explicitly defines how mechanisms operate across different lifeworld / lifestage contexts to precipitate an enhanced sense of self and of personal wellbeing among participants.	Relevant overall as demonstrates a clear link between context, mechanism and outcome.	Include.
2004	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 Experience Corps model" <i>Journal of Urban Health</i> 81;1:64-78	Paper focuses on the mechanisms of social engagement and activity (whether social, physical or cognitive) provision.	Impacts are described at both the organisational and individual levels.	Improved mental and physical wellbeing explicitly linked to the interaction between context and mechanism of this particular volunteer programme.	Relevant overall as demonstrates a clear link between context, mechanism and outcome.	Include.
2005	McGehee N; Santos C A: "Social change, discourse and volunteer tourism" <i>Annals of Tourism Research</i> 32;3:760-779	Paper deals with the theory that volunteering overseas can increase levels of social activism among participants.	Impacts are described at the organisational level.	Outcome measures designed to show an increase in social activism post-volunteer experience, but did not consider whether this commitment was long or short term. Did not include any measures	Paper is not relevant to the review as it deals with the concept of volunteer tourism, which was one of the exclusion criteria for primary research.	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
				of whether social capital was affected in the volunteers' home communities.		
2005	Grimm R; Dietz N; Spring K; Arey K; Foster-Bey J: Corporation for National and Community Service <i>Building Active Citizens: the role of social institutions in teen volunteering</i> Brief 1 in the <i>Youth Helping America</i> series.	Considers how voluntary activity can be used by the policy community as a driver for regeneration, (re)development and service delivery.	Impacts of volunteering are described at policy level, considering the importance of third sector activity in promoting the policy goals of community development and active citizenship. Argues that as welfare cuts increase, voluntary organisations will increasingly find themselves working in partnership with government to ensure provision of essential	Authors suggest that the mechanisms at work here are likely to prove a double edged sword; if the state comes to rely on volunteers to drive regeneration, development and service delivery, there is a danger that voluntary work will be devalued leading to fewer people becoming involved.	Relevant to the review as the Games volunteer programme has been presented as an opportunity for individuals to influence civic regeneration and community life as well as improving their own skills and social links. This paper suggests that negative outcomes are as likely to result from this as positive ones.	Include.
2005	Narushima M: "Payback time: community volunteering among older adults as a transformative mechanism" <i>Ageing and Society</i> 25;4:567-584	Paper considers how the transformative learning opportunities inherent in some types of voluntary activity can act as a driver for greater social and community engagement.	Impacts are described at the individual and community levels.	Paper demonstrates clearly how the mechanisms operate in different contexts to achieve better levels of social engagement within communities.	Focus on interaction between context and mechanism, is of particular interest. Connection between this interaction and potential outcomes also potentially useful, even though the outcome measures are not explicitly labelled as concerning health or	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
					active citizenship.	
2005	Lum T Y; Lightfoot E: "The effects of volunteering on the physical and mental health of older people" <i>Research on Aging</i> 27:31-55	Paper discusses how both social networks and social roles can be enhanced by volunteer activity, leading to improved physical and mental health.	Impacts are described at the individual level, and are shown to be dependent on lifestage (older vs younger adults).	Focuses explicitly on the health outcomes of interest to the review, and demonstrates clear links between these outcomes and the interaction of context and mechanism.	Demonstrates clear links between context, mechanism and outcome.	Include.
2005	Li Y; Ferraro K F: "Volunteering and depression in later life: social benefit or selection process?" <i>Journal of Health and Social Behaviour</i> 46:68-84	Paper describes how volunteering can enhance health and wellbeing by providing older adults with opportunities for social engagement, appropriate and fulfilling social roles and a sense of structure in their lives.	Impacts are described at the individual level, and are shown to be dependent on lifestage (older vs younger adults).	Creates an explicit link between the interaction of context and mechanism and improved mental and physical health outcomes in older volunteers.	Demonstrates clear links between context, mechanism and outcome.	Include.
2005	Stace S, Roker D" <i>Parental supervision: the views and experiences of young people and their parents</i> (summary report) Joseph Rowntree Foundation, available at http://www.jrf.org.uk	N/A: paper focuses on an exploration of parenting strategies to improve social behaviour in children and adolescents.	N/A	N/A	Paper is not relevant to the review.	Exclude.
2006	Fyfe N; Timbrell H; Smith F M: "The	Paper explores the increasing reliance (at	Impacts are discussed at policy level.	Paper illustrates how the mechanisms of	Overall, relevant to the review as the	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	third sector in a devolved Scotland: from policy to evidence” <i>Critical Social Policy</i> 26:630.	government level) on the third sector to provide essential service. Focuses on the potential of volunteering to promote community engagement and active citizenship in the context of service provision.		volunteering could end up operating negatively. As governments rely more heavily on volunteers to provide services, less people will volunteer.	interactions of context and mechanism are well illustrated, and negative outcomes are considered in addition to positive ones.	
2006	Finkelstein M A: “Dispositional predictors of organizational behaviour: motives, motive fulfilment and role identity” <i>Social Behavior and Personality</i> 34;6:603-616	Paper looks at how the role identity mechanism of volunteering operates in the context of workplace volunteer activity.	Impacts are discussed at the organisational and individual levels.	Paper illustrates how the role identity mechanism operates, and suggests that it may not be as important in this volunteering context as in others.	Overall, relevant to the review - illustrates how the mechanism operates to bring about an unexpected outcome.	Include.
2006	Martinson M; Minkler M: “Civic engagement and older adults: a critical perspective” <i>The Gerontologist</i> 46;3:318-324	Paper explores the mechanism of social role provision in the context of civic engagement projects aimed at older adults. Consideration is given to the way in which participation is framed, and the sorts of roles older people are being asked to take on in their communities.	Impacts are discussed at the level of societal groups (older adults) and wider communities.	Paper seeks to broaden the dialogue around whether the social roles being provided by these sorts of programmes are always likely to be beneficial. Illustrates how the social role mechanism operates in the context of older adults’ lifeworlds and of wider communities.	Overall, relevant to the review - demonstrates clear links between context, mechanism and outcome.	Include.
2006	Kim D; Iwachi I: “A multilevel analysis	Study explores the relationships between the	Impacts of social capital are discussed on general terms -	Minimal: the study does show that the form of	Study is of interest in terms of its support	Exclude

