A COOK'S TOUR: TOWARDS A FRAMEWORK FOR MEASURING THE SOCIAL IMPACT OF SOCIAL PURPOSE ORGANISATIONS

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ABSTRACT

For over 50 years Operational Researchers have advocated that Operational Research (OR) could be considered as a useful set of ideas and methods for the benefit of society. However, this aspiration, while still chiming today, has yet to realise its full potential. This paper focuses on organisations whose remit is to alleviate social problems, and therefore have a social purpose. They are under considerable pressure to demonstrate the impact of the work they do. However, showing the value of these organisations is not easy. The paper contributes to this research gap by developing a framework for measuring the impact of social purpose organisations. This is accomplished by bringing together current research on Sen's capability approach and configurational theory, and arguing for an integrative view to show the value of social purpose organisations.

Keywords
Community Operational Research; Social Value; participation; social innovation; configuration method; capability approach

INTRODUCTION

In his article *Operational Research, Social Well-being and the Zero Growth Concept*, published in 1973, Cook asserted that "Operational Research (OR) can be regarded as the use of science and scientific methods to influence decisions to the benefit of society" (Cook, 1973: 648). However, in this regard, he forewarned that OR must (re)-examine its social role in the context of the challenges in a rapidly changing world. Cook's view still seems to resonate within the OR community 40 or so years later (a consequence of which is the rebranding of OR in the UK as the 'Science of Better'). Noting that the social role for OR remains a neglected area of inquiry and has been a persistent concern for scholars of OR over many decades (Chesterton, Goodsman et al, 1975; Rosenhead, 1986, 1992; Midgley & Ochoa-Arias, 2004), Cook's assertion almost 40 years on is revisited. Indeed, many of the ideas and debates presented in the past still seem to chime today, and thus will form the basis of the current article.

In particular, this paper focuses on his notion of a social role for OR while acknowledging that the exogenous influences that shaped his thinking at the time are very different to the circumstances and influences today. In Cook's day, there were concerns about growth in the economy and a particular concern for the lack of professionalism and expertise both in the private and public sectors required to fuel the restructuring of the economy and society at the time (Cook, 1973). Today, there is also an unease around the pursuit of growth in the economy, but there are in addition increasing concerns around globalised flows of trade, capital and people, technological innovation and climate change to name but a few significant issues (Stiglitz, 2012; Stiglitz et al, 2009).

In attempting to reflect on the growing concern about measuring the quality of life of citizens, Cook claimed that "*social well-being"* or social value appears to be the sort of concept or measure that Operational Researchers "might try to maximise as a social objective" (Cook, 1973: 654). Connected to this, he also claimed that, if more people can be involved in analysis and research associated with social decision-making, "the level of well-being might be increased by that activity itself in addition to any increase derived from the better decisions reached" (Cook, 1973: 656). While acknowledging that the concept of social value or well-being is difficult to define, he

saw it as enabling an alternative approach to the customary economic appraisal of socially oriented programmes. As such, he called for an approach to capture social value that aligns the different perceptions of all of the stakeholders around the social intervention under investigation (Cook, 1973). This suggests that value for organisations delivering socially oriented programmes is concerned with the stakeholders' own internal, perceptional judgments of social value, rather than what the policymakers consider important (Cook, 1973). In other words, it is implied that social value can be defined if it corresponds to value viewed from the vantage point of some other or wider perspective, such as the community (Yuchtman & Seashore, 1967; Friend and Hickling, 2005; Jones and Eden, 1981 Taket and White, 1997; Boyd et al, 2007; Keisler et al, 2014; Midgley & Ochoa-Arias, 2004). While Cook's assertions have a contemporary feel (i.e., the concern for subjective as well as objective determinants of well-being), it is clear, however, that today, social value in OR has not been demarcated in a manner capable of achieving a common understanding of what it is (White, 2006).

To address this research gap, the current article brings together contemporary research on social well-being and impact to make a contribution to the literature on social value and Community OR. First, inspired by Cook's claim for a measure of social well-being (Cook, 1973), the article provides a brief review of the literature on social value. In doing so there is a departure from the prevailing view that draws on more traditional economic concepts, such as choice and desire fulfilment, that typically equates social value and well-being with either prosperity or utility (Sen, 1985). Instead, the article will build on Amartya Sen's work (1985, 1987), where it is argued that social well-being or value is best understood through the concept of beneficiaries'/communities' capabilities. Accordingly, the effectiveness of a social intervention is defined as the degree to which an organisation increases the beneficiaries'/communities' capabilities.

