Conceptualizing the wider societal outcomes of a community health programme and developing indicators for their measurement

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Abstract

Current theories and models applied in health promotion research have tended to be deficient in accounting for the complex and increasingly fragmented policy and social contexts in which health behaviour and interventions take place. We develop a grounded theory social return on investment (SROI) methodology using a subsample of 34 stakeholders involved in a community physical activity programme. The resulting conceptual framework identifies 15 outcomes across three domains comprising social equity, education and participation, and organizational and performance. These reflect the wider complexities of the ecological context in which health behaviour takes place. The grounded theory SROI methodology provides a basis for engaging meaningfully with community stakeholders in a co-production process to identify outcomes and develop indicators to assess them.

Keywords: health promotion; social return on investment; physical activity; sport; grounded theory

Key messages

● Social return on investment analyses can be improved through the application of a standardized framework that captures the wider ecological context.

● Applying grounded theory to the SROI framework ensures the outcomes of community health programmes are grounded in the realities of people who experience and implement them.

● Stakeholder participation in the research design and process provides a means of bringing commissioners and beneficiaries closer together.

Introduction

Demonstrating impact is fundamental to determining the best way of delivering better services for less money (Nicholls et al., 2012), and cost-effectiveness assessments have been widely used as a means of understanding the effectiveness of health promotion programmes (Hagberg and Lindholm, 2006; Kaplan and Groessl, 2002; Rush et al., 2004; Sevick et al., 2007). However, applying economic evaluation tools within public health programmes is complicated by the range of individual behaviour and intervention components (Kelly et al., 2006), and current health promotion theories and models have tended to be deficient in accounting
for the wider complexities of the ecological context in which health behaviour takes place (Linke et al., 2014). In contrast, an ecological model of health focuses on multiple and overlapping determinants of physical and psychological health, and their relationship with wider social, political, personal and interpersonal, and economic factors (Nutbeam, 1998; Raphael, 2000; Stokols, 1992; WHO, 2013a). This elevates the importance of policies and regulations, values and beliefs, physical and financial resources, and individual perceptions concerning the ability to control the environment (McLeroy et al., 1988).

Social return on investment (SROI) is a government-recognized methodology that accounts for the broader concept of value, and measures change in ways that are relevant to the people or organizations that experience or contribute to it (Aeron-Thomas et al., 2004). In the UK, SROI has been largely promoted as a way of enabling social enterprises to quantify the value of impacts and translate them into monetary values in order to understand how they make a difference (Department of Health, 2010; Harlock, 2013; Nicholls et al., 2012). SROI is therefore potentially useful in developing innovative evaluation approaches that are able to accommodate the complex and increasingly fragmented policy and social contexts in which community health programmes take place. Indeed, allowing ‘programme developers to take risks in order to try new approaches and break out of existing theoretical paradigms that have not always served us well’ (Crosby and Noar, 2010: 261) might help to advance health promotion theory and practice. In this respect, the methodological development and application of SROI through its positioning within an ecological model of health presents a means of developing health promotion theory and practice by identifying and harnessing compatibilities between disciplines that have not yet been fully explored within the field of health promotion evaluation.

As an outcome-focused methodology, SROI attempts to involve stakeholders at every stage of the research process as a means of understanding the wider benefits to society of a given intervention, programme or service (Arvidson et al., 2010; Nicholls et al., 2012). This understanding is based on more than a simple economic interpretation of value, instead providing a means of exploring real-world contexts and experiences via the acquisition of qualitative data (Leck et al., 2016; Lyon and Arvidson, 2011; Westall, 2009). The methodology has been encouraged as a tool for measuring social value created through community-focused activities (Department of Health, 2010; Nicholls et al., 2012). And the increasing number and depth of linkages between social enterprises, other community organizations and local authority departments suggests SROI has the potential to demonstrate impacts of multi-agency efforts across multiple ecological contexts.

The implementation of SROI methodologies in health promotion research and evaluation has largely emerged through praxis, and, as such, there is a dearth of peer-reviewed literature on the subject (Banke-Thomas et al., 2015). This exposes the methodology to criticism, particularly within academic domains where there is little substantive evidence concerning the manner or rigour in which it is applied, which is surprising given the potential utility of SROI within this field. With an emphasis on multiple factors at multiple levels, and the purposeful input from all those who experience change (Chaudoir et al., 2013), locating SROI within an ecological model of health can encourage researchers to acquire data irrespective of the ecological level at which it occurs. This reflects the ecological model’s emphasis on multiple, overlapping and interacting influences on health (Golden and Earp, 2012; Jolley, 2014). Thinking expansively in this way emphasizes health and the complex environment in
which the causes and conditions of individual health behaviour are determined (Best et al., 2003; Commers et al., 2007; Green and Tones, 2010). In doing so, it elevates the importance not only of engaging with individuals and groups, but also of exploring the linkages between individuals and groups who affect, and are affected by, efforts to improve health.