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	of key forms of community and individual level social capital as predictors of self-related health in the United States" <i>Journal of Urban Health</i> 83;5:813-826	various forms of social capital and self-reported health.	there is no focus at any one particular level.	social capital must be considered, not only whether it is present. However, outcome measures are self-reported and the communities which participated in the study were only considered in terms of their levels of social capital rather than considering socio-economic or socio-demographic variations across and between communities.	for the idea that social capital is a nuanced and multi-layered concept, but ultimately does not have anything to contribute to the discussion around how social capital operates across and between social groups.	
2006	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" <i>Journal of Urban Health</i> 83;5:941-953	Paper explores how cross-generational volunteer activity can bring about improvements in health and activity levels among older adults.	Impacts are discussed at the individual and community levels.	Demonstrates clearly how the mechanism operates in this context to precipitate improvements in cognitive, physical and social activity.	Demonstrates explicit links between context, mechanism and outcome.	Include.
2007	Cloke P; Johnsen S;	Paper explores how the	Impacts are discussed at the	Demonstrates clearly	Demonstrates clear	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	May J: "Ethical citizenship? Volunteers and the ethics of providing services for homeless people" <i>Geoforum</i> 38:1089-1101	social role mechanism is operationalised by giving people the chance to put their personal moral beliefs into practice and / or to give something back to an organisation which has helped them.	individual and organisational levels.	how the mechanisms interact with individual and organisational contexts to bring about positive outcomes for both the recipients of volunteering activity and the volunteers themselves.	links between context, mechanism and outcome.	
2007	Lie M; Baines S: "Making sense of organisational change: voices of older volunteers" <i>Voluntas</i> 18: 225-240	Paper does not explore any specific mechanisms of volunteering itself, focusing instead on the impacts of organisational change on individual decisions to volunteer	Impacts of volunteering are not discussed in any detail at any level.	N/A	Overall, this paper is not relevant to the review.	Exclude.
2007	Lyttleton C; Beesey A; Sitthikriengkrai M: "Expanding community through ARV provision in Thailand" <i>AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV</i> 19;S1:44-53	Paper is focused on the use of volunteers to provide anti-retroviral drugs to AIDS / HIV sufferers in order to broaden access to these services.	Impacts are discussed at the individual level.	This type of volunteer activity is considered against a backdrop of minimal government funding for AIDS prevention in Thailand. However, the paper does not consider the beneficial aspects of volunteering on the health or citizenship of people who actually volunteer.	Overall, not relevant to the review which is concentrating on the benefits (or otherwise) of voluntary activity to those who volunteer.	Exclude.
2007	Taylor M, Wilson M, Purdue D, Wilde P: <i>Changing neighbourhoods: the impact of</i>	Paper considers how the provision of minimally invasive community support programmes can improve community life by bolstering	Potential impacts are discussed at the community and individual levels.	N/A. Paper is concerned with describing the process of setting up such schemes and getting	Overall, minimally relevant to the review.	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	'light touch' support in 20 communities' (summary report) Joseph Rowntree Foundation, available at http://www.jrf.org.uk	social networks and community engagement.		buy-in from public sector agencies rather than with the impacts on individuals and communities <i>per se</i> .		
2007	Matsuba M K; Hart D; Atkins R: "Psychological and social-structural influences on commitment to volunteering" <i>Journal of Research in Personality</i> 41:889-907	Considers the potential of volunteer activity to improve and enhance social networks, particularly if the activity is something that resonates with the volunteer's personal morality (regardless of SES). Focus is on dovetailing of volunteer activity with personal morality and how this influences social identity and engagement.	Impacts are described at the individual and organisational levels.	Demonstrates links between the way mechanisms operate and the contexts they operate in.	Overall, relevant to the review - illustrates the ways in which outcomes are a direct consequence of the interaction of context and mechanism.	Include.
2007	Laverie D A; McDonald R E: "Volunteer dedication: understanding the role of identity importance on participation frequency" <i>Journal of Macromarketing</i> 27:274-288	Paper explores the mechanism of role identity and the impact this has on motivation to volunteer. Has something to add to the discussion around who volunteers and why, in the context of maintaining / retaining a defined role identity.	Impacts are described at the individual level.	Authors find that role identity, among other mechanisms, has a significant influence on the decision to volunteer, and volunteers who find that this facet of the experience is addressed are able to make a more significant contribution to social	Overall, paper has a contribution to make to the review in terms of who volunteers and why, and the importance of personal motivations for the outcome of volunteer programmes.	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
				welfare.		
2008	van Hooijdonk C; Droomers M; Deerenberg I M; Mackenbach J P; Kunst A E: "The diversity in associations between community social capital and health per health outcome, population group and location studied" <i>International Journal of Epidemiology</i> 17:1384-1392.	Study explores the idea that differences in effects of community social capital on health might be artefactual. To investigate this theory, authors consider the different relationships between social capital and health for different population groups in different areas.	Impacts are described at the level of population or social groups, and the community.	Demonstrates clear links between the way a mechanism operates and the context in which it operates. Study concludes that the effects of social capital on health vary depending on the population group studied, and the location in which the study took place.	Overall, this paper is relevant to the review because of its focus on the differences in outcome that the same mechanism can bring about for different people in different circumstances.	Include.
2008	Carpiano R M: "Actual or potential neighbourhood resources and access to them: testing the hypotheses of social capital for the health of female caregivers" <i>Social Science and Medicine</i> 67: 568-582.	Breaks down social capital into actual / potential network resources, access to them and their potentially negative effects on a specific population sub-group (female carers of children).	Impacts are discussed at the level of the population subgroup and the individual.	Concludes that considerations of the impacts of social capital on health need to bear in mind the actual or potential resources inherent in social relationships, and the access which particular population sub-groups have to these resources.	Relevant to the review because the author focuses explicitly on the way(s) in which social capital might work and also explores the potential negative effects in terms of how a lack of access to particular resources, even in good social networks, might impact	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
					negatively on health outcomes.	
2008	Maloney W A; van Deth J W; Roßteutscher S: "Civic orientations: does associational type matter?" <i>Political Studies</i> 56;261-287	Paper explores the link between different types of people and the types of volunteering they are most likely to be involved in, seeking to connect organisational context to membership. Focuses on individual levels of social capital and the potential influence of this on the motivation and commitment to volunteer.	Impacts are discussed at the level of the individual.	Demonstrates how social capital operates in different contexts, and suggests that the baseline level of social capital of individual volunteers has little influence on the decision to take part in voluntary activity.	Overall, relevant to the review - demonstrates how the mechanisms of volunteering can produce unexpected outcomes.	Include.
2008	Adamson D, Bromley R: <i>Community empowerment in practice: lessons from Communities First</i> (summary report) Joseph Rowntree Foundation, available at http://www.jrf.org.uk	Report considers the ways that community empowerment and engagement can be operationalised to the benefit of both communities and the individuals who live in them.	Impacts are discussed at the community level.	Demonstrates how improved community engagement has the potential to influence policy level decisions about service provision, and the ways in which this might be context dependent. Does not discuss any specific beneficial impacts of this type of programme.	Overall, probably relevant to the review, although the focus is on providing evidence to the policy community about <i>potential</i> rather than <i>actual</i> (observed or reported) benefits to the communities involved.	Borderline exclude - keep to one side for reference.
2008	Ray K, Hudson M, Campbell-Barr V, Shutes I: <i>Public officials and community involvement in</i>	N/A. Report focuses on the involvement of (paid) public officials in community engagement programmes. Does not discuss any specific mechanisms or the potential	N/A	N/A	Report is not relevant to the review.	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	<i>local services</i> (summary report) Joseph Rowntree Foundation, available at http://www.jrf.org.uk	benefits to be accrued from their operationalisation.				
2008	Jirovec R L; Hyduk C A: "Type of volunteer experience and health among older adult volunteers" <i>Journal of Gerontological Social Work</i> 30;3-4:29-42	Demonstrates the potential for volunteer activity to allow older adults to stay active, involved and engaged with their communities.	Impacts are discussed at the individual, population group (older adults) and organisational levels.	Illustrates how positive health benefits derived, allowing for certain caveats. Demonstrates a clear link between the interaction of mechanism and context, and the eventual programme outcomes.	Explicitly links health outcomes to the interaction of context and mechanism.	Include.
2008	Borgonovi F: "Doing well by doing good: the relationship between formal volunteering and self-reported health and happiness" <i>Social Science & Medicine</i> 66:2321-2334	Demonstrates how faith-based volunteer activity builds self-esteem by allowing volunteers to act in accordance with expressed religious principles. Demonstrates an explicit link between context and mechanism.	Impacts are discussed at the organisational and individual levels.	Positive (self-reported) health outcomes for volunteers benefiting from peer support given my individuals who share their beliefs. Demonstrates a clear link between context, mechanism and outcome.	Overall, demonstrates explicitly how a particular outcome can be derived for a specific population groups by specific mechanisms.	Include.
2008	Brown R; Novotny V; Danson M: "Older people and employment in Scotland: policy	Context of the paper is the dual one of the Scottish labour market and Scottish welfare policy. Interrogates the view of older adults as	Comparing work vs volunteering among older adults - both are motivated by a perceived loss of social ties and role identity. Does	Increased sense of wellbeing into old age from maintained strong social ties and feelings of social utility, but	Overall, probably not relevant to the review at this stage, although interesting.	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	trends and current policy approaches" <i>Scottish Affairs</i> 65:67-77	welfare dependent.	not focus on specific mechanisms of volunteering which might mitigate this sense of loss.	suggests that this could equally come from remaining in the labour market. Does not demonstrate an explicit link between context, mechanisms of volunteering and volunteer-specific outcomes (but this is not the point of the paper).		
2008	Priest N; Armstrong R; Doyle J; Waters E: <i>Interventions implemented through sporting organisations for increasing participation in sport</i> Cochrane Collaboration, 2008.	Minimal: found a lack of good quality evidence that participation programmes run by sporting organisations had the desired effect of increasing participation. As a result of this, there is a concomitant lack of evidence for the health benefits of increased sports participation. Paper concludes that similar programmes being run in future need to be linked to a rigorous evaluation strategy.	N/A	Minimal: paper is a Cochrane Review of the evidence for increased activity levels as a result of motivating people to take part in organised sports.	Minimal: review is focused on the evidence that programmes designed to increase sports participation work or do not work, and finds that there is insufficient evidence to support either conclusion. There is no discussion in this review of any of the mechanisms of interest to the current review.	Exclude.
2008	Boyd C P, Hayes L, Wilson R L, Bearsley-Smith C: "Harnessing the social capital of rural communities	Paper is contextualised within rural communities, but does not focus on volunteering activity.	Demonstrates the potential mental health benefits for young people by adopting an ABCD approach; does not focus explicitly on volunteering as part of this	Demonstrates clearly the potential for ABCD to have positive health impacts for young people in rural communities, but does	Links ABCD to social capital development, but not in the specific context of volunteer activity.	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	for youth mental health: an asset based community development framework" <i>Australian Journal of Rural Health</i> 16:189-193		approach, looking instead at the more general picture.	not tie this in to volunteering.		
2009	Moore S; Daniel M; Gauvin L; Dubé L: "Not all social capital is good social capital" <i>Health & Place</i> 15:1071-1077	Explores the idea that "social capital" has different meanings for different socio-economic groups. Potentially relevant to the review in terms of what it can contribute to the discussion around how the mechanism works for different people.	Impacts of social capital are reported at the individual level.	Concludes that among better educated individuals, high levels of social capital are associated with feelings of mastery, with less educated people feeling less mastery, even when with high levels of social capital. Illustrates the different ways in which social capital operates across different groups, leading to different outcomes.	Overall, relevant to the discussion around the way the mechanism operates differently across different groups in different circumstances.	Include.
2009	Muthuri J N; Matten D; Moon J: "Employee volunteering and social capital: contributions to corporate social responsibility" <i>British Journal of Management</i> 20:75-	Paper explores the contribution that employee volunteering makes to community and employee relations, and whether this type of volunteering contributes to the creation of social capital.	Impacts are discussed at the organisational and community levels.	Demonstrates how the interaction of contexts (an organisation working with and within the wider community) can influence the expected outcome of an employee programme.	Overall, minimally relevant to the review. Does demonstrate the potential contribution of employee volunteer programmes to the wider community, but the nature of these	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	89				programmes means that the principal benefits are felt by the organisations themselves. There is no opportunity within this type of programme for community members who are not employed by the host organisation to participate in the programme or to accrue any individual benefits from it.	
2009	Griffiths R; Horsfall J; Moore M; Lane D; Kroon V; Langdon R: "Building social capital with women in a socially disadvantaged community" <i>International Journal of Nursing Practice</i> 15:172-184	Paper considers the impact of a specific community capacity building project on social networks and, as a consequence, on perceived physical and mental health. Explores the ways in which the project helped to improve and maintain social networks within a specific population group.	Impacts are described at the individual and community levels.	Study reports that as a result of the programme, participants reported better connections within their community, higher levels of engagement and better self-reported physical and mental health.	Overall, study has a contribution to make to the discussion of the ways in which a particular mechanism impacts on a specific population group with a specific set of circumstances.	Include.
2009	Antoni G D: "Intrinsic vs extrinsic motivations to volunteer and	Paper explores the ways in which volunteer activity can create social capital.	Impacts are discussed at the individual level.	Author concludes that the creation of social capital is not necessarily the reason why people volunteer,	Overall, the paper has something to add to the discussion around how the mechanisms of volunteering	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	social capital formation” <i>Kyklos</i> 62;3:359-370			but that it is influenced by background motivations such as the ability to act according to personal beliefs and moralities.	operate inn the individual lifeworld.	
2009	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” <i>Journal of Intergenerational Relationships</i> 7;1:17-39	Paper explores how, by improving social networks, participation in volunteer activity becomes a conduit to better health for a specific population subgroup.	Impacts are described at the individual and population subgroup (older adults) levels.	Measured against baseline data, the study outcome showed better self-rated health and improved social networks among the participants who had volunteered most intensively. Study is clear that this is contextually dependent.	Demonstrates clear links between context, mechanism and outcome, and suggests a gradation of impact depending on the intensity of volunteer activity undertaken.	Include.
2009	Kay T; Bradbury S: “Youth sport volunteering: developing social capital?” <i>Sport, Education and Society</i> 14;1:121-140	Paper considers the potential of volunteering to improve individual lifeworlds and increase social connectedness by improving social capital, providing the opportunity for skills development and providing the opportunity for greater engagement with the wider	Impacts are discussed at the individual and population subgroup (young people) level.	Outcomes measured reinforce the interaction of mechanism and context, showing positive individual benefits and greater feelings of social connectedness among volunteer participants.	Demonstrates clear links between context, mechanism and outcome.	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
		community.				
2010	Kisby B: "The Big Society: power to the people?" <i>The Political Quarterly</i> 81;4:484-491	None. Paper is focused on a critique of David Cameron and the 'Big Society' policy and does not touch on any of the mechanisms of interest to the review in any context.	N/A	N/A	Overall, this paper is not relevant to the review.	Exclude.
2010	Morgan C W; Burchell J: "'It ain't wot you do, it's the way that you do it': lessons learned from analysing employer-supported volunteer schemes through the eyes of employees" <i>International Journal of Sociology and Social Policy</i> 30;11/12:632-647	Minimal: paper sets out to explore the views of participants in a company volunteer scheme about whether they think it is a good idea, and what they think of the way the scheme is run. Does not explore the actual mechanisms of volunteering in any detail.	N/A	N/A	Overall, this paper is not relevant to the review.	Exclude.
2010	Donovan T; Bowler S; Hanneman R; Karp J: "Social groups, sport and political engagement in New Zealand" <i>Australian Journal of Political Science</i>	Paper explores the theory that membership of voluntary associations increases citizenship and makes individuals more likely to participate in the democratic process. The voluntary associations chosen to test the theory	Impacts are discussed at the individual and social group (sports groups) levels.	Authors find that membership of sports groups and other voluntary associations does result in individuals being more engaged, both at community level and with the democratic	Overall, this paper is relevant to the review as it has something to contribute to the discussion of the likelihood that volunteering as part of the 2014 Games will result in greater	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	39;2:405-419	are sports groups.		(political) process in general. Not clear if this is as a direct result of the voluntary activity under investigation being directly related to sports participation.	levels of citizenship.	
2010	Iwase T; Suzuki E; Fujiwara T; Takao S; Doi H; Kawachi I: "Do bonding and bridging social capital have differential effects on self-rated health? A community based study in Japan" <i>Journal of Epidemiology and Community Health</i> 66:557-562	Breaks down one of the mechanisms of interest to the review (social capital) into its constituent parts. Considers whether bonding social capital (associations with homogeneous groups) or bridging social capital (associations with heterogeneous groups) have different effects on health outcomes. Participants were either volunteers in a variety of community groups or did not volunteer.	Impacts are discussed at the individual and social group levels.	Demonstrates how different types of social capital operate in different contexts to greater or lesser effect.	Paper has a positive contribution to make to the discussion around the role of social capital in achieving the outcomes of interest in the context of the 2014 volunteer programme.	Include.
2010	Boyle P A; Buchman A S; Bennett D A: "Purpose in life is associated with a reduced risk of incident disability among community dwelling older persons" <i>American Journal of</i>	Paper investigates whether having a defined purpose in life allowed older people living in the community to maintain functional abilities and abilities to cope with activities of daily living.	Impacts are discussed at the individual level.	Paper clearly demonstrates how one of the mechanisms of interest to the review (the potential of volunteer activity to provide a defined role in society) operates to good effect among older people.	Overall, relevant to the review - demonstrates clearly how outcomes are dependent on the interaction between context and mechanism.	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	<i>Geriatric Psychiatry</i> 18:12					
2010	Hong S I; Morrow-Howell N: "Health outcomes of Experience Corps®: a high commitment volunteer programme" <i>Social Science & Medicine</i> 71(2010) 414-420	Paper focuses on the potential of volunteer activity to stimulate activity levels, thus improving physical and mental health.	Impacts are discussed at the organisational and population sub-group levels.	Demonstrates a clear link between the way the mechanism operates and the context within which it operates.	Demonstrates explicit links between context, mechanism and outcome.	Include.
2010	The Joseph Rowntree Foundation <i>Residential care home workforce development: the rhetoric and reality of meeting older residents' future care needs</i> (summary report) 2010, available at http://www.jrf.org.uk	N/A. Paper focuses on the current and future training needs of staff who work in residential care homes.	N/A	N/A	Paper is not relevant to the review.	Exclude.
2010	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	Paper considers the potential of enlarging social networks (via participating in clubs) to promote improved health outcomes in adolescents.	Impacts are discussed at the population sub-group level (adolescents).	Concludes that, with certain exceptions, improved health and wellbeing, and more responsible health behaviours were noted in study participants who had been members of clubs. Shows a clear	Paper has something to contribute to the discussion around the mechanisms which should be promoted (in the context of the 2014 volunteer programme) as the most likely to result	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	from six countries” <i>Journal of Epidemiology and Community Health</i> 64:89-95			link between the operation of a mechanism and the context in which it is operating.	in the outcomes predicted by the legacy documents.	
2011	Bailey A W; Fernando I K: “Decoding the voluntourism process: a case study of the Pay It Forward tour” <i>Journal of Experiential Education</i> 33;4:406-410	Paper explores the potential for improving educational experiences and improving civic engagement by encouraging young people to volunteer in places other than their home community.	N/A	N/A	Paper is not relevant to the review as volunteer tourism was outside the scope of the definition of volunteering adopted for the review.	Exclude.
2011	Pick D; Holmes K; Brueckner M: “Governmentalities of volunteering: a study of regional western Australia” <i>Voluntas</i> 22:390-408	None. Paper explores the influence of different types of government on the visibility of the voluntary sector.	N/A	N/A	Paper is not relevant to the review.	Exclude.
2011	O’Brien L; Burls A; Townsend M; Ebden M: “Volunteering in nature as a way of enabling people to reintegrate into society” <i>Perspectives in Public Health</i> 131:71	Paper considers the potential of environmental volunteering to provide an access point for the vulnerable and socially marginalised to reintegrate with wider society. Minimally relevant to the review as does not consider the specific operation of any	N/A	N/A	Overall, not relevant to the review as the consideration of the benefits of volunteering activity is general rather than explicitly focused on the mechanisms.	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
		of the mechanisms of volunteering beyond a general assertion that it can benefit people who need support to integrate with others.				
2011	McNamara T K; Gonzales E: "Volunteer transitions among older adults: the role of human, social and cultural capital in later life" <i>The Journals of Gerontology Series :: Psychological Sciences and Social Sciences</i> 66(4):490-501	Paper explores the relationships between the different types of capital and the volunteer process for older adults. Supporting the findings of other authors, the paper suggests that while social capital is important, its presence alone is not enough to confer health benefits from the volunteer process.	Impacts are discussed at the population sub-group level (older adults).	Finding that the presence of social capital alone is not enough is linked to the idea that it may operate differently for different population subgroups.	Overall, relevant to the review as it makes the distinction between different types of capital and suggests that social capital cannot be taken at face value as a single, unified concept. Demonstrates clear links between context, mechanism and outcome.	Include.
2011	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 health" <i>BMC Public Health</i> 11:630	Paper focuses explicitly on the social capital mechanism, breaking it down into its constituent parts and suggesting that focusing on the quality of social capital is as important, if not more so, than focusing on whether it is present when considering how to improve the health of the most vulnerable.	Impacts are discussed at the level of wider society	Paper suggests that levels of social capital are likely to influence health outcomes differently depending on the contexts in which it arises.	Paper demonstrates clear links between context, mechanism and outcome.	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
2011	McDougle L M; Greenspan I; Handy F: "Generation green: understanding the motivations and mechanisms influencing young adults' environmental volunteering" <i>International Journal of Voluntary and Non-profit Marketing</i> 16:325-341	Paper discusses how eco-volunteering facilitates the adoption of a particular role in society and allows participants to act in accordance with their personal belief systems.	Impacts are discussed at the individual level.	Beneficial outcomes are self-reported rather than objectively assessed. Nevertheless, paper demonstrates a link between the interaction of context and mechanism and the eventual outcomes achieved.	Paper has something to contribute to the discussion of role building in society and about the beneficial impacts of volunteer activity in specific groups under specific circumstances.	Include.
2011	Morrow-Howell N; Hong S-l; McCrary S; Blinne W: "Changes in activity among older volunteers" <i>Research on Aging</i> 34:174	Paper demonstrates how volunteering can improve the health outcomes of a particular population sub-group by providing an stimulus to increase physical activity levels.	Impacts are discussed at the organisational, population sub-group and individual levels.	Measures of activity were improved, with the greatest benefit being seen by those who had been least active to begin with. Demonstrates a clear link between outcomes and the interaction of mechanism and context.	Demonstrates clear links between context, mechanism and outcomes of interest.	Include.
2011	Mueller M K; Phelps E; Bowers E P; Agans J P; Urban J B; Lerner R M: "Youth development program participation and	Paper explores how youth development programmes achieve success within a particular population subgroup (adolescents) by providing them with the opportunity to develop	Impacts are discussed at the individual and population sub-group levels.	Paper shows that those who became involved in youth development programmes tended to remain involved, and to experience positive developmental	Overall, relevant to the review - demonstrates clear links between context, mechanism and outcome.	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	intentional self-regulation skills: contextual and individual bases of pathways to positive youth development” <i>Journal of Adolescence</i> 34 (2011) 1115-1125	personal and employment-focused skills.		outcomes. Is explicit that the outcomes of this process are as a direct result of the way the skills development mechanism has operated in the context of adolescent school students.		
2011	Cattan M; Hogg E; Hardill I: “Improving the quality of life of aging populations: what can volunteering do?” <i>Maturitas</i> 70 (2011) 328-332	Difficult to pinpoint - this is a review of the evidence for beneficial impacts of volunteering on older people, and as such draws on a variety of heterogeneous sources. The authors explicitly acknowledge that causality is difficult to pinpoint exactly.	Potential impacts are discussed at the individual level.	Review finds that participating in volunteer activity <i>can</i> be beneficial to the quality of life of <i>some</i> older adults. Acknowledges that gaps in the knowledge base remain.	Overall, makes a good case for a connection between context, mechanism and outcome, allowing for the difficulties in pinpointing causality in heterogeneous sources.	Include.
2011	McBride A M; Johnson E; Olate R; O’Hara K: “Youth volunteer service as positive youth development in Latin America and the Caribbean” <i>Children and Youth Services Review</i> 33 (2011) 34-41	Considers the potential of the youth volunteer service in these areas to provide young people with positive social roles which allow them, in turn, to have a positive impact on the lives of others.	Impacts are discussed at the individual, population sub-group and national levels.	Shows how the mechanism operates in different contexts.; Also illustrates the potential for unintended outcomes: the authors find that health and social status benefits attributed to volunteering may well be due to pre-existing health and social status of more affluent	Demonstrates a link between context, mechanism(s) and outcome(s). Also suggests potential unintended consequences in terms of the social backgrounds of volunteer participants.	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
				teenagers who volunteer.		
2011	Cole I, Batty E, Green S: <i>Low income neighbourhoods in Britain: the gap between policy ideas and residents' realities</i> (summary report) Joseph Rowntree Foundation, available at http://www.jrf.org.uk	N/A: report focuses on describing the relationship between poverty and place.	N/A	N/A	Paper is not relevant to the review.	Exclude.
2011	Afridi A: <i>Social networks: their role in addressing poverty</i> (summary report) Joseph Rowntree Foundation, available at http://www.jrf.org.uk	Report discusses the utility of social networks in driving service delivery (against a background of public spending cuts), providing job opportunities and increasing engagement and interaction between community residents.	Impacts of social networks are discussed at the community and individual levels.	Report focuses explicitly on the way social networks operate in different contexts to achieve different outcomes.	Overall, relevant to the review. Considers the way social network mechanisms operate in contexts other than volunteer programmes.	Include.
2011	Martinson M; Halpern J: "Ethical implications of the promotion of elder volunteerism: a critical perspective"	Considers the potential of the volunteering rhetoric to promote the idea that only by participating in volunteer activity can one become a "good" older person, implying by default that	Impacts are discussed at the population sub-group level (older adults).	Demonstrates a link between the potential of the underlying rhetoric to promote volunteering as the preferred route to 'good' citizenship and /	Demonstrates a link between context, mechanism and outcome, and indicates an emerging ethical dilemma for the volunteering	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	<i>Journal of Aging Studies</i> 25 (2011) 427-435	those who do not choose to volunteer, or are unable to do so, are somehow “less good” or “not good”.		or ‘good’ older age and the obverse understanding that non-volunteers are socially diminished in some way. Paper makes it explicit that this finding applies to the specific context of volunteering being investigated.	discourse. Relevant to this review because of the consideration of what makes a ‘good’ citizen, and whether encouraging volunteering should be framed in these terms.	
2012	Schnittger R I B; Walsh C D; Casey A-M; Wherton J P; Mchugh J E; Lawlor B A: “Psychological distress as a key component of psychosocial functioning in community-dwelling older people” <i>Aging and Mental Health</i> 16;2:199-207	Minimal: paper explores the impact of psychological distress on the psychosocial functioning of older adults. Suggests that social support networks have a key part to play in minimising psychological distress in older adults, but only focuses on the issue in terms of identifying social support as a key factor.	N/A	Minimal: study set out to isolate factors contributing to psychological distress in older adults in the community (which it does); however does not explicitly explore the ways in which social support can be optimised to reduce this kind of distress.	Overall, this paper does not have a great deal to contribute to the discussion around the mechanisms of volunteering and how they impact on health, beyond confirming the importance of social networks (which has already been done by previous studies).	Exclude.
2012	Nicholson N R: “A review of social isolation: an important but underassessed condition in older adults” <i>Journal of Primary Prevention</i> 33:137-152	Author medicalises social isolation, suggesting that it is a health problem in its own right as well as contributing to poor health outcomes in older adults. Suggests that there is no evidence of viable interventions to reduce	N/A	Paper concludes that health professionals must take steps to minimise social isolation in their patients by referring them to “community services” (ill defined in this paper), and	Overall, the potential contribution of this paper is minimal; the author appears confused as to the methods of combating social isolation in older adults, and not to have understood	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
		social isolation (which seems an unlikely conclusion).		apparently contradicting the earlier assertion that there are no evidenced interventions to combat social isolation.	what “community services” might contribute to the process.	
2012	Mahmood A; Chaudhury H; Michael Y L; Campo M; Hay K; Sarte A@ “A photovoice documentation of the role of neighbourhood physical and social environments in older adults’ physical activity in two metropolitan areas in north America” <i>Social Science & Medicine</i> 74 (2012) 1180-1192	Paper develops general themes across which physical activity in adults <i>might</i> be stimulated. Does not explicitly unpack or explore mechanisms which would drive this increase.	Potential impacts discussed at the neighbourhood and individual levels.	No specific interactions of context and mechanism were investigated. The paper discusses the themes which were generated by the analysis and the policy implications of them.	Does not demonstrate clear links between outcome(s) and the interaction of context and mechanism.	Exclude.
2012	Ashrafi E; Montazeri A; Mousavi M; Vaez-Mahdavi M R; Asadi-Lari M: “Influence of sociodemographic features and general health on social capital:	Study explores the different components of social capital, whether they are correlated with sociodemographic factors such as age, gender, family size, wealth and whether any particular combinations of these factors have an impact on health outcomes.	Impacts are discussed at the population sub-group level.	Finds that there are variations in levels of social capital dependent on age and gender, and that health tends to be better in those with higher levels of social capital.	Relevant: study breaks down the components of social capital, considering which specific aspects of the concept are likely to have the greatest, or least, effects on which population subgroups.	Include.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	findings from a large population-based survey in Tehran, Iran (Urban-HEART).				Has something to contribute to the discussion around the ways in which specific mechanisms of volunteering are likely to work for different people in different circumstances.	
2012	Friedli L “‘What we tried hasn’t worked’: the politics of assets based public health” <i>Critical Public Health</i> DOI:10.1080/09581596.2012.748882	Paper explores the rise in popularity of assets-based approaches to health outcome improvement. Addresses concerns that the way assets-based mechanisms operate in different contexts has not been sufficiently investigated.	Impacts discussed at individual and community levels.	This paper demonstrates that a focus on individual health behaviour change is unlikely to bring about population level health improvements.	Peripherally relevant to the review. While not foregrounding interactions between context, mechanism and outcome, the paper has something to contribute to the discussion around the legacy focus on changing behaviours as a result of the Games volunteer programme, rather than bringing about tangible socio-structural improvements.	Borderline exclude - keep to one side for reference.
2012	Takasugi T; Lee A C K: “Why do community health workers volunteer?” <i>Public Health</i> 126 (2012)	Demonstrates explicit mechanisms which enhance the motivation to volunteer in this capacity - including rewards (both financial and non-financial), personal	Impacts are discussed at the community level.	Demonstrates that retention and maintenance of a volunteer workforce was highly dependent on some form of	Overall, demonstrates some links between context, mechanism and outcome but only in terms of how to maintain a largely	Borderline exclude - keep to one side for reference.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	839-845	recognition and personal development. Does not, however, look at the potential within the type of volunteering to influence the health / wellbeing of, or levels of citizenship among, volunteer healthworkers.		reward system being in place. No explicit link between volunteering as a community health worker and the impacts this might have on health and citizenship (either of the volunteers or the communities in which they worked).	volunteer workforce. It does, however, consider in some detail what it is that motivates individuals to volunteer, which could have important implications for the 2014 programme.	
2012	Minnaert L: "An Olympic legacy for all? The non-infrastructural outcomes of the Olympic Games for socially excluded groups (Atlanta 1996 - Beijing 2008)" <i>Tourism Management</i> 33 (2012) 631-370	Demonstrates that while there is a link between volunteer participation and improved employability skills, social networks and health, this link can result in negative outcomes for the socially excluded who are harder to recruit, support and retain as volunteers.	Impacts are discussed at the community and individual levels.	Demonstrates a link between the outcomes of legacy programmes (generally better for those who already have good skills / education / social connections) and the interactions of mechanism and context.	Demonstrates clear and explicit links between context, mechanism and outcome.	Include.
2012	Alexander Z: "The impact of a volunteer tourism experience, in South Africa, on the tourist: the influence of age, gender, project type and length of stay" <i>Tourism Management</i>	The paper considers a volunteer-tourism project, which is outside the definition of volunteering adopted for the review.	N/A	N/A	This paper is not relevant to the review.	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	<i>Perspectives 4</i> (2012) 119-126					
2013	Jung M; Viswanath K: "Does community capacity influence self-rated health? Multilevel contextual effects in Seoul, Korea" <i>Social Science and Medicine</i> 77:60-69	Minimal. Study explores the way the mechanism of community capacity operates to influence self-reported health. Paper does not focus on any of the mechanisms of interest to the review.	Impacts are discussed at the community level.	Minimal: paper makes some interesting findings in relation to the effects of community capacity on self-reported health, but the conclusions are very general in nature.	Overall, does not have a great deal to add to the discussion around which mechanisms of volunteering are likely to work for whom and in what circumstances.	Exclude.
2013	Foy C G; Vitols M Z; Case L D; Harris S J; Massa-Fanale M; Hopley R J; Gardner L; Rudiger N; Yamamoto K; Swain B; Goff D C; Danhauer S C; Booth D; Gaspari J: "Incorporating prosocial behaviour to promote physical activity in older adults: rationale and design of the Program for Active Aging and Community Engagement (PACE)" <i>Contemporary</i>	The trial is designed to test whether regular sessions of physical activity incorporating volunteering will have beneficial effects on functional activity and health related quality of life in this age group. Demonstrates a clear potential link between context and mechanism, but the paper describes a study which is currently ongoing and so can only speculate as to what the results may be.	Impacts are discussed at the community and individual levels.	Outcome measures are improvements in physical activity, improved functional ability and improved health related quality of life. A clear link is envisaged between the outcome and the interaction of the study mechanisms on the age context; however the study is designed to test the mechanisms of the specific trial intervention rather than any specific mechanisms of volunteering.	The study is certainly interesting and possibly pertinent to the review depending on its eventual findings. However, despite demonstrating clear potential links between intervention context, mechanism and outcome, it is still ongoing at the time of writing.	Borderline exclude - keep an eye out for future reports on the trial.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	<i>Clinical Trials</i> 36 (2013) 284-297					
2013	Fried L P; Carlson M C; McGill S; Seeman T; Xue Q-L; Frick K; Tan E; Tanner E K; Barron J; Frangakis C; Piferi R; Martinez I; Gruenewald T; Martin B K; Berry-Vaughn L; Stewart J; Dickersin K; Willging P R; Rebok G W: "Experience Corps: a dual trial to promote the health of older adults and childrens' academic success" <i>Contemporary Clinical Trials</i> 36 (2013) 1-13	The mechanisms explored in relation to the lifestage context of volunteer participants include the potential of participation in the programme to reduce disability, improve functional ability, limit the minor falls and injuries of older age and improve physical, social and cognitive activity. In the wider community context, the paper reports on the benefits which can be accrued by giving the children within a community a better educational start in life. Demonstrates clear and explicit links between the various mechanisms and the contexts in which they occur.	Impacts described at the individual and community levels.	Overall, the programme bestowed positive benefits on participants (both volunteers and the schools involved) compared to the control group. Authors demonstrate explicitly that these benefits are dependent on the interaction of mechanism and context.	Paper demonstrates clear and explicit links between the outcomes measured and the interactions of context and mechanism within the programme.	Include.
2013	Finlay A K; Flanagan C: "Adolescents' civic engagement and alcohol use: longitudinal evidence for patterns of engagement and	Mechanisms include the potential of civic programmes to exert a positive influence on youth development. Does not consider any specific type of programme, volunteer or otherwise; paper is looking only at whether involvement	Impacts described at individual and population sub-group level.	Outcomes of the study showed that adolescent out of school activities do predict some adult behaviours. However, the paper had no specific focus on any one type of programme or intervention and did	Does not demonstrate clear links between context, mechanism and outcome.	Exclude.