Second, it is found that in OR, more generally, the study of the processes by which one can measure the impact of interventions has been dominated by scholars of the expectancy theory approach (Bell et al, 1988), who have spent many decades debating the question of multiplicative versus additive value usage (see Belton and Stewart, 1999). Cook suggested a somewhat more integrative view and argued that

methods for measuring social well-being or value should consider the complex relationships between interacting systems (Cook, 1973). Here, it is noted that there is a dearth of studies due to complex issues associated with modelling multiple interactions. The contribution is to address the problem of modelling complex relationships between organisational practices and social value and well-being by using a configurational-based strategy (Fiss, 2007). This modelling strategy is well suited to the current study because it employs a set-theoretic method, which enables an understanding of organisations "as clusters of interconnected structures and practices, rather than modular or loosely coupled entities whose components can be understood in isolation" (Fiss, 2007: 1190).

Third, an in-depth empirical setting is provided in order to develop the ideas on social value, capabilities and effectiveness. In doing so, the study will present findings from a research programme examining the social impact of organisations delivering socially oriented programmes, referred to here as social purpose organisations. From the research, a framework was developed to measure and communicate a broad concept of social well-being as capabilities generated by the activities of a social purpose organisation with their communities. The framework adds to the literature on assessing the impact of social purpose organisations by providing an empirical example of a novel approach with which to contextualize the evaluation of social interventions.

This study begins with an explanation of an understanding of social purpose organisations and social value in the context of social intervention and socially oriented OR (or Community OR). The requirements of a framework is formulated incorporating a capability approach and a configurational perspective for appraising social purpose organisations that serve the different needs of their beneficiaries in complex social contexts. The article provides an empirical setting for describing the framework. The contributions and outline theoretical and empirical implications of the proposed framework are then discussed. Finally, the benefits and limitations of the research will be reviewed, including comments on further possible developments of Community OR.

COMMUNITY OR AND SOCIAL PURPOSE ORGANISATIONS

A direct consequence of Cook's plea for OR to re-examine its social role is the appearance of a set of initiatives under the label 'Community OR' (Cook et al., 1984; Rosenhead, 1986; Jackson, 1987). While Community OR is varied and wide ranging, it is unified by a concern for working with *alternative* or *non-traditional clients* (Ackoff, 1970; Cook, 1973; Rosenhead, 1986; Jackson, 1991). However, what counts as an alternative client is somewhat varied among the researchers in this field. More often than not, the basis for a definition is on an organisational form (Cook, 1973; Rosenhead, 1989); that is, the preference is for not-for-profit or community organisations, instead of public or private ones. Nowadays, this position is seen as unhelpful in a world where organisations are more hybrid and where many different types of organisations are operating in the same sector (Battilana & Dorado, 2010). Instead, a different conception is needed. As such, the organisations of interest for this article are labelled as 'social purpose organisations', in that they operate in an environment where the market and/or government has failed with regards to the production of public goods (Le Grand, 1997; Weisbord, 1975), and they attempt to alleviate complex societal problems (De Tombe, 2001; Liebl, 2002).

Essentially, it is believed that these organisations have a better understanding of the needs of those they are trying to assist and hence they have a greater capacity to deliver high-quality services than purely government or market providers (Nevile, 2009). This may be through providing a solution to a social concern that is more effective and efficient, and possibly sustainable than existing solutions or the absence of the intervention (Anheier & Seibel, 1990; Midgley & Ochoa-Arias, 2004; White & Taket, 1997). Such organizations often depend on material and voluntary support from several sources, including governmental institutions, businesses, and the public— sources that increasingly challenge the social purpose organisations with high expectations and demands regarding transparency and accountability (Anheier & Seibel, 1990; Polonsky & Grau, 2011).

The importance of appraising the *impact* of social purpose organisations is now particularly high on the agenda for governments looking to support them, either through promotion or funding (Krisic et al., 2014). At the same time, organisations whose remit is to alleviate social problems, and therefore have a social purpose, are under considerable pressure to demonstrate the impact of the work they do

(Emerson, 2003). These organisations face the dual objective of attempting to maximise their impact, while at the same time assessing their performance relative to their funders, organisational peers and clients (or users). The neglect of any or all of these objectives could lead to catastrophic consequences, as in the recent high profile reported case in the UK of the failure of *Kids Company (*Public Administration and Constitutional Affairs Committee, 2016). But scholars consider it difficult to evaluate social purpose organisations and their activities, and current approaches cannot properly appraise effectiveness (Austin et al., 2006). There is still a lack of a useable framework by which to tackle the vexing question surrounding whether and when it is plausible to infer that a given intervention is likely to result in the creation of social value. The literature highlights that, in order to appraise the effectiveness of social purpose organisations, there is a need for a measure of social value, defined as *that which accrues primarily to society as a whole* (Poister, 2003). This issue is explored below.