**The Active Together programme**

The significance of local communities to the objective of increasing physical activity and sport participation has increased following the devolvement of public health priorities to local authorities (Lindsey, 2014; Mansfield et al., 2015). In this spirit, the Active Together programme aimed to encourage greater participation in sport and physical activity across all sectors of society. Based within a single county within the south-west UK, the programme provided small grants of up to approximately £5,000 (with exceptions) to a range of organizations involved in the development and delivery of local sport and physical activity projects, including community groups, sports clubs, scout and guide groups, parish and town councils, and schools. Funding was available across the financial years 2014/15 and 2015/16, with a maximum of £40,000 available across each of the local electoral divisions. The funding was intended to encourage participation by communities in a range of local projects, including community walks, alternative sport and physical activity classes, outdoor gyms and horticultural projects.

**Developing a grounded theory SROI**

This paper develops a methodology and conceptual framework through applying the principles of grounded theory to SROI as a means of conceptualizing the wider outcomes of community programmes (such as Active Together) designed to increase participation in sport and physical activity. In so doing it provides a more critical understanding on which to develop indicators and assessments of their value. The grounded theory SROI described here (see Figure 1) outlines a series of steps in which the principles of SROI and grounded theory are combined in a mutually reinforcing cycle to ensure a logical and rigorous research process. The methodology is located within a pragmatist philosophy that understands that contextualized knowledge and experience is the basis on which action is initiated (Cornish and Gillespie, 2009). From an epistemological standpoint, this philosophy considers knowledge as a learned response to the environment, rather than as an accurate representation of reality (Deforge and Shaw, 2012; Rorty, 1999). Grounded theory is a systematic and flexible methodology that provides researchers with the means of developing explanatory models of phenomena grounded in empirical data (Charmaz, 2009; Hutchison et al., 2010). The theory is based on the objective of generating detailed knowledge capable of explaining the perceived changes that have occurred (or are occurring) as a consequence of a programme, and of informing the development of indicators through which the significance and magnitude of these changes might be measured. A distinctive feature of grounded theory is the focus on generating theory (Bryant and Charmaz, 2007; Strübing, 2007) that resonates with the development of an impact map within SROI, whereby a theory of change is used to articulate the links between activities and outcomes of interventions and programmes (Nicholls et al., 2012). Generating theory in this way maintains the relevance of context and provides a potential means of establishing detailed evidence about the ‘real-world’ practicalities of individual
Grounded theory approaches assist researchers in developing theories of social phenomena by taking subjective individual experiences and turning them into theoretical statements about causal relationships (Suddaby, 2006). Central to theory generation is the process of constant comparison, whereby data are collected, analysed, compared and refined in an iterative manner to assist with the conceptualization and categorization of data (Bringer et al., 2004; Jeon, 2004). This process was followed throughout the described study as a means of developing a grounded theory SROI methodology.

Figure 1: SROI grounded theory data collection and analysis process

Methods

Data collection

A central goal of SROI involves the identification and exploration of outcomes in a chain of events, or the trajectory of anticipated, experienced or expected outcomes over the short, medium and longer term. This allows for the capture, description, measurement and valuation of important or significant issues, rather than focusing simply on the outputs that are easier to record or measure, such as the numbers of people joining a club. Such outputs do not help to understand the impacts of community programmes on individual lives, communities, economies or the environment. In attempting to explore, and subsequently map, outcomes, SROI seeks to involve all stakeholders that are materially affected by an intervention or programme (Nicholls et al., 2012; Leck et al., 2016), rather than seeking to establish evidence that serves only the needs of funders, academics or practitioners. In this study, stakeholders included public health professionals and programme staff from the commissioning organization, elected council members and representatives from diverse local organizations, including community groups, sports clubs, youth organizations and play providers.