Appendix 2: Relevance analysis

Year	Paper	Discussion of mechanisms	Level of programme impacts	Interactions of context and mechanism	Overall relevance	Include / exclude
	use in the adult lives of a British cohort" <i>Journal of Adolescence</i> 36 (2013) 435-446	in civic activity during teenage years sets a precedent for later life.		not demonstrate how outcomes could be related to the interaction of context and mechanism.		
2013	Paine A E, McKay S, Moro D: <i>Does volunteering improve employability? Evidence from the British Household Panel Survey</i> Third Sector Research Centre, available at http://www/tsrcnws.org.uk	Paper explores whether volunteering does provide a conduit into paid employment by giving participants access to improved employability skills.	Impacts are reported at the individual level.	Paper finds that the potential of the employability mechanism is highly context dependent, and as likely to hamper efforts to gain work as to facilitate them.	Overall, relevant to the review - illustrates a clear link between context, mechanism and outcome. Also illustrates the potential for unintended outcomes.	Include.
2013	Jenkinson C E, Dickens A P, Jones K, Thompson-Coon J, Taylor R S, Rogers M, Bambra C L, Lang I, Richards S H: 'Is volunteering a public health intervention? A systematic review and meta-analysis of the health and survival of volunteers' <i>BMC Public Health</i> 13:773	Paper fails to identify any specific mechanisms within volunteering which might account for the observed improvements in the physical and mental health of volunteers.	Impacts described at the individual level.	No interaction of mechanism and outcome is described.	Overall, paper is not particularly useful for the review, as no context / mechanism / outcome interactions are identified or described.	Exclude.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
1984	Chambre S M: "Is volunteering a substitute for role loss in old age? An empirical test of activity theory" <i>The Gerontologist</i> 24; 3: 292-298	Paper has the potential to contribute to the review by exploring the ways in which the social role provision mechanism operates among older adult volunteers. Author lays out the extant theories about the mental health benefits which might be accrued by undertaking activities to replace social roles which have been lost. Analysis then breaks down this theory, showing that " <i>a significant number of older volunteers may be volunteers who became elderly; that is, their involvement is a continuation of behaviour patterns established earlier in life</i> " (p297).	<ol style="list-style-type: none"> 1. Was the study sample representative? Of whom / what? Paper is a secondary analysis of data from an earlier study (Americans Volunteer Survey, 1974). Data set chosen because overall study population "<i>is representative of the US population</i>" (p293); the population subset used for this analysis (people aged ≥ 60 years) was taken to be representative of the wider population of the same age group. 2. Were steps taken to eliminate, or acknowledge, bias? Author acknowledges the potential bias inherent in the chosen definition of 'volunteering'. By choosing to define the activity in terms of formal, rather than informal, volunteering (as did the study from which the dataset was drawn) they acknowledge that there will be an effect on the numbers and types of individuals who consider themselves (or are considered by society) to be volunteers. Authors are explicit in stating that "<i>the implications of using a dataset that employs a formal definition of volunteering should be noted</i>" (p293). Measures of volunteering are widened to include commitment to volunteer activity in an effort to account for this. 3. Was the research design appropriate to the chosen method? The statistical analysis methods used to interrogate the data set were appropriate to the secondary analysis design of the research project. 4. Was there sufficient breadth / depth of contextual description? Yes - author describes the wider social context of volunteering among the elderly in some detail, and her analysis accounts for participant lifeworld contexts such as age, gender, household income and educational achievement. 5. Were the programme mechanisms explicitly unpacked? Yes - author gives detailed descriptions of the ways in which voluntary activity can impact on the health and wellbeing of older people. Examples include the potential for increased activity, provision of a purpose in life and the provision of roles in society to replace those which have been lost. 6. Was underlying programme theory identified? Yes - author explicitly identifies the working hypothesis that volunteering will benefit older adults by providing them with replacement social roles. 7. Were sampling, data collection and analysis well described? Yes - author provides sufficient detail of these processes that the study could be replicated by another researcher. 8. Was there sufficient evidence to support the author's claims? Yes - author

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>actually disproves her working hypothesis, leading to an opportunity to modify extant theories about how volunteering works to benefit older adults. The theory that role provision is a key element is shown to be incorrect, with factors such as age, educational attainment and previous employment status having a greater influence.</p> <p>9. Had the (potential of actual) influence of external events been accounted for? No - author does not account for events external to the volunteer lifeworld which might have influenced the decision to volunteers, but that would not necessarily have been expected in a secondary analysis.</p>
1985	Newman S, Vasudev J, Onawola R: "Older volunteers' perceptions of volunteering on their psychological wellbeing" <i>Journal of Applied Gerontology</i> 1985;4:123-127	Paper sets out to explore whether the act of volunteering gives older adults an impetus to remain active and to maintain social involvement at a time in their lives when other roles and stimuli have been lost (eg due to retirement, death of a spouse, children having left home). Findings seem to support the idea that volunteering can fill a void in individuals' lives at times when they need extra support to remain involved with friends and the wider community.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sample appears to be reasonably representative of older people; participants drawn from a range of educational backgrounds. Criticism would be that no mention is made of ethnic diversity of the participant group; it may be that this is not relevant, but the question is not addressed. 2. Were steps taken to eliminate, or acknowledge, bias? As above - attempts made to eliminate gender, age and educational biases, though any potential ethnic bias is not addressed. 3. Was the research design appropriate to the chosen method? Difficult to tell. Mixed methods study - Lickert scale questionnaire plus follow up interview, but authors do not elaborate on the methods used to conduct the analysis beyond labelling them 'qualitative'. 4. Was there sufficient breadth / depth of contextual description? Contextual description is limited, although this is a short paper. Concise detail is provided about the volunteer programmes from which participants were drawn, although there is little contextual detail about participant life worlds, other than that they are elderly and participating in volunteer programmes in an educational setting. 5. Were the programme mechanisms explicitly unpacked? Mechanisms are explicitly unpacked; both questionnaire and interview identify the potential of volunteering to provide structure, enriches and energises, and helps volunteers to enhance their coping mechanisms for dealing with personal trauma. 6. Was the underlying programme theory identified? Yes - principal programme theory is identified as the potential of cross-generational volunteer programmes to enhance the psychological well-being of older volunteers by providing them with

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>structure, an identified social role and a way of coping with traumatic events.</p> <p>7. Were sampling, data collection and analysis well described? No - authors provide insufficient detail on how they conducted sampling or on how the data collected were analysed.</p> <p>8. Was there sufficient evidence to support the authors' claims? No - but this may be a limitation of the length of the paper. The precise qualitative methods used are not described, and very few direct quotes are used (from study participant interviews).</p> <p>9. Had the (potential or actual) influence of external events been accounted for? The authors do not explicitly consider the potential impact of external events (whether from participant lifeworlds or the wider community) on participation; however, there is some implicit consideration given the finding that participation can help older volunteers cope better with traumatic life events.</p>
1986	Rohs F R R: "Social background, personality and attitudinal factors influencing the decision to volunteer and level of involvement among adult 4-H leaders" <i>Nonprofit and Voluntary Sector Quarterly</i> 15:87-99	Paper has the potential to provide an insight into the factors which influence individual decisions to volunteer for particular social programmes. This would be relevant to the discussion around the types of individual likely to volunteer for the 2014 programme, and could provide insights which might be helpful in targeting future, similar programmes to under-represented groups.	<p>1. Was the sample representative? Of whom / what? Sample was drawn from adult leaders in the 4-H youth development programme. As such, results are applicable only to this group; potential to generalise to adults who volunteer in other youth development programmes, but would have to append the caveat that no other YD programmes were involved in this particular study.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? Potential sources of bias not explicitly acknowledged. The 300 selected participants are held by the authors to be representative of adults who volunteer for this programme, but the socio-demographic data quoted to support this concentrates heavily on income level and area of residence (urban vs rural). This may be representative of the types of individual who volunteer for this particular programme, but the author has a tendency to generalise more widely, indicating that "[n]o theory has been found which satisfactorily synthesizes the variety of factors into a comprehensive model to explain why individuals volunteer", indicating that these results are applicable to everyone who is involved in volunteer activity.</p> <p>3. Was the research design appropriate to the chosen method? The research was conducted via questionnaire. The method of analysis appears to be appropriate, but is not stated explicitly; the presentation of the findings indicates a statistical analysis but how this was conducted is not made clear.</p> <p>4. Was there sufficient breadth / depth of contextual description? No - the author</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>takes it as read that the reader will know what 4-H is and does not explain the programme, nor does he describe any particular factors of the programme which might make it an appealing one to volunteer in.</p> <ol style="list-style-type: none"> 5. Were the programme mechanisms explicitly unpacked? No - the author does not focus on what it is about the programme that makes people volunteer, concentrating instead on trying to provide a generalised explanation of why people volunteer. It is implicit that he expects his explanation to apply to people who volunteer for any type of social programme. 6. Was the underlying programme theory identified? No - as above, the author is focused on how individuals respond to the programme and does not consider what it is about the programme that might trigger this response. 7. Were sampling, data collection and analysis well described? Sampling and data collection were well described, analysis less so. The fact that the data were analysed statistically has to be inferred from the numerical presentation of the findings. 8. Was there sufficient evidence to support the author's claims? No. There is sufficient evidence to support the author's claims <i>with regard to 4-H volunteers</i>, but insufficient evidence to support his generalisation to <i>all</i> volunteers. This generalisation is inferred from his assertion that <i>"This truncated model does not confirm Smith's* hypotheses of social background factors influencing personality factors and personality factors influencing attitudinal factors"</i> (p95). * - Smith's paper refers to individuals who volunteer for <i>all</i> types of activity. 9. Was the (potential or actual) influence of external events accounted for? Again, no. the author does not account for any events beyond the individual lifeworld which might influence the decision to volunteer.
1996	Kretzmann J, McKnight J P: "Assets-based community development" <i>National Civic Review</i> 85;4:23-29	Paper has the potential to add something to the discussion around what sorts of communities might benefit most from the 2014 volunteer programme. If there is sufficient evidence that building capacity from within is more beneficial to residents than	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? N/A. Paper is an exploration of an alternative approach to (deprived) community development and regeneration, driven by the community and focusing on positives to be enhanced rather than negatives to be eradicated. Examples are given, but the paper does not take the form of a study explicitly contrasting one method with the other. 2. Were steps taken to eliminate, or acknowledge, bias? Again, not applicable - the paper is an exploration of the method and not a 'compare & contrast' exercise. 3. Was the research design appropriate to the chosen method? N/A. Paper is a call

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
		imposing programmes from without, this could have important implications for the way in which the programme is pitched in different communities around Glasgow (both for 2014 and any future, similar events).	<p>for the policy community to consider a different approach.</p> <ol style="list-style-type: none"> 4. Was there sufficient breadth / depth of contextual description? Yes - the authors go into some detail about the ways in which, traditionally, the 'needs map' of deprived communities is interpreted and the consequences this can have. There is also a wealth of description of the contexts in which a 'bottom up' approach can be more successful than a 'top down' one. 5. Were the programme mechanisms explicitly unpacked? Yes. Although not, strictly speaking, a well-defined social programme, the mechanisms by which a community driven approach to regeneration and improvement can work are well (and explicitly) described. 6. Was the underlying programme theory identified? Yes. Authors identify the theory that, by involving communities in improvement plans, more benefits can accrue to the community as it begins to be viewed as an entity with positives to be built on rather than negatives which must be dealt with. 7. Were sampling, data collection and analysis well described? N/A - again, this paper is an exploration of a different approach rather than a comparison study. 8. Was there sufficient evidence to support the authors' claims? Authors do not provide <i>prima facie</i> evidence that the approach 'works', but do make a good case for why it should be attempted, and acknowledge areas where it should not be used to supplant more traditional methods of tackling the by-products of deprivation. 9. Was the (potential or actual) influence of external events accounted for? Yes - the authors provide detailed descriptions of the ways in which events external to deprived communities can influence what happens within them.
1997	Page-Adams D, Sherraden M: "Asset building as a community revitalization strategy" <i>Social Work</i> 42;5:423-433	By pinpointing a specific mechanism of the assets-based approach, the paper has the potential to contribute to the discussion around how individuals from deprived communities might be persuaded to see the 2014 programme as a worthwhile use of their energies. If encouraging	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? No specific sample is defined; paper "<i>summarizes findings from studies addressing the effects of assets on personal well-being, economic security, civic behaviour, women's status, and children's well-being</i>" (p423). 2. Were steps taken to eliminate, or acknowledge, bias? No attempts were made to eliminate or acknowledge bias; the authors do, however, note that "<i>The studies summarized in this article were chosen in a somewhat arbitrary manner and thus provide only an initial look at the effects of assets</i>" (p424). 3. Was the research design appropriate to the chosen method? The research design

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
		individuals to participate in activities which will increase their personal store of assets (which are not necessarily monetary) can positively impact community development, there are important implications for how the 2014 programme should target support to volunteer participants.	<p>and chosen method are not made explicit, although the narrative summary of findings does seem to have been appropriate to the initial idea of gathering together studies which discuss the issue of asset accumulation.</p> <ol style="list-style-type: none"> 4. Was there sufficient breadth / depth of contextual description? Yes - the authors provide a detailed (if concise) description of what asset accumulation is, the contexts in which it has been encouraged / developed and the benefits which could potentially accrue from it. 5. Were the programme mechanisms explicitly unpacked? The paper pinpoints personal asset accumulation as a key mechanism of the assets-based approach to community development and regeneration. 6. Was the underlying programme theory identified? The authors posit the theory that, by encouraging and supporting individual asset accumulation, individuals will be more able to contribute positively to their communities, thus driving forward assets-based community development programmes. 7. Were sampling, data collection and analysis well described? No. By the authors' own admission, sampling and data collection were arbitrary; while the analysis is conducted narratively, there is no explicit exposition of the techniques employed to do this. 8. Was there sufficient evidence to support the authors' claims? The authors provide a wealth of evidence to support their contention that asset accumulation should be encouraged as part of a wider assets-based strategy. 9. Was the (potential or actual) influence of external events accounted for? The authors acknowledge the key role of the policy community and its historical reliance on discouraging asset-accumulation as an anti-poverty tool, implying that this attitude will need to be addressed for assets-based approaches to have any chance of success.
1996	Garrison J W: "Brazilian NGOs: from grassroots to national civic leadership" <i>Development in Practice</i> 6; 3: 250-		<ol style="list-style-type: none"> 1. Was the sample representative? 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. Were the programme mechanisms explicitly unpacked? 6. Was the underlying programme theory identified? 7. Were sampling, data collection and analysis well described?

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	254		8. Was there sufficient evidence to support the author's claims? 9. Was the (potential or actual) influence of external events accounted for?
1998	Janoski T; Musick M; Wilson J: "Being volunteered? The impact of social participation and pro-social attitudes on volunteering" <i>Sociological Forum</i> 13;3:495-519	Study sets out to define what it is that makes people want to volunteer, and describes two theories which might account for individual preferences in this regard. A major caveat, however, would be that the study looks at what makes individuals decide to volunteer rather than considering what it is about volunteering that attracts individuals, which has important implications for how the results are interpreted. Although mechanisms of volunteering, which are closely tied to the theories, are identified, they are not explored in the context of the programmes in which they might operate, but only in the context of individual volunteers' decisions about becoming involved.	1. Was the sample representative? Of whom / what? Study is based on responses to a previous panel survey of young people who were first surveyed in their 20s and followed up in their 30s. There is no indication of how representative the sample was of adults in this age group (for example, in terms of socio-economic status, educational attainment, gender or ethnicity). 2. Were steps taken to eliminate, or acknowledge, bias? No attempts to eliminate or acknowledge bias are described. 3. Was the research design appropriate to the chosen method? Study was designed to analyse survey responses statistically. No indication is given of whether the survey data were gathered numerically or not, so it is impossible to say whether the method of analysis was appropriate or not. 4. Was there sufficient breadth / depth of contextual description? No contextual description is given, either of the circumstances surrounding the initial survey or of the lifeworld circumstances of the individuals who responded to it. 5. Were the programme mechanisms explicitly unpacked? Yes. The authors posit two mechanisms of volunteering which contribute to a maintained commitment to volunteer activity. They suggest that attitudes to volunteering are either influenced by socialisation processes in young adulthood, or by " <i>the formative role of practical experiences and social participation</i> " (p496). 6. Was the underlying programme theory identified? Yes. The authors link the suggested mechanisms to two theories about how volunteer programmes work, which are closely tied to the mechanisms. 7. Were sampling, data collection and analysis well described? No. Beyond stating that the data set was extracted from a previously undertaken study, the authors provide no explicit description of their approach to sampling, data collection or analysis. 8. Was there sufficient evidence to support the author's claims? The authors provide a great deal of evidence, both from their findings and the wider literature, which seems to support their conclusions; however, a lack of clarity about how this evidence was obtained would tend to cloud any overt reliance on their arguments.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>9. Was the (potential or actual) influence of external events accounted for? No - the authors do not account for the potential or actual influence of any external events.</p>
1999	Clary E G; Snyder M: "The motivations to volunteer: theoretical and practical considerations" <i>Current Directions in Psychological Science</i> 8:156-159	Study sets out to address the question of why it is that individuals decide to volunteer, and having so decided why they remain committed to it. This has the potential to contribute considerably to the review, in terms of shedding light on what factors might influence individual decision making about the 2014 programme, which in turn could have important implications for the ways in which the programme is carried forward in the post-Games period.	<p>1. Was the sample representative? Of whom / what? No sample or sampling techniques are explicitly described. Study appears to take the form of a literature review, but there is no description of how papers were selected for inclusion.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? Not known - as above, no clear sampling methods were described.</p> <p>3. Was the research design appropriate to the chosen method? No specific research design or methodology is described. The paper is set out as a literature review, which appears to be an appropriate way to handle the subject matter, but this cannot be stated definitively.</p> <p>4. Was there sufficient breadth / depth of contextual description? The authors do provide a reasonable amount of description for the contexts in which the various theories about the motivations behind volunteering occur.</p> <p>5. Were the programme mechanisms explicitly unpacked? No specific mechanisms of volunteering are made explicit.</p> <p>6. Was the underlying programme theory identified? The authors identify a number of theories which might be able to explain what motivates individuals to volunteer. They then move on to consider evidence from the literature which either confirms or refutes these theories.</p> <p>7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis are not well described. It would be difficult for another researcher to replicate this study.</p> <p>8. Was there sufficient evidence to support the author's claims? The authors do provide a reasonable amount of evidence from the literature to support their assertions.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The influence of external events is not accounted for.</p>
1999	Musick M A; Herzog R A; House J S: "Volunteering and	Study sets out to investigate empirically whether there is any truth in the assertion that	<p>1. Was the sample representative? Of whom / what? Data is derived from a national sample. The population subset of interest is older adults, and the sample is taken to be representative of older adults across the country (US).</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	mortality among older adults: findings from a national sample” <i>Journal of Gerontology</i> 54B;3;S173-S180	volunteering can have beneficial impacts on the health and wellbeing of older volunteers. This is of particular interest to the 2014 programme, where there is little explicit provision for the contribution of older adults. If it can be shown that older adults can benefit significantly, there are important implications for the recruitment and retention of Games volunteers, specifically with regard to encouraging people to continue to volunteer in some capacity post-event. It may be that the 2014 programme focus will have to shift slightly, onto older adults, in order to be able to demonstrate real health benefits arising from participation.	<ol style="list-style-type: none"> 2. Were steps taken to eliminate, or acknowledge, bias? Blacks [sic] and adults aged ≥ 60 are oversamples, and the authors describe weighting the data to account for this oversampling, and to account for non-response in prospective iterations of the study. 3. Was the research design appropriate to the chosen method? The statistical analysis methods are appropriate to the interrogation of the survey data. 4. Was there sufficient breadth / depth of contextual description? The authors do not provide a huge amount of contextual description, although this would not necessarily be expected in a statistical analysis of survey data. 5. Were the programme mechanisms explicitly unpacked? The authors focus on the potential of volunteering to promote social integration and physical activity, and thus to precipitate positive impacts on health and wellbeing. 6. Was the underlying programme theory identified? The authors set out to test the theory that moderate amounts of volunteer activity can have a beneficial impact on individual health and wellbeing. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis were all well described, such that another researcher would be able to replicate the study. 8. Was there sufficient evidence to support the author’s claims? The authors provide detailed evidence to support their claim that volunteering is beneficial to health. They do, however, qualify their results, citing the potential influence of age, gender and either role strain or role enhancement (the latter two factors depending on the amount and frequency of volunteer work undertaken). 9. Was the (potential or actual) influence of external events accounted for? The potential influence of events external to the volunteer lifeworld is not accounted for.
1999	Wilson J; Musick M: “The effects of volunteering on the volunteer” <i>Law and Contemporary Problems</i> 62;4:141-168	This paper had the potential to make a significant contribution to the review in terms of its focus on specific benefits of volunteering which accrue to individual volunteers. The authors interrogate a number of different	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Paper is presented as a “review [of] some of the research on the supposed benefits of volunteering” and a description of “some of the results of our own work in this area” (p142). Whether this is intended to be a systematic review or a literature review is not made explicit, but the format of the paper suggests the latter. 2. Were steps taken to eliminate, or acknowledge, bias? No steps to deal with bias in the literature being reviewed are described.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
		aspects of volunteering which have been shown to impact on the outcomes of volunteering which are experienced by individual volunteers.	<ol style="list-style-type: none"> 3. Was the research design appropriate to the chosen method? The research design and method are not explicitly stated, but a literature review is an appropriate way to investigate the extant research on the topic. 4. Was there sufficient breadth / depth of contextual description? The authors provide a wealth of detailed description of the contexts in which the various effects of volunteer activity are felt. 5. Were the programme mechanisms explicitly unpacked? No mechanisms of volunteering are explicitly identified, but the discussion of effects on citizenship, physical health, mental health and occupational progression allows mechanisms to be inferred. 6. Was the underlying programme theory identified? The authors explicitly seek to explore the theory that participating in volunteer activities can have beneficial effects for the volunteer. 7. Were sampling, data collection and analysis well described? Sampling, data collection and methods of analysis are not described. 8. Was there sufficient evidence to support the author's claims? The authors provide a significant amount of evidence from the literature to support their contention that volunteering can have long term benefits to the volunteer, and that these may continue to be felt long after the period of volunteering has ceased. 9. Was the (potential or actual) influence of external events accounted for? The influence of specific external events is not explored.
2000	Grube J A; Piliavin J A: "Role identity, organisational experiences and volunteer performance" <i>Personality and Psychology Bulletin</i> 26:1108-1119	This paper was of interest to the review because of its investigation of the role identity mechanism, and how it operated within a particular organisational setting to influence recruitment and retention of volunteers.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sample was recruited from volunteers from the American Cancer Society; as such can only be taken to be representative of volunteers for this organisation. 2. Were steps taken to eliminate, or acknowledge, bias? The authors acknowledge that the volunteers they contacted were "<i>executive volunteers</i>" and, as such, the sample was likely to be biased in favour of educated, white males. They provide an explicit caveat about the danger of generalising from this sample to all volunteers (p1113). 3. Was the research design appropriate to the chosen method? The statistical analysis methods were appropriate to the data having been collected via a postal survey.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<ol style="list-style-type: none"> 4. Was there sufficient breadth / depth of contextual description? The authors provide a great deal of contextual description around the place of volunteering in American life generally, and about the organisational aspects of volunteering for the ACS. 5. Were the programme mechanisms explicitly unpacked? Yes. The authors explicitly investigate the way the role identity function of volunteering operates in the recruitment and retention of volunteers for this organisation. 6. Was the underlying programme theory identified? The authors identify two theories to interrogate: that <i>“general role identity as a volunteer will be predicted by perceived expectations of significant others”</i> and that <i>“general role identity as a volunteer will predict volunteer role performance”</i> and seek to establish which, if either, of these theories can be substantiated. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis are all well described. 8. Was there sufficient evidence to support the author’s claims? The authors provide a substantial amount of evidence to support their claims. 9. Was the (potential or actual) influence of external events accounted for? The influence of external factors (potential or actual) is not explored.
2000	Van Willigen M: "Differential benefits of volunteering across the lifecourse" <i>Journal of Gerontology</i> 2000; 55B: S308-S318	This paper had the potential to contribute a great deal to the review. The author looks at the benefits which can be accrued from volunteering at different stages of the lifecourse, suggesting that different approaches will need to be taken to the recruitment and retention of volunteers of different age groups. This is of particular relevance to the 2014 volunteer programme, where the majority of the emphasis is on efforts to recruit	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sample used first and second wave data from <i>Americans Changing Lives</i> (ACL) survey - face to face interviews conducted in the home. Implication is that the sample is representative of American adults who volunteer, but this is not made explicit. 2. Were steps taken to eliminate, or acknowledge, bias? Author indicates that, for this survey, <i>“Black people and people over age 60 were sampled at twice the rate of non-Blacks and people under 60”</i> (page S310) but does not indicate if this was a source of bias in the original research, or an attempt to eliminate it. No mention is made of potential biases relating to gender, social class or education. 3. Was the research design appropriate to the chosen method? Research design seems to be appropriate to the method chosen, although perhaps not to the type of data available; author conducts a regression analysis on pre-existing (qualitative) data to assess different impacts of volunteering at different stages of the life course.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
		younger people to the programme, with little or no (explicit) provision for their older counterparts.	<p>4. Was there sufficient breadth / depth of contextual description? The study contains no contextual description relating to the participants in the original study, or about the original study itself - it is implicit that readers of the paper will be familiar with the ACL study.</p> <p>5. Were the programme mechanisms explicitly unpacked? Mechanisms being investigated are explicitly described as the potential of volunteering to impact on both social role and levels of activity as perceived by volunteers themselves.</p> <p>6. Was the underlying programme theory identified? The underlying theory that participation in volunteer activity can have a beneficial impact on the physical and psychological wellbeing of older adults by giving them an identified social role and helping to improve / maintain activity levels is made explicit. However, variables used to interrogate the theory statistically are based on self-reported health and life satisfaction rather than any objective, external measures.</p> <p>7. Were sampling, data collection and analysis methods well described? Sampling and data collection are not well described, although neither was instigated by the author of the paper (which reports on results from a pre-existing data set). Analysis is well described, with rich detail about how and why variables on which to base the analysis were chosen.</p> <p>8. Was there sufficient evidence to support the author's claims? The author finds that volunteering is a predictor of physical and psychological wellbeing, and not the other way round; and that the attention paid senior citizens in the volunteering literature is warranted as they have, potentially, the most to gain from the experience. However, there is a question mark over how representative these results are, since the statistical tables presented indicate that two thirds of the sample were over 60 which could, potentially, influence the results in favour of older volunteers.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The author does give some consideration to the influence of external (participant lifeworld) circumstances, if not major life events - eg socioeconomic status marital status, social integration and functional impairment.</p>
2000	Wilson J: "Volunteering" <i>Annual Review of</i>	Significant - the author examines the literature on the different theories around why people	<p>1. Was the sample representative? Of whom / what? Paper takes the form of a review of the literature around volunteering and focuses on some of the principal theories about volunteer behaviour which have emerged. The author does not</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	Sociology 26: 215-240	volunteer, and what they can expect to gain from the experience. Author finds support for a number of theories, and also highlights areas where deeper explorations are needed to tease out some of the complexities around motivations to volunteer - for example, the effects of specific organisational contexts.	<p>describe the literature search process, however, nor the criteria for the inclusion / exclusion of studies from the review.</p> <ol style="list-style-type: none"> 2. Were steps taken to eliminate, or acknowledge, bias? The author does not indicate whether any specific steps were taken to eliminate bias in the review, although the focus on theory may render this moot. 3. Was the research design appropriate to the chosen method? The research design is not described, although the author uses qualitative methods to analyse the literature being reviewed, which is appropriate. 4. Was there sufficient breadth / depth of contextual description? The author provides a wealth of contextual description in relation to each of the theories of volunteering explored - for example, motives, values and beliefs of volunteers, the potential for the creation of human capital, exchange theory and social resources. 5. Were the programme mechanisms explicitly unpacked? The author makes an explicit attempt to unpack the mechanisms at work within each theory of volunteering: for example <i>“Individual-level theories of volunteering founded on behaviourist assumptions argue that the decision to volunteer is based on a rational weighting of its costs and benefits”</i> (p219); competing hypotheses about the relationship between paid work and volunteering are explored; and the author acknowledges that (at the time of writing) <i>“the mechanisms that link social resources to volunteering are only now being investigated”</i> (p224). 6. Was the underlying programme theory identified? Several underlying theories of volunteer activity are explicitly identified and explored in some detail. 7. Were sampling, data collection and analysis methods well described? Sampling and data collection are not described, and nor are the techniques used to analyse the literature selected. However, the analysis itself is reproduced in its entirety and is well evidenced. 8. Was there sufficient evidence to support the author’s claims? The author indicates the potential impacts of volunteering on citizenship, antisocial behaviour, physical and mental health, and socioeconomic achievement (pp231-232). These findings are well supported by the evidence in the analysis of the literature. 9. Was the (potential or actual) impact of external events accounted for? The influence of external events in the volunteer lifeworld is accounted for within the analysis of the literature pertaining to individual motivations to volunteer.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
2001	Thoits P A; Hewitt L N: "Volunteer work and well-being" <i>Journal of Health and Social Behaviour</i> 42;2:115-131	Significant - paper seeks to explore the relationships between volunteer activity and different aspects of wellbeing. In order to explore whether volunteering improves wellbeing, or whether those with existing high levels of wellbeing volunteer, the authors also explore selection and social causation effects.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Like van Willigen, uses two waves of data from the ACL study. The sampling strategy of the original study is well described, indicating that the study population consisted of adults aged 25 years and above, and the numbers of respondents at each stage of the study is also explained. The authors are explicit in their intention to access all of the data uncovered in the original study. 2. Were steps taken to eliminate, or acknowledge, bias? Bias in the original study (over-sampling of African Americans and adults over 60) is acknowledged. The authors are explicit about their intention to take advantage of this over-sampling (which was undertaken to aid comparison across ethnicity and age group) rather than to try to correct for it. 3. Was the research design appropriate to the chosen method? The statistical analysis methods are appropriate to the study design; the authors elaborate that the face to face interviews relied on a Lickert-type questionnaire. The variables used to measure things like life satisfaction and self esteem are well described and explained. 4. Was there sufficient breadth / depth of contextual description? Contextual description of the original study is thin; however, there is a thick layer of description around the theories about determinants, consequences and reciprocal effects of volunteer work (p117-119). 5. Were the programme mechanisms explicitly unpacked? The mechanisms of volunteer work (here delineated as the influence of volunteering on wellbeing and the influence of well being on volunteering, are well described and evidenced. 6. Was the underlying programme theory identified? Underlying theories about self-selection vs social selection processes in relation to the motivation to volunteer are identified and explored, with the caveat that, at the time of writing, more research in the area would prove "<i>fruitful</i>" (p128). 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are all well described. 8. Was there sufficient evidence to support the authors' claims? The authors provide a great deal of evidence to support their conclusions, all of which can be referenced back to the original study. 9. Was the (potential or actual) influence of external events accounted for? The

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			authors also account for the influence of external events / circumstances on the decision to volunteer (for example, membership of a church or other religious organisation).
2002	Luoh M-C; Herzog A R: "Individual consequences of volunteer and paid work in old age: health and mortality" <i>Journal of Health and Social Behaviour</i> 43;4: 490-509	Significant - authors seek to establish whether undertaking volunteer work, or paid work, into old age is a causal factor in reducing premature mortality, or whether those with better health tend to work and / or volunteer for longer. This has implications for the 2014 programme as it might go some way to mitigating the focus on younger people if it can be shown that by encouraging volunteer activity at a young age, beneficial behavioural patterns can be set which will then continue to accrue health benefits as these volunteers grow older.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Data drawn from waves 3 and 4 of the Asset and Health Dynamics among the Oldest Old (AHEAD) study. Sample described as "<i>a nationally representative cohort of persons who were born in 1923 or before and who were living in the community other than nursing homes at the time of the baseline interview in 1993</i>" (p493). Initial sample size for the study was over 8000, so does appear to be a reasonably representative sample, although African American and Hispanic individuals are described as having been "<i>over sampled</i>". 2. Were steps taken to eliminate, or acknowledge, bias? Potential bias inherent in the over-sampling of African Americans and Hispanics - the rationale for this is not described. There were also "<i>differences</i>" (p494) between the initial cohort and those still participating in waves 3 and 4 which are not elaborated on, although the authors of the paper indicate that they have attempted to address any biases occurring as a result of these differences by weighting the sample from wave 3 (the techniques for doing this are not described). 3. Was the research design appropriate to the chosen method? The research design is appropriate to the statistical methodology employed to answer the research questions. The authors sought to establish causal ordering by establishing whether volunteer activity and / or paid work precede health change or vice versa, and acknowledge that there will always be the possibility that some aspect of poor health may bias the effect of activities on health. They cite Thoits and Hewitt (2001) and van Willigen (2000) as examples where a similar method has previously been used to good effect. 4. Was there sufficient breath / depth of contextual description? The authors present thick layers of description in relation to the potential health effects of volunteer activity, potential causal mechanisms (eg social capital; physical activity resulting from getting out more in order to volunteer; the potential of volunteer activity to support core beliefs about the self, p492-3) and the variables used to measure the effects of volunteering. 5. Were the programme mechanisms explicitly unpacked? The potential

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>mechanisms of volunteer activity are unpacked in reasonable detail in the preamble to the analysis, although these are not returned to in the discussion section of the paper. The authors deal with the evidence for beneficial health impacts to occur as a result of volunteering, rather than with an exploration of how these impacts are brought about.</p> <p>6. Was the underlying programme theory identified? The authors are explicit that their intention is to interrogate theories around whether or not volunteer activity can contribute to the maintenance / retention of good health in elderly adults and this is explored in some detail.</p> <p>7. Were sampling, data collection and analysis methods well described? The sampling, data collection and analysis methods are all well described, with enough detail that the authors' work could be replicated (issues around potential bias in the original study notwithstanding).</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors provide detailed statistical evidence from their analysis which supports their conclusions that both volunteer work and paid work beyond retirement age can have a beneficial effect on ongoing health in older adults.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The authors do not consider the potential effects of external events, but are explicit about their intention not to do this.</p>
2003	Mathie A, Cunningham G: "From clients to citizens: asset-based community development as a strategy for community driven development" <i>Development in Practice</i> 13:5;474-486	This paper had the potential to contribute to the review by showing how community engagement and social capital mechanisms operate in different programmes (where they are potentially constrained by different contexts). The authors outline the approach in a similar way to Kretzmann & McKnight, and Page-Adams & Sherradan, making a case for this type of programme to be tried as an alternative approach	<p>1. Was the sample representative? Of whom / what? N/A. Paper is a description of assets-based community development (ABCD) which looks at how it can promote community-driven development and regeneration.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? N/A: see above.</p> <p>3. Was the research design appropriate to the chosen method? N/A: see above.</p> <p>4. Was there sufficient breadth / depth of contextual description? The authors provide a great deal of detailed description around what ABCD is, and how it can operate as a tool to encourage greater citizenship among community members.</p> <p>5. Were the programme mechanisms explicitly unpacked? Yes. The authors describe how community engagement and social capital mechanisms operate can operate to drive (re)development from within deprived communities.</p> <p>6. Was the underlying programme theory identified? The authors posit that by encouraging this kind of 'grassroots' development, communities will benefit from</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
		to more traditional efforts to tackle poverty and deprivation.	<p>higher levels of civic engagement and citizenship, which will benefit not only the immediate community but also wider society.</p> <p>7. Were sampling, data collection and analysis well described? N/A: this is a description of a particular approach rather than an empirical study.</p> <p>8. Was there sufficient evidence to support the author's claims? The authors provide a great deal of evidence to support their claims for the efficacy of ABCD.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The authors note that ABCD approaches are vulnerable to the influence of the policy community, which might not agree with development priorities outlined at community level.</p>
2003	Fyfe N R; Milligan C: "Out of the shadows: exploring contemporary geographies of voluntarism" <i>Progress in Human Geography</i> 27:397-413	Given that the 2014 volunteer programme is taking place against a background of increasing cuts to public services, and that the programme organisers envisage participants going on to volunteer in other organisations post-event, this paper is highly relevant. The warning the authors provide about the danger of policy makers seeing voluntarism as a quick fix to the problems of continuing social welfare provision is one which the Games legacy architects should be aware of.	<p>1. Was the sample representative? Of whom / what? No specific sample is described. Paper "<i>focuses on contemporary developments in voluntarism within advanced capitalist states</i>" (p397) and takes the form of a literature review, although this is not explicitly stated.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? Unknown - authors do not describe how papers were identified, or how decisions were made about inclusion / exclusion.</p> <p>3. Was the research design appropriate to the chosen method? Although research design and methodology are not made explicit, a literature review is an appropriate way to explore the topic.</p> <p>4. Was there sufficient breadth / depth of contextual description? The authors provide a great deal of contextual description around each of the developments of voluntarism that they describe.</p> <p>5. Were the programme mechanisms explicitly unpacked? No specific mechanisms of volunteering are identified - the paper is an exploration of current thinking on how volunteer programmes are becoming a substitute for the provision of social welfare programmes previously provided by the state.</p> <p>6. Was the underlying programme theory identified? No underlying theories of how voluntary activity can benefit the individual are explicitly identified.</p> <p>7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are not described.</p> <p>8. Was there sufficient evidence to support the author's claims? The authors</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>provide a reasonable amount of evidence to support their position, which is that the upsurge in the profile of volunteering as a result of reduced social welfare provision needs to be subject to more scrutiny, and should not be viewed (especially in policy circles) as a quick fix solution to the continuing provision of community services.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The influence of external events is not discussed.</p>
2003	Morrow-Howell M; Hinterlong J; Rozario P A; Tang F: "Effects of volunteering on the well-being of older adults" <i>Journal of Gerontology</i> 58B;3:S137-S145	Paper sets out to investigate the mitigating effects of volunteer activity on the health of older adults. In common with other papers looking at this particular population sub-group, this is of interest to the 2014 volunteer programme because it speaks to the potential of volunteer activity, continued into old age, to continue to accrue health benefits.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? The sample was drawn from the same <i>Americans Changing Lives</i> (ACL) study used by van Willigen and Thoits and Hewitt. For this study, a subset was compiled, consisting of all respondents aged 60 and over at the time of the first wave of the study. The reasons for doing this are well documented, and efforts have been made to ensure that the subset is as representative as possible of American adults in this age group at the time of writing. 2. Were steps taken to eliminate, or acknowledge, bias? Due to high non-response rates in the second and third waves of the original ACL study (due to a combination of deaths and inability to locate surviving respondents) there is potential for biases to creep into the sample subset (for example, based on gender or ethnicity). The authors describe the efforts to reduce this bias, by performing calculations to replace missing data, in some detail; the authors also checked that imputed data were not being used to impute other missing data relating to the sample. 3. Was the research design appropriate to the chosen method? The study design is appropriate to the statistical analysis methods used, with variables being identified which would capture the volunteer experience, as well as control variables which would allow the authors to check for artefacts due to - for example - gender, race or pre-existing health conditions; all factors which might influence individual approaches to the volunteer experience. 4. Was there sufficient breadth / depth of contextual description? The context of the original study is described, although not in a great deal of detail - which might not be expected in a statistical analysis. 5. Were the programme mechanisms explicitly unpacked? The potential mechanisms of volunteer activity are unpacked in some detail, as are their

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>potential impacts on the study cohort. However, the purpose of the study is to ascertain the potential effects of volunteer activity in health in later life rather than on how this is achieved, meaning that the mechanisms are not explored in particular detail.</p> <p>6. Was the underlying programme theory identified? Theories underpinning volunteer activity are explicitly identified, and are related back to the findings of the study - for example <i>“evidence suggests that occupying the role versus not, that is, engagement vs no engagement, is related to wellbeing”</i> (pS142).</p> <p>7. Were sampling, data collection and analysis methods well described? The sampling, data collection and analysis methods are all well described, such that the study could be replicated relatively easily.</p> <p>8. Was there sufficient evidence to support the authors’ claims? The authors present a wealth of statistical evidence to support their claims, and relate this back to the previously identified theories about volunteer activity (see point 6).</p> <p>9. Was the (potential or actual) influence of external factors accounted for? The authors do not explicitly identify, or consider, the influence of external events, but there is an implication that individual characteristics and / or lifeworld situations may have some bearing on the initial motivation to volunteer.</p>
2003	Musick M A; Wilson J: "Volunteering and depression: the role of psychological and social resources in different age groups" <i>Social Science & Medicine</i> 56:259-269	Paper sets out to investigate the mitigating effects of volunteer activity on mental health across the lifecourse. In common with other papers looking at this particular population sub-group, this is of interest to the 2014 volunteer programme because it speaks to the potential of volunteer activity, continued into old age, to continue to accrue health benefits.	<p>1. Was the sample representative? Of whom / what? Sample is drawn from ACL, and uses data from waves 1-3 of this study. Given the prevalence of the ACL study in the literature, there does appear to be consensus that the original study sample was representative of the non-institutionalised older adult population in America (at the time of the ACL study).</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? The authors acknowledge the potential biases in the dataset which might be due to non-random factors affecting attrition rates (although no examples of these are given); they also acknowledge the potential biases inherent in missing data. In both cases, a detailed description is given of the methods used to counter these sources of bias.</p> <p>3. Was the research design appropriate to the chosen method? The study design is appropriate to the statistical methods used, with detailed descriptions provided of the different measurement, mediating and control variables used.</p> <p>4. Was there sufficient breadth / depth of contextual description? There is no particularly broad or deep contextual description, either of the original ACL study</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>or the current study; however, this would not necessarily be expected in a statistical analysis.</p> <ol style="list-style-type: none"> 5. Were the programme mechanisms explicitly unpacked? Mechanisms are explicitly identified (the potential of volunteering to boost self-esteem and build social resources), but they are not explored in any great detail beyond a consideration of whether or not the dataset supports these claims. 6. Was the underlying programme theory identified? Theories around the impact of volunteering on the individual's sense of self, the provision of identifiable social roles and the way in which volunteering draws people into social interaction are explicitly identified, and discussed in relation to the study findings. 7. Were sampling, data collection and analysis methods well described? Sampling, data collection and analysis methods are all well described. 8. Was there sufficient evidence to support the authors' claims? The authors provide a good range of statistical evidence (which is clearly explained) to support their claims. For example: <i>"Our results showing that more sustained volunteering is associated with better mental health can be interpreted in terms of role salience. People for whom the role of the volunteer is salient do not cease volunteering simply because an opportunity dries up or the work turns unpleasant"</i> (p267). 9. Was the (potential or actual) influence of external events accounted for? There is some consideration of the impact of external events, at least in the context of the volunteer lifeworld - for example, the authors consider the impact belonging to and regularly attending a church group or other religious organisation on individual commitment to volunteer activity.
2003	Pattie C; Seyd P: "Citizenship and civic engagement: attitudes and behaviour in Britain" <i>Political Studies</i> 31: 443-468.	Paper has the potential to add a considerable amount of detail to the review, in terms of the discussion of mechanisms which operate to bring about increased levels of citizenship. The findings are important for the 2014 programme, as they indicate that increasing citizenship in Glasgow	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? No specific sample is defined. The authors <i>"...examined three alternative theories of civic behaviour: rational choice, social capital and civic voluntarism"</i> (p443) but do not specify how this was conducted, although the paper is set out as a literature review. 2. Were steps taken to eliminate, or acknowledge, bias? No - see above. 3. Was the research design appropriate to the chosen method? Despite the lack of clarity around research design and methods, a literature review is an appropriate way to investigate the topic. 4. Was there sufficient breadth / depth of contextual description? Yes - the

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
		will not be as simple as getting people to volunteer for a one-off event. Ongoing support and targeted resources will also be critical in the longer term (ie the post-event period).	<p>authors give a great deal of contextual description around the circumstances in which each theory of civic behaviour operates.</p> <ol style="list-style-type: none"> Were the programme mechanisms explicitly unpacked? Although not explicitly labelled as such, social capital and civic engagement stand out as mechanisms which can function to bring about increased citizenship. Was the underlying programme theory identified? Yes - the authors identify three theories of civic behaviour which they interrogate throughout the paper. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods were not described. Was there sufficient evidence to support the author's claims? Yes - the authors provide a wealth of evidence from the literature to support their claims that civic behaviour is multi-faceted and has different triggers for different individuals in different contexts. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.
2003	Danson M : <i>Review of research and evidence on volunteering</i> Volunteer Development Scotland, 2003	As an existing review of the evidence for the potential benefits to be accrued from participating in volunteer programmes in Scotland, this paper had the potential to contribute a great deal to the review. The author explores a number of different mechanisms of volunteering, and unpicks what it is about these mechanisms that can either attract people to particular voluntary enterprises, or repel them.	<ol style="list-style-type: none"> Was the sample representative? Of whom / what? Paper takes the form of a review of the extant evidence on the prevalence and utility of volunteering in Scotland. The evidence sampled is taken to be representative of the available literature on the topic. Were steps taken to eliminate, or acknowledge, bias? Author acknowledges that in some of the studies he references, percentages which look fairly high may, in fact, refer to a relatively small number of people. Was the research design appropriate to the chosen method? The study is designed, and executed, as a review of the evidence. Was there sufficient breadth / depth of contextual description? Yes - the author provides a great deal of description of the contexts in which volunteering in Scotland occurs, and of the contexts in which it might be beneficial to encourage more participation in volunteer programmes. Were the programme mechanisms explicitly unpacked? Yes - the author explores a number of mechanisms of volunteering which might effect change in individuals as well as communities. Was the underlying programme theory identified? The underlying theory that