An initial sample of participants (n=22) was drawn purposively from a database containing details of individuals and organizations who had received programme funding to devise and implement local sport and physical activity projects at the time.
the study was conducted (n=130). Purposive sampling allowed the researchers to select individuals on the basis that they might illustrate features, processes, patterns and problems relating to the research (Erlandson et al., 1993), thus providing the most relevant data (Kemper et al., 2003). Data were collected via workshops (n=2) and individual interviews (n=12) with stakeholders over a period of 12 weeks, using a standardized data collection tool based on a ‘journey of change’ developed originally by the New Economics Foundation (Rouse and Maguire, 2013). Stakeholders represented community groups and associations, sports clubs, volunteer groups, charities, local councillors, and the local authority. The data collection approach provided a practical means of engaging participants in discussions concerning the anticipated short-, medium- and long-term outcomes of the Active Together programme with respect to their personal experiences and perceptions. This involved exploring in detail what it was that the organization or individual wanted to achieve, and the conditions that influenced the way in which these outcomes might be realized. Through their participation in the workshops and interviews, the participants were aware that they were contributing directly to a co-production process with respect to identifying outcomes and developing indicators through which to assess them. Data were recorded for each participant on an individual template that captured key information pertaining to the inputs, outcomes, and perceived facilitators and barriers. Written data were supplemented with open-ended discussion with participants, in which wider aspects of the programme, local context and individual factors were investigated. This involved discussion of initial themes concerning the outcomes, which helped to refine ideas and articulate perceptions, and provided the basis for subsequent desk-based analyses by the authors. For example, life skills was a concept to which participants often related at an early stage in the process, although it did not necessarily prove significant in its own right. As data were explored and added to, this concept was integrated into a more refined and complete higher-level concept of increased agency, which had greater explanatory power in respect of articulating progress towards the anticipated outcomes.

Ethical approval was a requirement of the authors’ university institution, and this was granted by the University Research Ethics Panel prior to commencement, following review of the study documentation. All appropriate ethical guidelines were observed and taken into account to protect participants involved in the study. Participants’ anonymity and confidentiality were assured through adherence to the researchers’ institutional ICT security system protocols, including password-protected computer access. All written material was stored securely in a locked filing cabinet in a locked office.

Data analysis
The second part of the SROI grounded theory process concerns mapping outcomes that are generally depicted in a theory of change, so as to articulate the links between health programmes and outcomes (Nicholls et al., 2012). Grounded theory is particularly suited to this process because its basic product is concerned with developing a theoretical framework to explain phenomena via an iterative process in which the researcher collects and analyses data, and then repeats the process to refine the emerging theoretical framework (Charmaz, 2006; Strauss, 1987). Data were analysed on a case-by-case approach before implementing a process of cross-case analyses to derive and develop emergent codes and concepts (Corbin and Strauss, 2008; Strauss and Corbin, 1998), codes being organized into increasingly distinct themes. Undertaken by the two
authors, cross-case analyses helped to prompt new questions, reveal new dimensions and explore alternatives in order to further develop the emergent concepts (Khan and VanWynsbergh, 2008). Within this emerging framework, discretionary (applied by the researcher) and ‘in-vivo’ codes (using the actual words of participants) were created in order to develop a deeper analysis in which distinct groups of data codes, or themes, were arranged to reflect the conceptual development of the framework. For example, three themes comprising social equity, education and participation, and organizational and performance were established, representing distinct conceptual pathways along which participants perceived that activity took place in pursuit of short- to medium-term and long-term outcomes.

Grounded theory focuses less on subjective experiences and perceptions of individuals, and more on how these experiences can be abstracted into theoretical statements about causal relations (Suddaby, 2006). To facilitate the grounded theory SROI process of abstraction, theoretical coding was used to move beyond simple descriptions to a position in which the interrelatedness of codes could be articulated within an integrated theory (Jeon, 2004). This process was underpinned by the use of a coding paradigm to facilitate the systematic exploration of the relationship between structure and process (Corbin and Strauss, 2008; Strauss and Corbin, 1998), with re-coding of data undertaken where appropriate to reflect emergent themes and concepts. (Although there is a concern that the use of the coding paradigm can lead to the forcing of themes, rather than these being allowed to emerge through analysis (Kelle, 2007; Walker and Myrick, 2006); its use here provided an effective means of synthesizing the SROI and grounded theory processes.) A standardized data-collection template was employed to elicit data concerning outcomes and the wider context in which they were located. Re-coding continued until data saturation had been achieved, at which point the relationships between data categories were clearly explicated and could not be advanced by the addition of new data. In addition, the use of memo-writing provided an important means of helping ideas to emerge and the overall processes to be documented (Hutchison et al., 2010). Memos were used to store thoughts and detailed explanations of conceptual development as data analysis progressed, and they were useful for developing links between data categories and theoretical abstractions. The resulting conceptual model (see Figure 2) was subsequently shared with stakeholders (n=7, including 2 that had not participated in the workshops or interviews) as a means of validating the outcomes of the data analysis. No revisions were deemed necessary following participant feedback, confirming the validity and relevance of the model.