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>volunteering is beneficial to health is both identified and interrogated.</p> <p>7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis were all well described, such that another researcher would be able to replicate the review.</p> <p>8. Was there sufficient evidence to support the author's claims? The author made a number of recommendations rather than claims, and these were well supported by the evidence cited.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The author accounted for the potential influence of the policy community, considered to be 'an external event' in the context of the lifeworlds of individual volunteers.</p>
2003	Pearce N; Davey Smith G: "Is social capital the key to inequalities in health?" <i>American Journal of Public Health</i> 93;1:122-129	This paper had the potential to contribute to the discussion of the mechanisms of social capital within volunteering, which is central to the current review. The authors identify social capital as "a community level variable" (p128) rather than an individual level one, and suggest that attempts to boost it which are not allied to real policy shifts designed to encourage and support communities in their efforts to effect improvement have as much potential to be damaging as helpful.	<p>1. Was the sample representative? Of whom / what? No specific sample is identified. Paper seeks to explore the relationship between social capital formation, health inequalities and macro-level policy decisions.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? N/A.</p> <p>3. Was the research design appropriate to the chosen method? No specific research design or method is made explicit; however the paper takes the form of a literature review, which is appropriate to the exploration of the topic.</p> <p>4. Was there sufficient breadth / depth of contextual description? The authors provide detailed descriptions of the contexts in which improving levels of social capital can be beneficial to the individuals and communities involved.</p> <p>5. Were the programme mechanisms explicitly unpacked? The authors are not exploring a specific social programme, but rather how the concept of social capital can be operationalised to impact on community life.</p> <p>6. Was the underlying programme theory identified? Different theories about the way(s) in which social capital operates are explored, specifically in relation to how boosting social capital at the community level can have beneficial outcomes for community residents.</p> <p>7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are not described.</p> <p>8. Was there sufficient evidence to support the author's claims? The authors provide a number of pieces of evidence to support their position that boosting social capital in and of itself will make little difference to health inequalities in the</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>long run; such a strategy would have to be linked to a wider, policy-level shift in attitudes in order to have any chance of success.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The authors explicitly acknowledge, and explore, the influence of the policy community on the development of social capital in communities.</p>
2004	Corden A; Ellis A: "Volunteering and employability: exploring the links for incapacity benefits" <i>Benefits</i> 40;2:112-118	Focus on the potential of volunteering to provide a route into paid work for a specific population subgroup is relevant to the 2014 programme, which is being heralded as an excellent opportunity for young, unemployed people to gain valuable employability skills. The lack of evidence for volunteering as a conduit to work has implications for the recruitment and retention of 2014 volunteers, especially in the post-event period when individuals are likely to drift away from volunteering if they do not see immediate, tangible benefits.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? No specific sample is identified. Paper seeks to explore the potential of volunteering to provide a route into work for disabled people. 2. Were steps taken to eliminate, or acknowledge, bias? N/A 3. Was the research design appropriate to the chosen methods? No specific research design or method is made explicit; however the paper takes the form of a literature review, which is appropriate to the exploration of the topic. 4. Was there sufficient breadth / depth of contextual description? Yes - the authors provide a great deal of contextual information around the way volunteering has been framed as a route into paid employment in Government policy. 5. Were the programme mechanisms explicitly unpacked? Although not explicitly identified as a mechanism, the authors focus on the potential of volunteering to give people new or enhanced employability skills, such as "<i>confidence, social skills and experience gained in a work environment</i>" (p112). They interrogate this in some detail, pointing out how barriers to inclusion and common perceptions of the types of people who volunteer can have a negative effect on individual motivations to volunteer. 6. Was the underlying programme theory identified? Again, not explicitly, but the authors focus on the theory that by getting incapacity benefit claimants involved in volunteering, they will ultimately progress to paid employment. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are not described. 8. Was there sufficient evidence to support the authors' claims? Yes. The authors provide a great deal of evidence to support their claim that, while it is not unknown for volunteering to be a route into work for the disabled, there is actually a dearth of evidence to suggest that this is a routine occurrence. 9. Was the (potential or actual) influence of external events accounted for? The

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			influence of external events was not discussed.
2004	Seyfang G: “Working outside the box: community currencies, time banks and social inclusion” <i>Journal of Social Policy</i> 33: 49-71	Paper has some important points to make about the ways in which volunteering is conceptualised at policy levels. The author suggests that it should not be viewed as the only alternative to paid employment, and suggests other ways in which community engagement can be promoted, and employability skills boosted. This has implications for the 2014 programme, which frames the achievement of paid employment as a measure of reducing social exclusion - a standpoint which Seyfang suggests is unhelpful.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? No specific sample is identified. Paper seeks to explore the evidence for the use of Time Banks, and whether they represent an alternative way of promoting community engagement and employability skills, and helping to reduce social exclusion. 2. Were steps taken to eliminate, or acknowledge, bias? N/A 3. Was the research design appropriate to the chosen methods? No specific research design or method is described; however, the paper takes the form of a literature review, which is appropriate to the exploration of the topic. 4. Was there sufficient breadth / depth of contextual description? Yes - the author provides a wealth of contextual description around time banks, how they are used and what they can bring to communities and individuals. 5. Were the programme mechanisms explicitly unpacked? Although not explicitly labelled as a mechanism, the author investigates the way time banks can be used to promote community currencies. These in turn get people communicating with each other and working together, which can lead to a reduction in social disintegration and have positive impacts on educational attainment and paid employment prospects. 6. Was the underlying programme theory identified? The underlying theory that time banks can promote social inclusion and community engagement is identified, although not explicitly. It is contrasted with the policy view that any and all forms of unpaid activity will, ultimately, lead to paid employment which in turn is used as a measure of social inclusion. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are not described. 8. Was there sufficient evidence to support the authors' claims? The author provides a great deal of evidence from the literature to support her position, and identifies implications for the policy community as more and more reliance is placed on volunteering as a means of achieving policy goals. 9. Was the (potential or actual) influence of external events accounted for? Yes - the author considers the impacts of policy level decisions, which are external to the lives of the individuals and communities involved in time banking.
2004	Greenfield E A;	Paper sets out to investigate	1. Was the sample representative? Of whom / what? Sample was drawn from the

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	Marks N F: "Formal volunteering as a protective factor for older adults' psychological well-being" <i>Journal of Gerontology</i> 59B;5:S258-S264	whether volunteering provides older adults with protective health effects by giving them the opportunity to gain and / or retain valued social roles. This is of interest to the 2014 programme, which has the potential to offer participants recognisable, well defined roles during the event, and looks to encourage people to maintain similar roles in other volunteering environments in the post event period.	<p>National Survey of Midlife Development in the US (MIDUS), and consisted of 3,032 English speaking, non-institutionalised adults between the ages of 25 and 74. Sampling weights were used to correct for selection probabilities and non-response, in order to produce a sample that was as representative as possible of the wider population in terms of age, gender, sex and education.</p> <ol style="list-style-type: none"> 2. Were steps taken to eliminate, or acknowledge, bias? Potential for biases existed within the original sample, and these were corrected for using the methods outlined in point 1. The authors found no major differences in results, suggesting that age, gender, sex and education biases were not a major issue for the study. 3. Was the research design appropriate to the chosen method? The research design is appropriate to the statistical methods used to answer the tightly focused research question, which was focused on estimating "<i>the effects of major role-identity absences, formal volunteering and the interaction between major role-identity absences and formal volunteering, on respondents' negative affect, positive affect and purpose in life</i>" (pS258, abstract). 4. Was there sufficient breadth / depth of contextual description? There is some contextual description relating to the background to the theories about volunteering being investigated, and also some description of the contexts in which volunteering occurs among older adults. These contexts are not explored in particular depth, but this would not necessarily be expected in a statistical investigation. 5. Were the programme mechanisms explicitly unpacked? The principal mechanism being investigated is the ability of volunteering to mitigate role identity absences in later life, and this is explicitly unpacked and clearly described. 6. Was the underlying programme theory identified? Theories around role-absence are clearly described: "<i>When a person internalizes a positional designation, which is gained through interactions in role relationships, a role-identity is formed, and role-identities collectively form one's self</i>" (pS259, citing Burke & Tulley, 1977). 7. Were sampling, data collection and analysis methods well described? Sampling, data collection and analysis methods are all clearly and explicitly described, such that the study could be replicated relatively easily. 8. Was there sufficient evidence to support the authors' claims? The authors provide a wealth of statistical evidence (from their own analysis) and theoretical

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>evidence (from the literature) to support their claims.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The potential influence of external events (for example, in the volunteer lifeworld) is not accounted for, but this would not necessarily be expected in a statistical analysis.</p>
2004	<p>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 Experience Corps model" <i>Journal of Urban Health</i> 81;1:64-78</p>	<p>Paper considers how volunteering operates to deliver better health outcomes among a specific population sub-group. This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which does not make any specific provision for older adults who might be interested in participating.</p>	<p>1. Was the sample representative? Of whom / what? The sample of respondents for this study was actively recruited from adults who were aged 60 and over. As the study was situated within the American public education system, respondents had to satisfy specific eligibility criteria to be included - <i>"ability to read and pass a criminal background check; ability to travel to the schools; a Mini-Mental State Examination score of 24 or above or, if among those with a high school education or less scoring between 20 and 23, ability to complete the Trail Making Test within specified time limits"</i> (p67), in order to ensure that participants were literate, had no major cognitive impairment and posed no danger to school students because of previous criminal behaviour. It is arguable that this sample is not representative of the wider population, but within the eligibility criteria, the authors have endeavoured to include as many different types of people as possible in relation to gender, educational background and socio-economic background.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? Potential biases which are acknowledged and addressed include the possibility that participants might be trading off one voluntary activity for another, and that participants might be self-selecting in terms of educational ability or background health issues. Baseline tests were carried out to ascertain self- and independently assessed health status, functional ability and cognitive ability.</p> <p>3. Was the research design appropriate to the chosen method? The design of the evaluation was considered at the same time as the study design was being finalised, ensuring that evaluation methods are appropriate to the study and feasible to administer.</p> <p>4. Was there sufficient breadth / depth of contextual description? The authors have included a thick layer of description of both the Experience Corps study, and the evaluation techniques in order to present a rounded picture of the ways in which the programme operated for the different types of individual who participated in it.</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>5. Were the programme mechanisms explicitly unpacked? Mechanisms which are explicitly identified are the potential for the input of programme volunteers to have a positive impact on school students' grades, and the potential of engagement with the programme itself to improve the cognitive, social and physical activity levels of older adult participants. These mechanisms are clearly explained, and are explored through consideration of both the study results and the wider literature on the topic.</p> <p>6. Was the underlying programme theory identified? The underlying theory which is being interrogated is that participation in the Experience Corps programme will have a positive impact on the cognitive, social and physical activity levels of its participants. This theory is clearly identified, and referred back to in the discussion of the authors' results.</p> <p>7. Were sampling, data collection and analysis methods well described? Sampling, data collection and analysis methods are all clearly and explicitly described, such that the evaluation could be replicated relatively easily.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors provide a considerable amount of evidence to support their findings, both from their own analysis and from the wider literature. For example: <i>"Volunteers signed up for the programme for generative, not health related, reasons. Specifically, 64% volunteered 'to help children', 24% because they 'loved children', and 7% to 'make a difference in their own life'; 4% described their goals as helping themselves 'feel good', and 2% wanted to 'keep active' "</i> (p70), followed later by <i>"The Experience Corps is 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, including many not likely to participate in more traditional health promotion activities. One theoretical base for Experience Corps was that it would attract older adults because of the opportunity for generativity, and that ongoing generativity would retain volunteers while they received regular doses of physical, social and cognitive activity. There is evidence from this pilot trial to support underlying theory"</i> (p74).</p> <p>9. Was the (potential or actual) influence of external events accounted for? No consideration is given to the potential impact of specific external events, although</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			the lifeworld circumstances of programme volunteers are taken into account (for example, social isolation, level of education etc).
2005	Grimm R; Dietz N; Spring K; Arey K; Foster-Bey J: Corporation for National and Community Service <i>Building Active Citizens: the role of social institutions in teen volunteering</i> Brief 1 in the <i>Youth Helping America</i> series.	Paper had the potential to contribute significantly to the discussion around what sorts of young person are likely to volunteer. This is relevant to the 2014 programme, where the focus is largely on encouraging young people to participate, motivated by the chance to gain employability skills and valuable work experience. If the evidence suggests that this is not a prime motivating factor for younger volunteers, there would be implications for the type of support that would need to be offered to encourage young people to become involved and to retain a commitment to volunteering in the post-Games period.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Yes. The findings were based on a national survey of American young people aged 12-18 years. 2. Were steps taken to eliminate, or acknowledge, bias? No steps to deal with potential biases are described. 3. Was the research design appropriate to the chosen methods? The research design is not made explicit, but the findings rely heavily on statistical analyses which would have been an appropriate way to investigate the topic. 4. Was there sufficient breadth / depth of contextual description? Yes - the authors provide a significant amount of background to volunteer activity among American young people and the contexts in which this is most likely to occur. 5. Were the programme mechanisms explicitly unpacked? Yes, although the mechanisms identified are external to volunteering and include the influence of parents, schools and religious organisations on the decision to volunteer. 6. Was the underlying programme theory identified? Not explicitly, but the authors indicate that they are investigating the theory that adolescents with strong family / religious / school ties which encourage and support volunteering are more likely to volunteer. 7. Were sampling, data collection and analysis well described? No - sampling is described but not in any detail, and descriptions of data collection and analysis methods are absent. 8. Was there sufficient evidence to support the authors' claims? The authors do provide a reasonable amount of evidence from their findings to support their claims. 9. Was the (potential or actual) influence of external events accounted for? Yes - the focus of the report is on the influence of external factors such as family, school and religious environment.
2005	Narushima M: "Payback time: community volunteering among older adults	Paper considers how volunteering operates to deliver better health outcomes among a specific population sub-group. This is of interest to the 2014 programme	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sampling for this study was split into two parts: first, a sample of non-profit organisations (NPOs) was identified. The process by which this was done is clearly and explicitly described, and shows that efforts were made to gather a sample which would be representative of NPOs in the region (Toronto). The second stage was the

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	as a transformative mechanism" <i>Ageing and Society</i> 25;4:567-584	because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which does not make any specific provision for older adults who might be interested in participating.	<p>identification of a sample of individual volunteers; this sample was recruited by word of mouth and is not necessarily representative of all older volunteers, although individuals included came from a variety of backgrounds and social circumstances. The authors address this explicitly and emphasise that the study findings are not intended to be generalised to the whole of Canada and / or beyond.</p> <ol style="list-style-type: none"> 2. Were steps taken to eliminate, or acknowledge, bias? No sources of bias or potential bias are noted by the authors. 3. Was the research design appropriate to the chosen method? The authors have used a case study approach, which is appropriate to their research design. The design of the study and the methods employed to conduct it are clearly described. 4. Was there sufficient breadth / depth of contextual description? A thick layer of contextual description is provided, both in terms of the NPOs' organisational contexts and the individual lifeworld contexts of the older volunteers. 5. Were the programme mechanisms explicitly unpacked? Mechanisms are explicitly identified from the literature ("<i>The premise is that volunteering can transform an individual's consciousness and her or his commitment toward their community (Rifkind 1995). Despite the importance of community volunteering as a promoter of citizenship participation and the social economy, it cannot be assumed that this idealised version will be spontaneously realised...</i>" (p569)) and are then translated into the 'everyday' language of the older volunteers who were interviewed ("<i>Although every participant referred to concerns for others and to society at large as motives for volunteering, no-one uttered the words 'social obligation' or 'altruism'. Instead they used expressions like 'feel responsible'. 'want to work for social causes' or 'want to give something back to the community'.</i>" (p575)). 6. Was the underlying programme theory identified? The underlying theory explicitly identified by the authors is that "<i>[i]t is argued that the self-help and transformative mechanisms embedded in community volunteering provide opportunities for retirees to sustain their self-esteem and sense of wellbeing, while cultivating 'generativity' in late adulthood</i>" (p567, abstract). 7. Were sampling, data collection and analysis methods well described? The sampling, data collection and analysis methods are all clearly and explicitly

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>described, such that the study could be replicated reasonably easily (although with the caveat that no potential sources of bias were considered).</p> <p>8. Was there sufficient evidence to support the author's conclusions? The author provides a wealth of evidence both from their analysis and from the wider literature to support their findings - for example: <i>"This study of older volunteers in Toronto has indicated that they can be effective service providers if society creates the structures that allow them to express and cultivate their 'generativity' and their desire to 'pay back' through social contributions...Unfortunately, however,...most societies still do not support older people's generative inclination to work with younger generations, despite this activity's link with successful ageing (Fisher 1995; McAdams and Logan 2003)"</i> (p580).</p> <p>9. Was the (potential or actual) influence of external events accounted for? The authors give due consideration to the potential impacts of external events, such as social attitudes to older volunteers, and the lifeworld circumstances of older volunteers which might influence their motivation and / or commitment to voluntary activity.</p>
2005	Lum T Y; Lightfoot E: "The effects of volunteering on the physical and mental health of older people" <i>Research on Aging</i> 27:31-55	Shows how volunteer activity enables older adults to engage productively with the wider community and to have the confidence to access social networks and resources. Paper demonstrates a clear link between this and the improvement in health outcomes in the group of older volunteers being studied. This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which	<p>1. Was the sample representative? Of whom / what? Sample drawn from respondents to AHEAD survey (previously reported by Luoh and Herzog, 2004). The authors do not detail the eligibility criteria for AHEAD, but they do cite the survey website where detailed information about the survey and its data quality is available. The sub-sample for this study consisted of all AHEAD respondents who were aged 70 or over in 1993.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? Potential for bias arises from the exclusion of respondents who <i>"reported 'other' race (other than white, black or Hispanic)"</i> (p38), although this exclusion is acknowledged and explained as being done because the numbers were too small for meaningful analysis. Data from the AHEAD study have been reported elsewhere, and it appears that there is a reasonable consensus about the representativeness of subsamples drawn from the original dataset.</p> <p>3. Was the research design appropriate to the chosen method? The statistical methodology is appropriate for the interrogation of this data set as the study sets out to measure associations between formal volunteering and health, using</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
		does not make any specific provision for older adults who might be interested in participating.	<p>predominantly numerical data derived from the original (AHEAD) study.</p> <ol style="list-style-type: none"> 4. Was there sufficient breadth / depth of contextual description? There is no particular breadth or depth of contextual description, but this would not necessarily be expected from a quantitative study. 5. Were the programme mechanisms explicitly unpacked? Specific mechanisms of volunteering are not identified or explored; however, this was not what the study set out to do and is not an indication of lack of rigour in the study methodology. 6. Was the underlying programme theory identified? The underlying theory, that participation in volunteer activity has a positive impact on health and wellbeing in older adults, is explicitly identified and interrogated by the authors. 7. Were sampling, data collection and analysis methods well described? Sampling, data collection and analysis methods are all well defined, such that the study could be replicated relatively easily. 8. Was there sufficient evidence to support the authors' claims? The authors provide a wealth of evidence both from their analysis and from the wider literature to support their findings - for example: <i>"Providing empirical support to earlier studies, our study found that volunteering by older individuals is positively correlated with self-reported health, depression levels and functioning levels as measured by ADLs and IADLs"</i> (p49). 9. Was the (potential or actual) influence of external events accounted for? The influence (actual or potential) of external events is not addressed, but as with point 5, this was not what the study set out to do and is not necessarily a sign of a poorly executed study.
2005	Li Y; Ferraro K F: "Volunteering and depression in later life: social benefit or selection process?" <i>Journal of Health and Social Behaviour</i> 46:68-84	Paper seeks to establish a causal relationship between volunteering and depression for a specific population sub-group (older people). This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sample is drawn from ACL, and uses data from waves 1-3 of this study. Given the prevalence of the ACL study in the literature, there does appear to be consensus that the original study sample was representative of the non-institutionalised older adult population in America (at the time of the ACL study). 2. Were steps taken to eliminate, or acknowledge, bias? The authors seek to explore the relationship between depression and volunteering; they explicitly acknowledge that there are potential sources of bias inherent in the question as it is possible that only those with low levels of depression are more likely to volunteer. One of the principal aims of the study is to investigate where this bias

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
		programme which does not make any specific provision for older adults who might be interested in participating.	<p>might arise. However, they do not acknowledge or address potential sources of bias in the sampling strategy (although this may be because, by 2005, ACL had been extensively reported elsewhere).</p> <ol style="list-style-type: none"> 3. Was the research design appropriate to the method? The study design is appropriate to the statistical investigative methods chosen; the authors are investigating whether non-random attrition in a longitudinal study might bias the depression / volunteering relationship. 4. Was there sufficient breadth / depth of contextual description? Contextual description is limited, although this is not unexpected in a quantitative study where the focus is on investigating one specific aspect of volunteer activity rather than a whole programme or set of programmes. 5. Were the programme mechanisms explicitly unpacked? Mechanisms of volunteer activity are explicitly identified and unpacked prior to the commencement of the analysis; they are then tied into the study findings as part of the explanatory process. 6. Was the underlying programme theory identified? Social benefit theory is explicitly identified as the underlying theory of interest, and is investigated in some detail using both the wider literature and the authors' own results. 7. Were sampling, data collection and analysis methods well described? Sampling, data collection and analysis methods are all well described, such that the study could be replicated relatively easily. 8. Was there sufficient evidence to support the authors' claims? The authors provide a wealth of evidence both from their analysis and from the wider literature to support their findings - for example: "<i>Consistent with much of the previous research, we found a <u>benefit effect</u> due to formal volunteer activity (Krause et al, 1992; Rietschlin 1998; van Willigen 2000; Musick and Wilson 2003)</i>" (p79), and "<i>Continued engagement in formal volunteering is beneficial to older volunteers. This is an important finding for voluntary organisations and speaks more generally to the value of the development of social capital</i>" (p79). 9. Was the (potential or actual) influence of external events accounted for? The influence (actual or potential) of external events and / or circumstances is not accounted for, but this would not necessarily be expected in a tightly focused statistical analysis.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
2006	Fyfe N; Timbrell H; Smith F M: "The third sector in a devolved Scotland: from policy to evidence" <i>Critical Social Policy</i> 26:630.	Paper had the potential to contribute significant detail to the discussion around where the 2014 legacy plans sit within the policy agenda. There is a real danger that the Games volunteer programme comes to be regarded as an instrument of the policy agenda rather than an enjoyable activity for people to take part in, and this is a danger highlighted by the authors with regard to other third sector activities.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? N/A. Paper is a consideration of the challenges facing the devolved Scottish administration in putting policies aimed at increasing social capital and citizenship into practice. 2. Were steps taken to eliminate, or acknowledge, bias? N/A. 3. Was the research design appropriate to the chosen methods? The research design and methodology are not explicitly described; however, the paper takes the form of a literature review which is an appropriate way to explore the topic. 4. Was there sufficient breadth / depth of contextual description? Yes - the authors give a great deal of description of the policy contexts within which programmes aimed at increasing social capital and / or citizenship must operate. 5. Were the programme mechanisms explicitly unpacked? No. Mechanisms for achieving improvements in social capital and citizenship are not discussed, but this is not the point of the paper which seeks to consider the specific policy challenges of trying to bring about these improvements. 6. Was the underlying programme theory identified? No underlying, unifying theory is identified. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are not described. 8. Was there sufficient evidence to support the authors' claims? The authors provide a great deal of evidence to support their position that the third sector is at risk of being subsumed into policy initiatives designed to deliver specific social welfare outcomes. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.
2006	Finkelstein M A: "Dispositional predictors of organizational behaviour: motives, motive fulfilment and role identity" <i>Social Behavior and</i>	This paper considers what motivates employees of a particular organisation to take part in volunteer activities organised by their employer. This has the potential to contribute to the discussion around why people would volunteer for something advocated by a specific	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Purpose of the study is to try to identify predictors of organisational volunteering among employees. Sample derived from employees of four organisations, so can only be said to be representative of employees who volunteer. 2. Were steps taken to eliminate, or acknowledge, bias? No steps to eliminate or acknowledge bias are described. 3. Was the research design appropriate to the chosen methods? The statistical analysis methods were appropriate to the survey-led research design. 4. Was there sufficient breadth / depth of contextual description? A detailed

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	<i>Personality</i> 34;6:603-616	organisation (and the 2014 Games organisers could be considered in this light) rather than simply volunteering for a cause they support.	<p>description of the circumstances in which organisational volunteering can arise is provided, but there is no context given for the companies from which the respondents were recruited for the study.</p> <ol style="list-style-type: none"> Were the programme mechanisms explicitly unpacked? Although not explicitly identified as programme mechanisms, the authors investigate how the potential to gain motive fulfillment and a sense of role identity operate to motivate employee-volunteers. Was the underlying programme theory identified? The authors interrogate the theory that by participating in volunteer activities organised by their employer, volunteers gain a sense of personal fulfilment - although this is not explicitly identified as a programme theory. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are all reasonably well described, the lack of attention to possible sources of bias notwithstanding. Was there sufficient evidence to support the authors' claims? Yes - the authors provide a great deal of evidence both from the literature and from their findings to support their claims. Was the (potential or actual) influence of external events accounted for? There was no discussion of the influence of external events.
2006	Martinson M; Minkler M: "Civic engagement and older adults: a critical perspective" <i>The Gerontologist</i> 46;3:318-324	In common with other authors [REFS], this study has the potential to contribute evidence to the discussion of the relationships older adults might have with volunteer and other civic engagement programmes. This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which does not make any specific	<ol style="list-style-type: none"> Was the sample representative? Of whom / what? No sample is explicitly defined; the paper takes the form of an exploration of the literature using a specific theoretical framework. Were steps taken to eliminate, or acknowledge, bias? No - see above. Was the research design appropriate to the chosen methods? No research design is outlined, but the literature review methods used are appropriate to the investigation of the topic. Was there sufficient breadth / depth of contextual description? The authors provide a reasonable amount of contextual information regarding the relationships older adults have with civic engagement projects. Were the programme mechanisms explicitly unpacked? No specific mechanisms are identified. Was the underlying programme theory identified? No specific theory is identified; the authors state that this paper is "<i>an attempt to broaden the dialogue</i>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
		provision for older adults who might be interested in participating.	<p><i>on civic engagement and older adults and to move it into some largely uncharted terrain” (p323).</i></p> <ol style="list-style-type: none"> 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods were not described. 8. Was there sufficient evidence to support the authors’ claims? Difficult to judge, as the authors do not make any specific claims beyond suggesting that the dialogue needs to be broadened away from a focus on causal relationships between civic engagement and health in older adults. They do provide a reasonable amount of evidence to support this position. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events is not accounted for.
2006	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" <i>Journal of Urban Health</i> 83;5:941-953	In common with other authors [REFS], this study has the potential to contribute evidence to the discussion of the relationships older adults might have with volunteer and other civic engagement programmes. This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which does not make any specific provision for older adults who might be interested in participating.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sample was recruited from among older adults belonging to several different communities in Baltimore city. Strict eligibility criteria were enforced to <i>“maximise effectiveness and safety of the older adults and the children they would serve”</i> (p944) - these criteria had already been explored in greater detail in an earlier paper by the project team (Fried et al., 2004). 2. Were steps taken to eliminate, or acknowledge, bias? The project team clearly describe the efforts made to ensure that the sample was as representative as possible of the wider community, the strict eligibility criteria notwithstanding: <i>“[r]ecruiters...utilized a wide range of strategies, from ‘pounding the pavement’, handing out brochures on city streets and at health fairs, to presentations at churches, community organisations, retiree organisations, senior housing sites and senior centers”</i> (p944). 3. Was the research design appropriate to the chosen method? The design of the evaluation was considered at the same time as the study design was being finalised, ensuring that evaluation methods are appropriate to the study and feasible to administer. 4. Was there sufficient breadth / depth of contextual description? The authors provide a thick layer of contextual description relating to the study, focusing in on the organisational context (the public school system in America) and the potential benefits to both organisation and individual participants (both the older adult volunteers and the students involved in the programme).

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>5. Were the programme mechanisms explicitly unpacked? This paper focused on a slightly different aspect of the identified mechanisms that the earlier (2004) paper. Here, the authors explicitly consider the impact of programme mechanisms on the volunteers, rather than the student recipients of volunteer activity, and unpack the mechanisms relating to impacts on cognitive, social and physical activity in more detail. The generative component of these mechanisms is identified as being particularly important to older volunteers, and an unintended consequence was reported - namely that a high proportion of minority groups such as African-American women and individuals with a low level of education.</p> <p>6. Was the underlying programme theory identified? The underlying programme theory - that participation in the Experience Corps programme will have a positive impact on the cognitive, social and physical activity levels of its participants - is clearly identified, and amended to include the finding that the programme also has the potential to involve non-traditional volunteer participants, who might not otherwise become involved in health promotion activities.</p> <p>7. Were sampling, data collection and analysis methods well described? Sampling, data collection and analysis methods are all well described.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors provide a great deal of evidence from their findings, and from the wider literature, to support their claims.</p> <p>9. Was the (actual or potential) influence of external events accounted for? The influence of external events is considered, particularly the influence of lifeworld events on older volunteers' decision to become involved in this particular programme rather than any other type of volunteer activity.</p>
2007	Cloe P; Johnsen S; May J: "Ethical citizenship? Volunteers and the ethics of providing services for homeless people" <i>Geoforum</i> 38:1089-1101	Paper has the potential to contribute to the discussion around what types of people volunteer and why, as well as providing some insight into the barriers some people face in trying to volunteer. This has the potential to be useful to the 2014 programme, where very little consideration has been	<p>1. Was the sample representative? Of whom / what? Respondents who were interviewed for the study are all volunteers providing homeless services, and are assumed to be generally representative of this group.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? No steps to acknowledge or eliminate bias are outlined.</p> <p>3. Was the research design appropriate to the chosen methods? The research design is not made clear, but the combination of literature review and participant observations is an appropriate way to investigate the topic.</p> <p>4. Was there sufficient breadth / depth of contextual description? Yes - the</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
		given to some of the implicit barriers to participation which some individuals will face (for example, they may be uncomfortable with the 'corporatisation' of volunteering, as Cloke and colleagues suggest).	<p>authors provide a great deal of detail about the contexts in which volunteers provide social welfare services.</p> <ol style="list-style-type: none"> 5. Were the programme mechanisms explicitly unpacked? Although not explicitly identified as such, personal identification with a specific social role emerges as an important mechanism of this type of volunteering. 6. Was the underlying programme theory identified? No specific programme theory is put forward; the paper seeks to understand what motivates individuals to volunteer for marginalised organisations providing this kind of service. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis were not described in any detail. 8. Was there sufficient evidence to support the authors' claims? The authors do provide a reasonable amount of evidence from the literature to support their position, which is that this type of volunteering allows people to identify with a particular social role. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events is not accounted for.
2007	Matsuba M K; Hart D; Atkins R: "Psychological and social-structural influences on commitment to volunteering" <i>Journal of Research in Personality</i> 41:889-907	Paper had the potential to make a significant contribution to the discussion around what motivates individuals to volunteer. This is important for the 2014 volunteer programme, as it has implications for the recruitment and retention of volunteers for the event, and for the intention to encourage these individuals to continue to give their time to volunteer activities in the post-event period.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sample is described as being representative of "English-speaking American adults between the ages of 25 and 74" (p895). Beyond asserting that 48% of the sample was female, no details are provided about the breakdown of ethnicity, educational background, employment status or any other socio-demographic indicators. 2. Were steps taken to eliminate, or acknowledge, bias? No steps to deal with potential sources of bias are described. 3. Was the research design appropriate to the chosen methods? The research design and proposed methods are not described, although the statistical analysis which is presented does seem to be an appropriate way to interrogate the model which the authors present. 4. Was there sufficient breadth / depth of contextual description? No contextual description is provided, although this is not unexpected in a statistical analysis. 5. Were the programme mechanisms explicitly unpacked? No specific mechanisms of volunteering are described; the paper sets out to test the hypothesis that motivation to volunteer comes as a result of personality, socio-demographic qualities and social relationships. It does not test whether these operate as

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>mechanisms to bring about specific outcomes for volunteers (for example, improved health outcomes).</p> <p>6. Was the underlying programme theory identified? The authors posit that motivation to volunteer comes about as a result of the factors outlined above; they do not look for an underlying theory of volunteering itself which might explain particular outcomes in certain individuals or population sub-groups.</p> <p>7. Were sampling, data collection and analysis well described? Sampling and data collection are not well described, although the analysis is set out in some detail.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors provide a great deal of evidence to support their position.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not accounted for.</p>
2007	Laverie D A; McDonald R E: "Volunteer dedication: understanding the role of identity importance on participation frequency" <i>Journal of Macromarketing</i> 27:274-288	This paper considers what motivates employees in a particular industry to take part in volunteer activities which reflect their everyday job roles. This has the potential to contribute to the discussion around why people would volunteer for something advocated by a specific organisation (and the 2014 Games organisers could be considered in this light) rather than simply volunteering for a cause they support.	<p>1. Was the sample representative? Of whom / what? The sample is derived from volunteers for a charity which helps disadvantaged children. Beyond the information that all the volunteers are employed in the marketing industry, no information is given on how the sample breaks down in terms of gender, ethnicity, educational background or any other socio-demographic factors.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? No steps to address bias are described; it was also noted that participation was incentivised by the provision of entry into a high end raffle.</p> <p>3. Was the research design appropriate to the chosen methods? The research design is briefly described as a postal survey; analysis methods are not clearly stated, but are presented as a statistical analysis which is an appropriate way to interrogate such a survey.</p> <p>4. Was there sufficient breadth / depth of contextual description? The authors provide a great deal of contextual description around the organisation for which survey respondents volunteer.</p> <p>5. Were the programme mechanisms explicitly unpacked? Although not explicitly identified as a mechanism, the authors investigate whether the provision of a valued role identity as a result of volunteering has an impact on how often and for how long individuals volunteer.</p> <p>6. Was the underlying programme theory identified? The authors interrogate the theory that volunteers who gain a strong sense of identity from their role are likely</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>to volunteer more often and for longer.</p> <p>7. Were sampling, data collection and analysis well described? Sampling and data collection were described, although not in any detail. Analysis methods were described extensively.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors provide a great deal of evidence to support their position, and also take the step of identifying the limitations of their work.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The influence of external events is not taken into account.</p>
2008	<p>van Hooijdonk C; Droomers M; Deerenberg I M; Mackenbach J P; Kunst A E: "The diversity in associations between community social capital and health per health outcome, population group and location studied" <i>International Journal of Epidemiology</i> 17:1384-1392.</p>	<p>Social capital is posited as a mechanism by which the 2014 volunteer programme is likely to have an impact on health. This paper had the potential to make a significant contribution to this discussion, especially as the authors found the role of social capital to be highly dependent on the individual, the community and the type of health outcome being measured.</p>	<p>1. Was the sample representative? Of whom / what? Sample was derived from nationally available mortality statistics (in the Netherlands) and covered all individuals whose birth, death, immigration or emigration was registered during a five year period. Sample can be taken to be representative of the wider population of the Netherlands during this time.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? No specific measures to combat potential biases are described.</p> <p>3. Was the research design appropriate to the chosen methods? Yes - the statistical analysis methods were appropriate to the interrogation of national mortality statistics.</p> <p>4. Was there sufficient breadth / depth of contextual description? N/A - study did not interrogate a specific social programme.</p> <p>5. Were the programme mechanisms explicitly unpacked? N/A - see above.</p> <p>6. Was the underlying programme theory identified? The authors test the theory that there is a positive association between community social capital and health.</p> <p>7. Were sampling, data collection and analysis well described? Yes - sampling, data collection and analysis were described in considerable detail.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors provide a wealth of evidence to support their position that any association between social capital and health is highly context dependent.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.</p>
2008	<p>Carpiano R M: "Actual or</p>	<p>As with van Hooijdonk's paper, this study had the potential to make a</p>	<p>1. Was the sample representative? Of whom / what? Data are derived from the Los Angeles Family and Neighborhood Study (LAFANS) and are "representative of all</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	potential neighbourhood resources and access to them: testing the hypotheses of social capital for the health of female caregivers” <i>Social Science and Medicine</i> 67: 568-582.	significant contribution to the discussion around how social capital operates as a mechanism to (potentially) influence health. The finding that strong neighbourhood ties are not necessarily health-promoting has implications for the 2014 programme, as it may be that changes to the way the programme encourages the building of social capital have to be considered.	<p><i>neighbourhoods and households in Los Angeles County</i>” (p572). The author notes that poor neighbourhoods and families with children are over-sampled.</p> <ol style="list-style-type: none"> 2. Were steps taken to eliminate, or acknowledge, bias? The authors acknowledgement of oversampling indicates an acknowledgement that the results are likely to be biased towards poorer families with children. They also explicitly state that, for the individual samples, “<i>only female respondents living in their current residence for 12 months or longer were selected for the final sample...</i>” (ibid), although is not problematic in terms of bias as the study specifically sets out to garner the views of women. 3. Was the research design appropriate to the chosen methods? The statistical analysis is appropriate to the interrogation of area-wide survey results. 4. Was there sufficient breadth / depth of contextual description? The authors give a reasonable amount of context for both the survey from which the data set was gathered, and of the contexts in which female caregivers are likely to attempt to access social network resources. 5. Were the programme mechanisms explicitly unpacked? Social capital and access to neighbourhood resources are identified as mechanisms which can impact on health, although this identification is inferred rather than explicit. 6. Was the underlying programme theory identified? Although not investigating the mechanisms in the context of any type of social programme, the authors interrogate the theory that higher levels of social capital will be related to fewer harmful health behaviours and higher levels of good health generally. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis are all well described. 8. Was there sufficient evidence to support the authors’ claims? Yes - the authors provide a great deal of evidence from their findings to support their position. 9. Was the (potential or actual) influence of external events accounted for? The Influence of external events was accounted for in so far as social capital and neighbourhood social resources can be considered to be external to the daily lifeworlds of the individuals accessing them.
2008	Maloney W A; van Deth J W; Roßteutscher S:	As with van Hooijdonk’s and Carpiono’s papers, this study had the potential to make a significant	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sample is representative of individuals who volunteer for specific organisations. This is a deliberate step on the part of the authors, who seek to represent variations rather than to ensure that

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	<p>“Civic orientations: does associational type matter?” <i>Political Studies</i> 56;261-287</p>	<p>contribution to the discussion around how social capital operates as a mechanism to (potentially) influence health. The finding that strong neighbourhood ties are not necessarily health-promoting has implications for the 2014 programme, as it may be that changes to the way the programme encourages the building of social capital have to be considered.</p>	<p>their findings are generally representative (p266).</p> <ol style="list-style-type: none"> 2. Were steps taken to eliminate, or acknowledge, bias? The potential for bias in deliberately selecting individuals who volunteer for specific organisations is acknowledged. 3. Was the research design appropriate to the chosen methods? Yes - the statistical investigation was appropriate to the comparative case study design of the research. 4. Was there sufficient breadth / depth of contextual description? Yes - the authors give detailed contextual description of the volunteering landscape in both cities studied. 5. Were the programme mechanisms explicitly unpacked? Although not explicitly identified as such, the personal associations of individual volunteers is treated as a mechanism which supports motivation and continuation of volunteer activity. 6. Was the underlying programme theory identified? The authors interrogate the theory that, within the voluntary sector, different types of social capital will precipitate different types of outcome for different individuals, rather than the perceived norm that volunteering increases social capital for all participants. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods were all well described. 8. Was there sufficient evidence to support the authors’ claims? The authors provide a wealth of evidence from their findings to support their conclusions. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events was accounted for, framed as individual volunteers’ external social associations.
2008	<p>Jirovec R L; Hyduk C A: “Type of volunteer experience and health among older adult volunteers” <i>Journal of Gerontological Social Work</i> 30;3-</p>	<p>Paper sets out to investigate whether the health benefits accrued to older volunteers arise as a direct result of the type of volunteering undertaken. This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger,</p>	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? The sample for this study was drawn from the lists of volunteers for two organisations operating within a large hospital. Sample is acknowledged by the authors to be “<i>disproportionately white and female</i>”, but in terms of economic, educational and employment status, the sample is described as “<i>approximat[ing] the national cohort of 60+ older adults (U.S. Census Bureau 1995)</i>” (p33), indicating that the authors feel the sample is sufficiently representative of the wider population in the same age group. 2. Were steps taken to eliminate, or acknowledge, bias? Potential biases arise from the over-representation of individuals who are either white and / or female;