**Results: Conceptual and operational development**

Figure 2 presents the product of the grounded theory SROI process, which establishes the nature and scope of outcomes perceived by stakeholders implementing local community projects to increase participation in sport and physical activity. The conceptual model helped to explain the next steps in the ongoing evaluation with respect to identifying the indicators that most closely represented the types of outcomes identified by stakeholders, and which could best serve any future data-collection exercises to track changes over time. The core category improved health, well-being and community cohesion provided a means of conveying what workshop participants perceived the programme to be about, and tied together the data categories in a coherent explanation (Corbin and Strauss, 2008). In turn, this provided an important
integrative link between concepts that helped to explain dimensions in the data (Jeon, 2004), making relationships between the data more intelligible (Charmaz, 2006).

The conceptual model provided a basis for the development of indicators, as set out in Table 1. Following accepted SROI protocols, the process of identifying and developing indicators began during the stakeholder consultation exercises, to explore not only the efficacy of developing self-reported versus more objective measures of change for the outcomes being discussed, but also to ensure that the proposed indicators were relevant to the scope of Active Together, and the various types of stakeholders (Nicholls et al., 2012). Development and refinement of the indicators took account of the need for outcomes to be measurable across variable timeframes and for measurable data to be collected within the scope of available resources. In this respect, three outcome domains comprising social equity (A), education and participation (B), and community connections and resources (C) were established to arrange the indicators into discrete sets that operationalized the conceptual model within a data-collection framework that facilitated the assessment of outcome change. In turn, these indicators formed the basis for the subsequent development of survey questions to measure the ‘distance travelled’ in outcome change over the course of the Active Together programme. Emphasis was placed on self-reported change and triangulation of outcome change data through the development of composite indicators, as well as the employment of auxiliary constructs for measuring certain outcomes (Maier et al., 2015), such as club membership as a proxy for improved community ties and strengthened civic engagement.

Figure 2: Conceptual model depicting nature and scope of outcomes perceived by stakeholders
Table 1: Proposed indicators to measure distance travelled in the identified outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Indicator description</th>
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<tbody>
<tr>
<td><strong>Impact domain A: Social equity</strong></td>
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<tr>
<td>A1 Improved mental health</td>
<td>Reported improvement in mental health; feeling positive about myself; able to make up my mind about things</td>
</tr>
<tr>
<td>A2 Safer and more positive environments</td>
<td>Reported change in feeling safer in the community; feeling more positive about the local area</td>
</tr>
<tr>
<td>A3 Stronger and more connected people and communities</td>
<td>Reported change in involvement in local events; club membership and volunteering</td>
</tr>
<tr>
<td>A4 Reduction in chronic disease, long-term care and medication</td>
<td>Extent to which people: have a long-term condition that limits daily activities; feel in control of their health; perceive their health to be good or very good</td>
</tr>
<tr>
<td>A5 Reduced burden on social care services</td>
<td>Extent to which people: have drawn on support from organizations to help them feel in control of their life; know where to go to get health advice</td>
</tr>
<tr>
<td>A6 Improved physical health and vitality</td>
<td>Reported change in levels of physical activity; feeling healthier; visiting GP less</td>
</tr>
<tr>
<td>A7 Improved personal resilience and self-esteem</td>
<td>Reported change of feelings of optimism; positivity and getting back to normal</td>
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<tr>
<td><strong>Impact domain B: Education and participation</strong></td>
<td></td>
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<tr>
<td>B1 Increased agency and self-awareness</td>
<td>Extent to which beneficiaries feel that they have more control of their health and their lives; have time to do the things they enjoy; more conscious of their own feelings and motives</td>
</tr>
<tr>
<td>B2 Reduced social isolation</td>
<td>Reported change in feeling lonely; in meeting socially with friends, relatives or colleagues; in feeling supported</td>
</tr>
<tr>
<td>B3 Improved competence, engagement and purpose</td>
<td>Reported change in sense of accomplishment; getting chance to learn new things; that doing something is worthwhile</td>
</tr>
<tr>
<td>B4 Improved physical, social and life skills and training</td>
<td>Reported change in skills acquired and developed; feeling more employable</td>
</tr>
<tr>
<td><strong>Impact domain C: Community connections and resources</strong></td>
<td></td>
</tr>
<tr>
<td>C1 Improved access to community resources</td>
<td>Percentage of stakeholders who feel that community resources are more accessible to them; member of more clubs or organizations</td>
</tr>
<tr>
<td>C2 Improved well-being through development of cultural, recreational and sports facilities</td>
<td>Extent to which use of new and developed facilities has resulted in increased life satisfaction; improved health and energy; and increased optimism and self-esteem</td>
</tr>
<tr>
<td>C3 Greater integration of social, sport and special-interest groups</td>
<td>Percentage of organizations and interest groups reporting improved links with other groups and the wider community</td>
</tr>
<tr>
<td>C4 Improved social capital and community ties, and strengthened civic engagement</td>
<td>Reported change in involvement in local events; club membership and volunteering; organizations reporting improved links with sector and the wider community</td>
</tr>
</tbody>
</table>
Discussion and conclusion