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	4:29-42	adults. This may have implications for the 2014 programme which does not make any specific provision for older adults who might be interested in participating.	<p>however as outlined above, the authors address this by taking steps to ensure that the sample is sufficiently representative of the wider, national picture in other areas (eg education, home ownership, employment status).</p> <ol style="list-style-type: none"> 3. Was the research design appropriate to the chosen method? The cross-sectional survey design of the research project is well suited to the statistical analysis methods chosen by the authors. 4. Was there sufficient breadth / depth of contextual description? An extensive literature search provides a considerable amount of context about the background against which many volunteer programmes operated in the US at the time of this study. 5. Were the programme mechanisms explicitly unpacked? Mechanisms are identified but not explicitly unpacked. The purpose of the study, however, is to ascertain whether there is a connection between volunteering and physical / mental health outcomes in older adults rather than to assess how, why or for whom this should be the case, so this is not a methodological drawback of the study. 6. Was the underlying programme theory identified? The underlying theory which the authors set out to test is that participation in volunteer activity can have a beneficial effect on the physical and / or mental health of older adults. 7. Were sampling, data collection and analysis methods well described? Sampling, data collection and analysis methods are all clearly described, such that the study could be replicated relatively easily. 8. Was there sufficient evidence to support the authors' claims? The authors provide a significant amount of evidence to support his claims, for example: <i>"Tables 1 and 2 show frequency tables and measures of central tendency and variation for items assessing volunteer activities, and physical and psychological well-being. Most volunteer subjects in our study donated time to two or more organizations, volunteered on a regular basis, and contributed between 250-1000 annually or the equivalent of 5-20 hours of their time weekly (Table 1). Almost all stated that they volunteered in order to stay active and received formal recognition (but not financial reimbursement) for their efforts"</i> (p33). 9. Was the (actual or potential) influence of external events accounted for? The authors do not consider the (actual or potential) influence of external events, but this would not necessarily be expected in a statistical analysis.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
2008	Borgonovi F: "Doing well by doing good: the relationship between formal volunteering and self-reported health and happiness" <i>Social Science & Medicine</i> 66:2321-2334	Paper sets out to test whether there is a causal relationship between volunteering and good (self-reported) health and happiness. The finding that a low level of volunteer activity can have positive health impacts is important for the review of the 2014 programme, since it seems to support the position that volunteering has a positive impact on health.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? The sample is drawn from the Social Capital Community Benchmark Survey (SCCBS) dataset (US). This contains both a sample of the US population and specific samples from 41 communities across the US; as such, it is a reasonably representative sample. 2. Were steps taken to eliminate, or acknowledge, bias? No potential biases in the dataset are identified or addressed by the author. 3. Was the research design appropriate to the chosen method? The research design is not explicitly described, so it is not possible to state definitively whether it is appropriate to the statistical analysis methods used to interrogate the dataset. 4. Was there sufficient breadth / depth of contextual description? There is not a great deal of contextual description, either for volunteer programmes or for individuals who volunteer. However, this is not necessarily a drawback of the study as such description would not normally be expected in a statistical analysis of a pre-existing dataset. 5. Were the programme mechanisms explicitly unpacked? The authors provide evidence to show that volunteering can have a positive impact on the physical and mental health of volunteers, but they do not unpack why or how this happens, nor to whom. Again, this type of analysis would not necessarily be expected in a statistical interpretation of the dataset. 6. Was the underlying programme theory identified? The underlying theory which the authors set out to interrogate is that people who volunteer enjoy better physical and psychological health than those who do not, and that this is not pinned to socio-economic differences between volunteers and non-volunteers. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are not described. 8. Was there sufficient evidence to support the author's claims? The author provides a significant amount of evidence to support his claims, for example: <i>"Keeping other factors constant, a person who volunteers less than once a month is 4.5% more likely to report being in excellent health and 7% more likely to report being very happy than a person who does not engage in voluntary work"</i> (p2324-5). 9. Was the (actual or potential) influence of external events accounted for? The author does not consider the (actual or potential) influence of external events, but this would not necessarily be expected in a statistical analysis.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
2009	Moore S; Daniel M; Gauvin L; Dubé L: "Not all social capital is good social capital" <i>Health & Place</i> 15:1071-1077	Paper had the potential to make a significant contribution to the review in so far as it considers the negative influences of social capital. Most studies look specifically for positive associations, so a finding that negative impacts can also follow on from efforts to improve levels of social connectedness is an important one to consider in terms of the 2014 volunteer programme.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sample drawn from Montreal Neighbourhood Survey of Lifestyle and Health (NMSLH). Original study used a census-based sampling strategy which took account of socio-economic status and first language (French or English), and there was a restriction to adults between 18 and 55. Over-representation of some groups was noted in some of the census area-based data, but overall the sample was felt to be generally representative of the adult population of the area. 2. Were steps taken to eliminate, or acknowledge, bias? Potential bias was acknowledged in the noting of an over-representation of adults with degrees, married couples and individuals born outside of Canada. No steps to correct for these potential biases are noted. 3. Was the research design appropriate to the chosen methods? The statistical analysis methods were appropriate to the survey-based research design. 4. Was there sufficient breadth / depth of contextual description? Very little contextual description is provided; the paper concentrates on the findings of the study. 5. Were the programme mechanisms explicitly unpacked? Although not explicitly labelled as a mechanism, the study concentrates on the way(s) in which social capital might operate negatively to influence health in different socio-economic groups. 6. Was the underlying programme theory identified? The authors interrogate the theory that social capital has the potential to precipitate negative impacts on health and wellbeing. 7. Were sampling, data collection and analysis well described? Yes - the authors give a considerable amount of detail on the sampling, data collection and analysis methods. 8. Was there sufficient evidence to support the authors' claims? The authors provide a wealth of detail to support their position that access to social capital and networks operates differently in groups with lower and higher levels of educational attainment, with individuals who have achieved a higher level of education feeling more in control of their lives and general wellbeing. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
2009	Griffiths R; Horsfall J; Moore M; Lane D; Kroon V; Langdon R: “Building social capital with women in a socially disadvantaged community” <i>International Journal of Nursing Practice</i> 15:172-184	Paper had the potential to contribute significantly to the discussion around how social capital works, and for whom it works best. this was felt to be important for the 2014 programme, where social capital is positioned as a crucial mechanism for bringing about the health and citizenship benefits predicted in the legacy.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sample was drawn from young women living in an area of high socio-economic deprivation. No other details are given about how the sample was identified, so it is not possible to say whether or not it was representative of the women living in this area. 2. Were steps taken to eliminate, or acknowledge, bias? No steps to acknowledge or eliminate bias are described. 3. Was the research design appropriate to the chosen methods? The cross-sectional survey design was appropriate to the statistical methods used to analyse the results. 4. Was there sufficient breadth / depth of contextual description? Very little contextual description was given, either about the deprived area where respondents lived, or the capacity building programme the study was being used to evaluate. 5. Were the programme mechanisms explicitly unpacked? No - programme mechanisms were not identified. 6. Was the underlying programme theory identified? No underlying programme theory was identified. 7. Were sampling, data collection and analysis well described? Sampling and data collection were minimally described, although analysis methods were documented in some detail. 8. Was there sufficient evidence to support the authors’ claims? The authors provide a reasonable amount of evidence to support their findings that an area of high SE deprivation had quite high levels of social cohesion. However, they do not acknowledge that this was the case for female residents of a similar age group who may have had a variety of lifestyle factors in common (eg children the same age) and as such can’t really be generalised to the area as a whole. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not considered.
2009	Antoni G D: “Intrinsic vs extrinsic motivations to volunteer and	Paper had the potential to contribute significantly to the discussion around how social capital works, and whether it is more or less important than the	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sample drawn from a database of individuals who volunteered for different organisations operating in one particular district of Italy. No details are given of factors such as gender, age, SE status, ethnicity etc, so it is not possible to decide whether the sample is representative of all volunteers in this area or not.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	social capital formation” <i>Kyklos</i> 62;3:359-370	personal motivations of individual volunteers. This was felt to be important for the 2014 programme, where social capital is positioned as a crucial mechanism for bringing about the health and citizenship benefits predicted in the legacy.	<ol style="list-style-type: none"> 2. Were steps taken to eliminate, or acknowledge, bias? No steps to address (possible or actual) sources of bias are described. 3. Was the research design appropriate to the chosen methods? The statistical analysis methods were appropriate to the interrogation of the database which the author describes. 4. Was there sufficient breadth / depth of contextual description? The author provides no contextual description of either the types of voluntary organisation, the types of people who volunteered, or the way in which voluntary activity is perceived in Italy. 5. Were the programme mechanisms explicitly unpacked? Not as such, although the author investigates whether extrinsic or intrinsic motivations are more prevalent among individuals who volunteer. 6. Was the underlying programme theory identified? No specific theory of volunteering is identified. 7. Were sampling, data collection and analysis well described? Sampling and data collection are reasonably, if concisely, described; analysis methods are described in more detail. 8. Was there sufficient evidence to support the author’s claims? The author provides a considerable amount of evidence to support his position that the opportunity to create social capital is no more important to volunteers than the opportunity to put into practice their own moral values. 9. Was the (potential or actual) influence of external events accounted for? Yes - one of the reasons behind the study was to investigate whether motivations external to the volunteer lifeworld had any particular influence on the decision to volunteer.
2009	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;	In common with other authors [REFS], this study has the potential to contribute evidence to the discussion of the relationships older adults might have with volunteer and other civic engagement programmes. This is of interest to the 2014 programme	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? The authors describe a three tier sampling strategy - for selecting areas in which to base the study, schools in which to take the study forward and volunteer participants to staff the intervention which the study seeks to evaluate. A control group was also recruited. The authors describe efforts to cast their net widely in order to have as representative a sample as possible. 2. Were steps taken to eliminate, or acknowledge, bias? No specific biases are explicitly acknowledged, but the authors describe a control group who took part in

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	Shinkai S: “REPRINTS: effects of an intergenerational health promotion programme for older adults in Japan” <i>Journal of Intergenerational Relationships</i> 7;1:17-39	because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which does not make any specific provision for older adults who might be interested in participating.	<p>normal social activities (other than intergenerational programmes); it is assumed that this was done to check whether any benefits accrued could be attributed to the programme under study rather than any other characteristics of the participants and / or their lifeworlds.</p> <ol style="list-style-type: none"> 3. Was the research design appropriate to the chosen methods? The research design is appropriate to the statistical analysis tools used to interrogate the data. 4. Was there sufficient breadth / depth of contextual description? The authors provide a detailed contextual description of the programme they were implementing, and give some contextual background on the Japanese education system. 5. Were the programme mechanisms explicitly identified? Mechanisms are not explicitly identified, but the authors do imply that the programme is designed to test whether involvement in an intergenerational volunteer programme will promote greater understanding between the generations, and promote better social contacts and better mental and physical health among older volunteers. 6. Was the underlying programme theory identified? The underlying programme theory is not made explicit, but it is implied that the programme is built around the theory that an intergenerational volunteer programme will accrue specific and particular benefits for older volunteers. 7. Were sampling, data collection and analysis well described? The sampling, data collection and analysis methods are all clearly described. 8. Was there sufficient evidence to support the authors’ claims? The authors provide a great deal of evidence from their findings, and from the wider literature, to support their claims, for example: “<i>Previous studies demonstrated that reading aloud was found to improve frontal function in people with dementia (Kawashima et al., 2005) and that discussion based therapy for cognitive stimulation was found to maintain episodic memory or executive function of people with Mild Cognitive Impairment (MCI) (Yatomi, 2004). These effects were short term...Thus, although this study, whose subjects were healthy older persons, might need long-term follow up, the scores of a few variables in the intensive volunteers group remained significantly higher than those of the control group during the 21 months</i>” (p33). 9. Was the (actual or potential) influence of external events accounted for? The authors do not consider the (actual or potential) influence of external events, but

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			this would not necessarily be expected in a statistical analysis.
2009	Kay T; Bradbury S: "Youth sport volunteering: developing social capital?" <i>Sport, Education and Society</i> 14;1:121-140	This paper looks explicitly at the question of whether volunteering in the context of sports participation has the potential to influence the development of better social capital and improved life and employability skills among younger volunteers. This was directly relevant to the 2014 programme, which is promoted as having the potential to have precisely these effects.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Study is a secondary analysis of primary data collected via the Step Into Sport (SIS) Volunteer Training Programme. The original programme was implemented via PE departments in schools nationwide (UK) and aimed at 14-19 year olds. The authors imply that the data can be taken to be reasonably representative of young people in this age group (although perhaps only those who have an existing interest in sports participation?). 2. Were steps taken to eliminate, or acknowledge, bias? No sources of bias in the original dataset are acknowledged or addressed in this study. 3. Was the research design appropriate to the chosen method? Whether the analysis methods are appropriate to the research design is difficult to define. The authors describe the study as "<i>report[ing] on qualitative research conducted during 2004-06 into the Community Volunteers (CVs) element of the programme</i>" (p126) but they do not explicitly define the methods which will be used to do this. 4. Was there sufficient breadth / depth of contextual description? There is a reasonable breadth and depth of detail provided about the original programme and about the Community Volunteers element of the programme. 5. Were the programme mechanisms explicitly unpacked? Mechanisms of interest (although not labelled as such) are defined as social capital, social participation and active citizenship. 6. Was the underlying programme theory identified? The underlying programme theory is not explicitly identified, but the authors do discuss at length the fact that both sport and volunteering have been identified as having the potential to increase social capital and participatory citizenship. 7. Were sampling, data collection and analysis well described? Sampling and data collection methods are clearly described, but as indicated in point 3, the analysis methods are harder to define. 8. Was there sufficient evidence to support the authors' claims? The authors provide extensive evidence from their analysis to support their findings, for example: "<i>All groups of stakeholders reported that the placement experience improved personal and professional development skills amongst volunteers, including increased confidence, motivation, communication and organisational skills</i>" (p132).

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>9. Was the (actual or potential) influence of external events accounted for? The authors do not explicitly consider the (actual or potential) impacts of external events (for example, in participants' lifeworlds).</p>
2010	<p>Donovan T; Bowler S; Hanneman R; Karp J: "Social groups, sport and political engagement in New Zealand" <i>Australian Journal of Political Science</i> 39;2:405-419</p>	<p>This paper looks explicitly at the question of whether volunteering in the context of sports participation has the potential to influence political engagement among younger volunteers. This was directly relevant to the 2014 programme as it is likely that more politically aware and involved young people could have interesting repercussions for the political landscape in both Glasgow and Scotland.</p>	<p>1. Was the sample representative? Of whom / what? No specific sample or sampling strategy is delineated. The authors derive their sample from responses to the New Zealand Election Study, but this is not stated explicitly only mentioned "in passing". No details of the NZES are given so it is impossible to make any comment on the representativeness, or otherwise, of the sample.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? No steps to address (potential) bias are described.</p> <p>3. Was the research design appropriate to the chosen methods? The research design is not detailed; it is not possible to make a judgement on whether the mixed methods analysis is appropriate or not.</p> <p>4. Was there sufficient breadth / depth of contextual description? No - the authors purport to investigate the relationship between sports volunteering and political engagement in New Zealand, but provide almost no detail of the contexts in which either activity occurs.</p> <p>5. Were the programme mechanisms explicitly unpacked? No programme mechanisms were explicitly identified.</p> <p>6. Was the underlying programme theory identified? Although not explicitly identified as such, the authors investigate the theory that sports volunteering has a direct causal relationship with political engagement among young people.</p> <p>7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are poorly described.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors appear to provide evidence from their findings to support their position, but the it is difficult to trust the findings as there has been no explanation of how the study was designed and conducted, how the sample was derived, what the context of the study was and whether there were any biases operating which might have influenced the results.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.</p>
2010	Iwase T; Suzuki E;	Paper had the potential to	<p>1. Was the sample representative? Of whom / what? Data derived from Okayama</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	Fujiwara T; Takao S; Doi H; Kawachi I: "Do bonding and bridging social capital have differential effects on self-rated health? A community based study in Japan" <i>Journal of Epidemiology and Community Health</i> 66:557-562	contribute significantly to the discussion around how social capital works, and whether different types of social capital can have different effects on health. This was felt to be important for the 2014 programme, where social capital is positioned as a crucial mechanism for bringing about the health and citizenship benefits predicted in the legacy.	<p>Social Capital Study, which used random sampling to target 4000 adults in Okayama Japan to receive a postal survey for completion. Sample felt to be reasonably representative of adults in the city aged 20 - 80 years.</p> <ol style="list-style-type: none"> 2. Were steps taken to eliminate, or acknowledge, bias? No steps to address bias are described. 3. Was the research design appropriate to the chosen methods? The statistical analysis methods are appropriate to the survey-based research design. 4. Was there sufficient breadth / depth of contextual description? Very little contextual description is provide, but this would not necessarily be expected in a statistical analysis. 5. Were the programme mechanisms explicitly unpacked? Although not explicitly labelled as such, the authors investigate the social capital mechanism to try ti understand whether different types of social capital have different effects on health. 6. Was the underlying programme theory identified? The working theory which the authors interrogate is that bonding and bridging social capital will have different effects on self-reported health. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis are reasonably well, if concisely, described. 8. Was there sufficient evidence to support the authors' claims? The authors provide a reasonable amount of evidence to support their finding that bonding social capital does not have a consistently beneficial effect on health, and also noted that the operation of social capital of all types is highly context dependent. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.
2010	Boyle P A; Buchman A S; Bennett D A: "Purpose in life is associated with a reduced risk of incident disability among community	In the same way that a number of papers have set out to investigate the link between social capital and good health in older adults, this survey sets out to test whether having a sense of purpose in life has a similar link. This is important for the current review,	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sampling is only briefly described - participants were older adults without dementia who were resident in sheltered housing in the Chicago area. 2. Were steps taken to eliminate, or acknowledge, bias? No steps to deal with potential sources of bias are described. 3. Was the research design appropriate to the chosen methods? The research design is not explicitly stated, so it was not possible to make a judgement on whether the statistical methods chosen to analyse the data were appropriate.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	dwelling older persons” <i>American Journal of Geriatric Psychiatry</i> 18:12	as bequeathing a sense of purpose in life and providing a valued social role are closely related. This might have important implications for the 2014 programme, if it can be demonstrated that this type of mechanism can have a tangible effect on reducing accident-led disabilities in older people.	<ol style="list-style-type: none"> 4. Was there sufficient breadth / depth of contextual description? The authors do not provide much in the way of contextual description, but this is not unexpected in a statistical analysis. 5. Were the programme mechanisms explicitly unpacked? Although not explicitly labelled as such, the authors treat the concept of purpose in life very much as a mechanism, suggesting that it can have a positive influence on long term health in older adults. 6. Was the underlying programme theory identified? The authors set out to test the theory that having a sense of purpose in life is associated with a reduced level of incident disability. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis are reasonably well described, the lack of clarity around whether bias was addressed notwithstanding. 8. Was there sufficient evidence to support the authors’ claims? The authors present a reasonable amount of evidence to support their theory. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.
2010	Hong S I; Morrow-Howell N: “Health outcomes of Experience Corps®: a high commitment volunteer programme” <i>Social Science & Medicine</i> 71(2010) 414-420	Paper considers how volunteering operates to deliver better health outcomes among a specific population sub-group. This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which does not make any specific provision for older adults who might be interested in participating.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Study is based on the Experience Corps programme; the sample for this paper includes only individuals who satisfied the eligibility criteria and joined the programme for the first time at the start of the 2006/07 school year. 2. Were steps taken to eliminate, or acknowledge, bias? No potential sources of bias are identified or addressed by the authors, although these have been dealt with in previous papers on the Experience Corps programme so this might represent the reaching of a consensus that biases have already been acknowledged and addressed? 3. Was the research design appropriate to the chosen method? The research design is appropriate to the statistical analysis techniques employed; as previously noted in earlier papers on the Experience Corps project, the evaluation was designed in tandem with the study to ensure appropriateness of analysis methods. 4. Was there sufficient breadth / depth of contextual description? There is a reasonable amount of context provided for readers not already familiar with the EC programme.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>5. Were the programme mechanisms explicitly identified? No specific programme mechanisms are identified or explored, although this would not necessarily be expected in a statistical analysis. The purpose of the study is to contribute to the growing body of evidence about the potential health benefits for older volunteers participating in the EC programme, rather than to investigate how and why this happens, and to whom.</p> <p>6. Was the underlying programme theory identified? The underlying programme theory - that participation in the programme will accrue health benefits for older volunteers is clearly articulated, although not labelled as an underlying theory.</p> <p>7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are all clearly described.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors provide a wealth of evidence from their own, and previous, studies on the EC programme to back up their findings. For example: <i>"The study findings demonstrate that high commitment volunteering produces enhanced health outcomes for older adults. This work is consistent with previous research on the positive effects of volunteering"</i> (p418).</p> <p>9. Was the (actual or potential) influence of external events accounted for? The authors do not account for the (actual or potential) influence of external events, but this would not necessarily be expected in a statistical analysis.</p>
2010	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" <i>Journal of Epidemiology and Community Health</i>	Paper had important implications for the current review, as the 2014 programme is predicated on the potential for young adults taking part to realise health benefits in addition to other social and employability skills.	<p>1. Was the sample representative? Of whom / what? Sample is derived from a WHO study of health behaviours in school children, an international study with 41 participant countries. Sampling unit was the school, with questionnaires being given out to pupils at age 11, 13 and 15. However, only 6 countries included the package of questions related to club participation, and only to 15 yo pupils; therefore, the sample can only be said to be representative of 15yo internationally rather than all school age children.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? No steps to address potential sources of bias are described.</p> <p>3. Was the research design appropriate to the chosen methods? The statistical methods used to analyse the results were appropriate to the survey based research design.</p> <p>4. Was there sufficient breadth / depth of contextual description? The authors</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	64:89-95		<p>provide very little in the way of contextual description, although this is not unexpected in a statistical analysis.</p> <ol style="list-style-type: none"> Were the programme mechanisms explicitly unpacked? No mechanisms were explicitly identified or investigated. Was the underlying programme theory identified? Although not explicitly identified as such, the authors interrogate the theory that participating in clubs has a beneficial effect on the health of adolescents. Were sampling, data collection and analysis well described? Sampling and data collection were briefly described; analysis methods were covered in more detail. Was there sufficient evidence to support the authors' claims? The authors provide a reasonable amount of evidence to support their position that beneficial health effects were associated with participation in clubs. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.
2011	McNamara T K; Gonzales E: "Volunteer transitions among older adults: the role of human, social and cultural capital in later life" <i>The Journals of Gerontology Series :: Psychological Sciences and Social Sciences</i> 66(4):490-501	Paper had the potential to contribute a great deal to the discussion around the way in which social capital operates in relation to older volunteers. This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which does not make any specific provision for older adults who might be interested in participating.	<ol style="list-style-type: none"> Was the sample representative? Of whom / what? Sample drawn from subsample of Health and Retirement survey (HRS). Original study taken to be representative of US adults aged 50 and over. Sample was taken from sub-study as main study did not include components on volunteer activity in its later waves. Were steps taken to eliminate, or acknowledge, bias? No steps to address potential sources of bias are described, although the authors do note a number of limitations of the study in the discussion section. Was the research design appropriate to the chosen methods? Research design and methods are not made explicit, but the research is presented as a statistical analysis which is an appropriate method for the interrogation of survey data. Was there sufficient breadth / depth of contextual description? The authors provide a reasonable level of contextual description in terms of describing the background against which many older adults have been shown (in the literature) to volunteer. Were the programme mechanisms explicitly unpacked? Although not explicitly labelled as mechanisms, the authors investigate the ways in which social, human and cultural capitals operate within volunteer programmes to influence engagement with the volunteer process, number of hours volunteered and reasons for giving up volunteer activity.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>6. Was the underlying programme theory identified? The authors identify seven hypotheses based on the potential operation of the various types of capital, which operate as working theories, although they are not labelled as such.</p> <p>7. Were sampling, data collection and analysis well described? Sampling and data collection are reasonably well described, with the analysis being recorded in more detail.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors do provide a reasonable body of evidence to support their position that "...<i>this study showed that human, social and cultural capital in later life shed light on the complex dynamics of volunteer transitions</i>" (p499).</p> <p>9. Was the (potential or actual) influence of external events accounted for? The influence of external events is not described, although this is not unexpected in a statistical analysis of survey data.</p>
2011	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 health" <i>BMC Pubic Health</i> 11:630	Paper had the potential to contribute a great deal to the review, which is framed as an investigation into how the mechanisms of the 2014 volunteer programme have the potential to influence social determinants of health, and in particular health inequalities.	<p>1. Was the sample representative? Of whom / what? Random sampling of households undertaken for each Australian state; states with larger populations had more surveys sent out. Data source was electronic white pages, "<i>which contains postal addresses for all households with a telephone listed</i>" (p3). No other details are given about how the sample was derived (for example, there is no indication of whether the households identified were in deprived or more affluent areas).</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? Other than noting that households without a telephone were not included, which the authors felt to be a small limitation, outweighed by the fact that the data source was the only comprehensive, publicly available way of obtaining contact data. No information is given about the potential bias arising from, for example, a prevalence of particular socio-economic groups, gender, ethnicity etc.</p> <p>3. Was the research design appropriate to the chosen methods? The statistical analysis methods described were appropriate to the interrogation of the survey data collected.</p> <p>4. Was there sufficient breadth / depth of contextual description? The authors give a reasonable amount of contextual information about the current background to research on how best to tackle social determinants of health.</p> <p>5. Were the programme mechanisms explicitly unpacked? The authors identify socio-economic security, social cohesion, social inclusion and social empowerment</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>as mechanisms which can influence the quality of social relationships and interactions (although these factors are not explicitly labelled as mechanisms).</p> <p>6. Was the underlying programme theory identified? No specific underlying theory is identified; the authors focus on the aspects of social quality which they feel are likely to benefit most from further research.</p> <p>7. Were sampling, data collection and analysis well described? Sampling and data collection are very briefly described, with the analysis methods being recorded in more detail.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors provide a reasonable amount of evidence to support their position that "...there were systematic differences in social quality between population groups. This was most pronounced for people on lower incomes (less than \$45000) who were more likely to have spent their savings...On all four domains of social quality, people with lower incomes were disadvantaged and may therefore be seen as having lower social quality than people on higher incomes" (p7).</p> <p>9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.</p>
2011	McDougle L M; Greenspan I; Handy F: "Generation green: understanding the motivations and mechanisms influencing young adults' environmental volunteering" <i>International Journal of Voluntary and Non-profit Marketing</i> 16:325-341	As the 2014 volunteer programme is largely focused on the potential benefits to young adults (in terms of employability skills and job opportunities which they can expect to gain), this paper had the potential to contribute a great deal to the discussion around what sorts of young people decide to volunteer and why.	<p>1. Was the sample representative? Of whom / what? Sample is drawn from survey of college students at a Canadian university. Authors acknowledge early in the study that this is a convenience sample and not necessarily representative of all young adults who engage in environmental volunteering; however, this acknowledgement is not carried through to the discussion of results, which are taken to be representative.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? In terms of bias, the authors note that the fact that the study was about environmental volunteering may have led to only students who were interested in this activity responding to the survey. The authors also note that non-white, politically liberal females are overly represented in their sample.</p> <p>3. Was the research design appropriate to the chosen method? The project was designed as an online anonymous survey, which is appropriately analysed using statistical methods.</p> <p>4. Was there sufficient breadth / depth of contextual description? There is no focus on contextual description, but this would not necessarily be expected in a</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>statistical analysis.</p> <p>5. Were the programme mechanisms explicitly unpacked? Mechanisms of environmental volunteering are identified, but not explicitly labelled as such. For example, the authors find that “...<i>young adults who engaged in a number of different daily pro-environmental behaviors were more likely than those who did not engage in such behaviors to volunteer for environmental organisations... indeed, young adults who engage in one form of pro-environmental behavior are more likely to engage in other forms of pro-environmental behavior as well...thus it is possible that, as Jennings (2002) has suggested volunteering may cultivate a sense of civic identity, and young adults may tend to act in ways that reinforce that identity</i>” (p336). This indicates that a primary mechanism of environmental volunteering is its potential to influence pro-environmental and other civically minded behaviours in young adults (with the caveat, not acknowledged by the authors, that this finding cannot be generalised any more widely than the population of students in one particular university).</p> <p>6. Was the underlying programme theory identified? No underlying theory of environmental volunteering, nor of civic behaviours, is identified explicitly by the authors.</p> <p>7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are all clearly described.</p> <p>8. Was there sufficient evidence to support the authors’ claims? The authors do not present a great deal of evidence to support their findings; they acknowledge that it is possible that their findings were undermined by the fact that, potentially, only students who were interested in environmental volunteering would have been motivated to complete the survey.</p> <p>9. Was the (actual or potential) influence of external events accounted for? There is some consideration of the influence of external factors - for example, whether (in their daily lifeworlds) survey respondents were affected by environmental considerations or felt that such considerations modified their behaviours.</p>
2011	Morrow-Howell N; Hong S-l; McCrary S; Blinne W: “Changes in	In common with previous papers on the Experience Corps programme, paper considers how volunteering operates to deliver better health	<p>1. Was the sample representative? Of whom / what? Study is based on the Experience Corps programme; the sample for this paper includes only individuals who satisfied the eligibility criteria and joined the programme for the first time at the start of the 2006/07 school year.</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	activity among older volunteers” <i>Research on Aging</i> 34:174	outcomes among a specific population sub-group. This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which does not make any specific provision for older adults who might be interested in participating.	<ol style="list-style-type: none"> 2. Were steps taken to eliminate, or acknowledge, bias? No potential sources of bias are identified or addressed by the authors, although these have been dealt with in previous papers on the Experience Corps programme so this might represent the reaching of a consensus that biases have already been acknowledged and addressed? 3. Was the research design appropriate to the chosen methods? The research design is appropriate to the statistical analysis techniques employed; as previously noted in earlier papers on the Experience Corps project, the evaluation was designed in tandem with the study to ensure appropriateness of analysis methods. 4. Was there sufficient breadth / depth of contextual description? There is a reasonable amount of context provided for readers not already familiar with the EC programme. 5. Were the programme mechanisms explicitly unpacked? Although not explicitly labelled as such, the principal programme mechanism which is identified is the potential of participation in the EC programme to have a positive effect on activity levels among older adults. 6. Was the underlying programme theory identified? Although not explicitly labelled as such, the underlying theory which this paper interrogates is that participation in the EC programme will maintain and / or increase activity levels in older adults who participate in the programme. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are all clearly described. 8. Was there sufficient evidence to support the authors’ claims? The authors provide a wide range of evidence to support their findings. For example: “<i>Table 5 indicates that 23% of the sample moved from low-activity at pre-test to high activity at post-test (n=41). A majority (61%, n=109) stayed in the high activity class after participating in the EC program. Only 5 persons (3%) moved from the high-activity class at pre-test into the low activity class at post-test</i>” (p189). 9. Was the (actual or potential) influence of external events accounted for? There is some consideration given to the operation of external factors - for example, the authors acknowledge in their findings the potential influence of participants still being in employment as opposed to retirement, and the potential influence of having been widowed.

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
2011	Mueller M K; Phelps E; Bowers E P; Agans J P; Urban J B; Lerner R M: “Youth development program participation and intentional self-regulation skills: contextual and individual bases of pathways to positive youth development” <i>Journal of Adolescence</i> 34 (2011) 1115-1125	In terms of the 2014 volunteer programme’s focus on youth and employability skills, this paper had the potential to make a significant contribution. The authors seek to establish whether a relationship exists between participation in social programmes (using youth development as an example) and better behavioural and life choices, and social integration.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Sample drawn from a subset of the 4-H Study of Positive Youth Development (in the US) - a national, longitudinal study. Sample is taken to be representative of American adolescents and it is noted that the authors break the sample down to indicate the breakdown of gender and ethnicity within the sample. 2. Were steps taken to eliminate, or acknowledge, bias? No steps to address potential biases were indicated by the authors, but they do state that the full study methodology has been delineated elsewhere. 3. Was the research design appropriate to the chosen methods? The statistical analysis methods were appropriate to the interrogation of survey data. 4. Was there sufficient breadth / depth of contextual description? The authors provide a reasonable amount of description of the utility of youth development programmes in the context of improving the lives of adolescents. 5. Were the programme mechanisms explicitly unpacked? No specific mechanisms of youth development programmes are identified; authors are explicitly attempting to show whether there is a relationship between youth development programmes and positive developmental outcomes in adolescents, and not the specific ways in which such a relationship might operate. 6. Was the underlying programme theory identified? Although not explicitly identified as a theory of youth development programmes, the authors adopt the working hypothesis that participation in youth development programmes will result in more positive development in terms of attitudes to life, contributions made in school and social integration. 7. Were sampling, data collection and analysis well described? Allowing for the note that the full study methodology has been described elsewhere, sampling, data collection and analysis are all well described. 8. Was there sufficient evidence to support the authors’ claims? The authors provide a reasonable amount of evidence to support their working hypothesis. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.
2011	Cattan M; Hogg E; Hardill I: “Improving the	Paper considers how volunteering operates to deliver better health outcomes among a specific	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? The sample was drawn from a literature search for research articles published between 2005-2011 which investigated the benefits of formal volunteering for older people with regard to

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	quality of life of aging populations: what can volunteering do?" <i>Maturitas</i> 70 (2011) 328-332	population sub-group. This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which does not make any specific provision for older adults who might be interested in participating.	<p>their quality of life (p329).</p> <ol style="list-style-type: none"> 2. Were steps taken to eliminate, or acknowledge, bias? No specific sources of bias are identified by the authors. 3. Was the research design appropriate to the chosen method? The synthesis method is not explicitly stated, but its qualitative underpinnings are appropriate to the research design. 4. Was there sufficient breadth / depth of contextual description? As this is a literature review, there is no particular focus on contextual description. 5. Were the programme mechanisms explicitly unpacked? Although not explicitly identified as such, mechanisms identified included social networks, social productivity and effects on health status (both self-reported and independently measured). 6. Was the underlying programme theory identified? The underlying programme theory being interrogated is not explicitly acknowledged or labelled as such, but the authors seek to confirm or refute the idea that involvement in volunteer programmes has a significant beneficial effect on QoL for older volunteers. 7. Were sampling, data collection and analysis well described? The sampling and data collection methods are clearly described; the analysis method is not explicitly defined. 8. Was there sufficient evidence to support the authors' claims? The authors provide a wide range of evidence from the literature to support their findings, and acknowledge that as this is only a small study it cannot be taken to be a definitive answer to the question of whether QoL is unequivocally improved for older people by participating in volunteer programmes. 9. Was the (actual or potential) influence of external events accounted for? The influence of external events is not considered, although this would not necessarily be expected in the context of a literature review.
2011	McBride A M; Johnson E; Olate R; O'Hara K: "Youth volunteer service as positive youth development in	In terms of the 2014 volunteer programme's focus on youth and employability skills, this paper had the potential to make a significant contribution. The authors seek to establish whether a relationship	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Data collected from results of a cross-sectional survey, implemented across twelve countries in Latin America and the Caribbean (LAC). Probability sampling used to select the countries, then largest city in the country targeted as the research site. Survey distributed to participants in youth development volunteer programmes. Sample can be taken to be reasonably representative of young people in this area who participate in youth

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	Latin America and the Caribbean” <i>Children and Youth Services Review</i> 33 (2011) 34-41	exists between participation in social programmes (using youth development as an example) and better behavioural and life choices, and social integration. The study is situated in a very specific geographical setting, which is contrasted with findings from researchers looking at youth development in other areas. This has implications for the 2014 programme, should it become apparent that the outcomes of youth volunteering are both place and context dependent.	<p>development volunteer programmes.</p> <ol style="list-style-type: none"> 2. Were steps taken to eliminate, or acknowledge, bias? The authors identify two potential sources of bias (although not explicitly). The survey, which was created in English, was translated into Spanish and Portuguese to eliminate any linguistic bias where respondents’ first language was not English, and the research team ensured that all requests for participation were emailed at the same time to try to eliminate any potential bias arising from participants who had already completed the survey influencing their peers. 3. Was the research design appropriate to the chosen method? The research design is appropriate to the statistical analysis methods used to interrogate the data. 4. Was there sufficient breadth / depth of contextual description? The authors give a reasonable level of background contextual detail about youth development volunteer programmes in general, and in this area in particular. They do not provide contextual detail about the study participants’ lifeworlds or circumstances, but this would not necessarily be expected in a statistical analysis. 5. Was the programme mechanisms explicitly unpacked? Mechanisms are identified (although not labelled as such); the authors consider the operation of organisational features, volunteer activities and roles, and any defining characteristics of volunteers. 6. Was the underlying programme theory identified? Programme theory is identified (although not explicitly labelled as such) as the ability of youth development volunteer programmes to socialise young people and channel them into productive activities. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are all well described. 8. Was there sufficient evidence to support the authors’ claims? The authors provide a considerable amount of evidence to support their claims (although it should be noted that this is quite a short paper). For example: “<i>The data convey that there are incentives and supports for volunteer performance. There is also a general trend among these data, which suggests that higher educated though perhaps under-employed youth are volunteering in these programmes</i>” (p39). 9. Was the (actual or potential) influence of external events accounted for? The authors account for the influence of external factors such as geographical location,

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			and lifeworld factors such as gender, income level and ethnic origin.
2011	Afridi A: <i>Social networks: their role in addressing poverty</i> (summary report) Joseph Rowntree Foundation, available at http://www.jrf.org.uk		<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? No specific sample is identified; paper takes the form of a literature review, although this is not made explicit and there is no data provided on how papers to review were selected. 2. Were steps taken to eliminate, or acknowledge, bias? N/A: see above. 3. Was the research design appropriate to the chosen methods? Neither the research design, nor the methods used to execute it, are described. 4. Was there sufficient breadth / depth of contextual description? The author provides a wealth of description of the contexts in which social capital arises and the contexts in which social capital and social networks are most commonly utilised. 5. Were the programme mechanisms explicitly unpacked? Although not explicitly identified as such, both social capital and social networks are treated as mechanisms by the author, who seeks to explore how they operate for different population sub groups and individuals to influence poverty. 6. Was the underlying programme theory identified? Although not explicitly described as such, the author seeks to test the working theory that the beneficial effects of social capital and social networks might have been overstated. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are not described. 8. Was there sufficient evidence to support the author's claims? The author provides a reasonable amount of evidence to support his position that, while social networks / capital can contribute to positive personal and health outcomes, there is little or no evidence to suggest that this has any knock-on effect on lifting people out of poverty or reducing inequalities. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events is not accounted for.
2011	Martinson M; Halpern J: "Ethical implications of the promotion of elder volunteerism: a critical	Paper had the potential to make a significant contribution to the discussion around the reasons for promoting volunteerism among older adults. Authors focus on the ethical implications, and whether	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? No specific sample is identified: paper is presented as a review of the literature, aimed at identifying "...the values and ethical standpoints embedded in the discourse promoting volunteerism and productive ageing..." (p427). 2. Were steps taken to eliminate, or acknowledge, bias? N/A: see above. 3. Was the research design appropriate to the chosen methods? Neither research

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
	perspective” <i>Journal of Aging Studies</i> 25 (2011) 427-435	the championing of volunteerism for this age group frames the activity in terms of value judgements about the types of people who volunteer.	<p>design nor methods are explicitly described, but a review of the literature is an appropriate way to investigate the topic.</p> <ol style="list-style-type: none"> 4. Was there sufficient breadth / depth of contextual description? The authors provide a wealth of contextual description relating to the ways in which volunteerism operates (and is perceived to operate) among older adults. 5. Were the programme mechanisms explicitly unpacked? No programme mechanisms are explicitly described. 6. Was the underlying programme theory identified? No specific theory of volunteering is advanced, but this is not the purpose of the paper. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are not described. 8. Was there sufficient evidence to support the authors’ claims? The authors provide a considerable amount of evidence from the literature to support their position that there might be different / better ways of framing volunteer activity among older adults so that value judgements about individuals who do and do not volunteer are not foregrounded in discourses about the activity. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.
2012	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).	Paper had the potential to contribute a great deal to the discussion around the way in which social capital operates in relation to older volunteers. This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which does not make any specific provision for older adults who might be interested in participating.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? Random sampling strategy employed to identify more than 20000 households spread across 22 districts of Tehran. Purpose of this was to ensure sample was as representative as possible of the general population. 2. Were steps taken to eliminate, or acknowledge, bias? The authors describe methods used to address potential age and gender biases, and assert that this helped them to avoid any social class correlations, although they do not describe why this should be the case. 3. Was the research design appropriate to the chosen methods? The survey based research design was appropriate to the statistical analysis methods used to interrogate the data. 4. Was there sufficient breadth / depth of contextual description? Very little contextual description was provided, but this was not unexpected as it is a statistical rather than qualitative analysis. 5. Were the programme mechanisms explicitly unpacked? No mechanisms were

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>unpacked; the purpose of the study was to ascertain whether health was determined by the relationship between social capital and a range of other socio-demographic factors.</p> <ol style="list-style-type: none"> 6. Was the underlying programme theory identified? Although not explicitly identified as such, the authors use as a working hypothesis the theory that health is influenced not by social capital alone, but by the way it operates against specific socio-economic factors in individuals' lives. 7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis were all well described. 8. Was there sufficient evidence to support the authors' claims? The authors provide a wealth of evidence to support their claims about the relationship between social capital and factors such as age, gender, social class, income level etc. 9. Was the (potential or actual) influence of external events accounted for? The influence of external events was not discussed.
2012	Minnaert L: "An Olympic legacy for all? The non-infrastructure outcomes of the Olympic Games for socially excluded groups (Atlanta 1996 - Beijing 2008)" <i>Tourism Management</i> 33 (2012) 631-370	Paper had the potential to contribute by providing a 'like for like' comparison in terms of the context of the volunteer programme. The authors argue that there is very little evidence to support the position that legacy programmes accrue benefits for the most disadvantaged in host communities. This had obvious implications for the 2014 programme, which has been promoted as a means of impacting health outcomes and health inequalities in the most disadvantaged parts of Glasgow.	<ol style="list-style-type: none"> 1. Was the sample representative? Of whom / what? No specific sample is identified; study is framed and presented as a review of the literature. 2. Were steps taken to eliminate, or acknowledge, bias? N/A: see above. 3. Was the research design appropriate to the chosen methods? While research design and methods are not explicitly described, a review of the literature is an appropriate way to investigate the topic. 4. Was there sufficient breadth / depth of contextual description? The authors illustrate a number of contexts in which sporting event legacy programmes have arisen, and the questions which surround the benefits these programmes bring to population groups living in different circumstances and contexts. 5. Were the programme mechanisms explicitly unpacked? A number of mechanisms of legacy programmes are suggested, which are held to accrue specific benefits for disadvantaged communities and individuals, despite a lack of evidence to support these assertions. 6. Was the underlying programme theory identified? Although inferred rather than explicitly identified, the authors interrogate the theory that legacy programmes from major sporting events may not bring about the non-infrastructure benefits for host populations which are often used to justify bidding for the events in the first

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>place.</p> <p>7. Were sampling, data collection and analysis well described? The specific methods used for sampling, data collection and analysis are not described, although the literature is covered in some detail.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors demonstrate sufficient lack of evidence to support their position (that is, they illustrate that the evidence to support legacy benefits is in short supply).</p> <p>9. Was the (potential or actual) influence of external events accounted for? The influence of external events is not discussed.</p>
2013	<p>Fried L P; Carlson M C; McGill S; Seeman T; Xue Q- L; Frick K; Tan E; Tanner E K; Barron J; Frangakis C; Piferi R; Martinez I; Gruenewald T; Martin B K; Berry- Vaughn L; Stewart J; Dickersin K; Willging P R; Rebok G W: "Experience Corps: a dual trial to promote the health of older adults and childrens' academic success" <i>Contemporary Clinical Trials</i> 36 (2013) 1-13</p>	<p>In common with previous papers on the Experience Corps programme, paper considers how volunteering operates to deliver better health outcomes among a specific population sub-group. This is of interest to the 2014 programme because, like previous studies, it highlights the potential benefits for older, rather than younger, adults. This may have implications for the 2014 programme which does not make any specific provision for older adults who might be interested in participating.</p>	<p>1. Was the sample representative? Of whom / what? Study is based on the Experience Corps programme; the sample for this paper includes only individuals who satisfied the eligibility criteria and joined the programme for the first time at the start of the 2006/07 school year.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? No potential sources of bias are identified or addressed by the authors, although these have been dealt with in previous papers on the Experience Corps programme so this might represent the reaching of a consensus that biases have already been acknowledged and addressed?</p> <p>3. Was the research design appropriate to the chosen methods? The research design is appropriate to the statistical analysis techniques employed; as previously noted in earlier papers on the Experience Corps project, the evaluation was designed in tandem with the study to ensure appropriateness of analysis methods.</p> <p>4. Was there sufficient breadth / depth of contextual description? There is a reasonable amount of context provided for readers not already familiar with the EC programme.</p> <p>5. Were the programme mechanisms explicitly unpacked? Although not explicitly labelled as such, the principal programme mechanism which is identified is the potential of participation in the EC programme to have a positive effect on activity levels among older adults.</p> <p>6. Was the underlying programme theory identified? Although not explicitly labelled as such, the underlying theory which this paper interrogates is that participation in the EC programme will maintain and / or increase activity levels in</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>older adults who participate in the programme.</p> <p>7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are all clearly described.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors provide a wide range of evidence to support their findings. For example: "<i>Table 5 indicates that 23% of the sample moved from low-activity at pre-test to high activity at post-test (n=41). A majority (61%, n=109) stayed in the high activity class after participating in the EC program. Only 5 persons (3%) moved from the high-activity class at pre-test into the low activity class at post-test</i>" (p189).</p> <p>9. Was the (actual or potential) influence of external events accounted for? There is some consideration given to the operation of external factors - for example, the authors acknowledge in their findings the potential influence of participants still being in employment as opposed to retirement, and the potential influence of having been widowed.</p>
2013	Paine A E, McKay S, Moro D: <i>Does volunteering improve employability? Evidence from the British Household Panel Survey Third Sector Research Centre</i> , available at http://www/tsrcnews.org.uk	Using data derived from the British Household Panel Survey, this study aimed to show empirically whether or not volunteering had the potential to improve employability. This was of direct relevance to the 2014 programme, given the strong focus in the legacy documents on the provision of improved employability skills for young people	<p>1. Was the sample representative? Of whom / what? Sample was derived from the British Household Panel Survey, and was taken to be representative of private households in Britain.</p> <p>2. Were steps taken to eliminate, or acknowledge, bias? No steps to address bias are described, although it was noted that factors such as ethnicity, age, gender, employment status etc formed part of the survey.</p> <p>3. Was the research design appropriate to the chosen methods? The statistical analysis methods were appropriate to the survey-led research design.</p> <p>4. Was there sufficient breadth / depth of contextual description? Yes - the authors give a detailed description of the contexts in which volunteering is situated and in which it can be perceived to provide some training in employment skills.</p> <p>5. Were the programme mechanisms explicitly unpacked? Although not labelled as a programme mechanism, the study sets out to investigate the way in which the provision of employability skills might operate in the context of volunteering for different socio-economic groups.</p> <p>6. Was the underlying programme theory identified? No underlying theory is identified at the outset of the paper; the authors set out to explore the links between volunteering and employability skills rather than to test a particular theory or theories.</p>

Appendix 3: Rigour analysis

Year	Paper	Potential contribution	Reliability of contribution
			<p>7. Were sampling, data collection and analysis well described? Sampling, data collection and analysis methods are all reasonably well described.</p> <p>8. Was there sufficient evidence to support the authors' claims? The authors advance a reasonable amount of evidence to support their claim that although volunteering can provide individuals with useful skills, this does little to help them in a saturated labour market where there are few jobs to find.</p> <p>9. Was the (potential or actual) influence of external events accounted for? The influence of the labour market (external to both volunteering as a concept and to the lifeworlds of individual volunteers) is considered.</p>