Through the development of a methodology to assess the wider outcomes of the Active Together programme, this paper has addressed some of the shortcomings in health evaluation that have often led to a failure to capture the wider social, personal and interpersonal, and economic benefits for individuals and communities that reflect the multiple determinants of physical and psychological health. The conceptual model and its operationalization through the developed indicators of change help to reflect the wider complexities of the ecological context in which individual health behaviour, and its diverse range of benefits, play out. In this way, it speaks to the complex and increasingly fragmented policy and social contexts in which health programmes take place. Applying grounded theory to the government-recognized SROI framework not only allows these complexities to be harnessed, but through their involvement in the development of the evaluation, ensures that the outcomes are grounded in the realities of people who experience and help implement the programme. This is important, given that participatory approaches are critical for equity-focused evaluations that involve stakeholders in all phases of the evaluation process (WHO, 2013b). In this sense, the methodology provides a means of engaging with a diverse range of stakeholders and intended beneficiaries in order to identify and explore outcomes that are contextually relevant and appropriate. In doing so, the approach provides a means of developing ‘culturally sensitive’ initiatives (Butterfoss and Kegler, 2002: 162) that build individual and organizational capacity to influence both community interventions and the evaluations that seek to understand and assess their impact. This offers significant potential for practice-based evaluations seeking to engage with stakeholders and beneficiaries while avoiding the tendency to focus on acute and chronic health conditions (Godfrey, 2001) – instead exploring the wider social benefits of interventions that reflect the lives of those at whom they are targeted.

Looking to the future, it is anticipated that the three outcome domains and associated indicators identified here could provide the basis for monitoring and evaluation frameworks that can be embedded into the management and delivery of similar programmes in other health promotion settings using physical activity and sport as devices to improve community health. While it is unlikely that the specific indicators would be directly applicable across multiple and contrasting settings, the outcome domains highlighted in this study are likely to have broader relevance in a range of contexts and settings. This is because they resonate with the individual, personal, organizational, community and societal levels that are associated with population health outcomes and acknowledge the relevance of individual socio-cognitive factors, education, health prevention and protection, and community capacity and empowerment (Downie et al., 1996; Cerin et al., 2010; Czerwinski et al., 2015; Sallis and Owen, 2015; Vatcharavongvan et al., 2013).

Already, we have helped to overcome some of the limitations of, and reservations about, SROI associated with the ‘arbitrary’ or ‘soft’ nature of outcomes, and through the further development and refinement of the framework will likely increase its utility and value for those commissioning and evaluating interventions of this type. In this way, the study reflects the emerging consensus that SROI can be improved immeasurably through the application of a standardized framework (Nicholls et al., 2009), and can be regarded as a first step in the development and application of such a framework for the evaluation of community health programmes within an ecological context.
Limitations

The present study is limited by the relatively small sample size, from which it is not possible to say with certainty that a full range of stakeholder perspectives has been adequately captured. Data collection was conducted during the early stages of the Active Together programme, and it is possible that participants may have represented those with certain attitudes and perceptions compared with those who were awarded funding later in the programme. Consequently, the subsequent framework may potentially overestimate or emphasize certain outcomes over others. As a co-production exercise, the greater involvement of participants in the data collection and analysis cycles may have helped in the coding process and ensured fuller participant involvement in the development of the conceptual model. This aspect could usefully be emphasized and made more explicit in future iterations of the approach.

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References