DIFFICULTIES IN DEFINING SOCIAL VALUE AND WELL-BEING

Scholars have repeatedly tried to define the kind of social value generated by social purpose organisations. In fact, the wider literature has viewed social value as far too complex to boil down to a single concept, no matter how it is defined (Polonsky and Grau, 2011). Indeed, there is a lack of consistency among definitions of social value: quite often definitions are so broad as to contain almost anything, and other times a more limited set of concepts are arbitrarily focused upon in accordance with the purposes of the scholars writing the definitions (Harlock, 2013). On the one hand, value can be expressed in terms of resources or utility (for example, changes in income and/or employment); on the other hand, it is more often than not expressed, largely speaking, as well-being.

There is also the problem of measurement. Here, the wider literature makes it clear that there are no well-defined measures (Sowa et al., 2004). Further, scholars who have examined the measurement of social value suggest that, first, all organisations create both economic and social value; and that, second, the two types of value creation are intrinsically connected (Emerson 2000; Emerson 2003; Nicholls 2009). Scholars have also noted that economic value creation may improve

well-being, e.g., by creating jobs (e.g., Austin et al., 2006), and the creation of social value may also improve an economic situation, e.g., by generating earned income (e.g., Chell, 2007). Here, it is recognised that social activity must reflect economic realities, while economic activity must generate social value. The perspective considers that both parts of value operate together, remaining interlocked or complementary at all times (Emerson 2003). However, to date, there is very little research that shows how the complementary nature of these different elements of social value can be captured or measured. While measuring social value is presently being discussed at length in the literature (Polonsky & Grau, 2011), a full discussion of the most effective measures of social value is outside the scope of this article.

However, one prevailing view on defining and measuring social value stands out, and it concerns well-being. Here, the concept of social value as well-being can be thought of as the absence of negative conditions and feelings as a result of adjustment and adaptation to a complex social need (Keyes, 1998). Indeed, well-being can be viewed as "a broad category of phenomena that include people's emotional responses, domain satisfactions and global judgments of life satisfaction" (Kahneman et al., 1999: 277). It is a well-researched and evaluated concept in terms of its validity, and is well known in both economic theory and organisational theory, where it is conceptualised as a composite of interrelated elements including moral, social, utility and aesthetic dimensions, referring to concepts such as dignity integrity and diversity, but also involvement, compromise, openness and sustainability. However, although the debates on well-being add substantial significance to applying the concept of social value to social interventions, they cannot be routinely applied in a comparative way because of the heterogeneous nature of the interventions (Midgley et al, 2013), where each intervention tends to have its own contexts and behaviours.

The Capability Approach

Given the problems outlined above, another part of the literature is drawn on, particularly from research on international development and poverty (Community OR scholars have done this from time to time, e.g., Rosenhead, 1992; White, 1994; Ochoa-Arias, 2004), where scholars are beginning to offer a completely different

perspective on social value, and one that has so far been absent from organisational studies (Ansari et al, 2012). Specifically, the work of Sen is drawn on, who argues that economic value, such as income, is an analytically inadequate metric for social value, and that approaches to well-being, as a means of satisfying un-met needs, are equally insufficient (Sen, 1985). He also claims that social value as happiness or pleasure (a proxy for utility) often reflects a person's mental state rather than their physical state, and is, therefore, a problematic metric for well-being. What is more, he notes that none of the interpretations of well-being as a measure of social value takes one very far in pinning down what the concept actually is (Sen, 1985). In sum, Sen argues that the economic value people have, or their perceptions of well-being, are inappropriate to focus on because they only provide restricted evidence of social value. For example, despite abject poverty and lack of material possessions, a person (or, say, a potential recipient of a social intervention) may be able to claim to be relatively happy since his or her happiness may be more dependent on perceptions of intangibles, such as family or community relationships (Sen, 1985). Sen also rejects the presumption that achievement in some dimensions compensates for shortfalls in others (i.e., trade-offs) (Sen, 1985): if people are falling short on a particular capability that has been mutually agreed to be significant, then action would require addressing the shortfall if at all possible, rather than offering compensation in some other form, such as increased income or employment.

Interestingly, in developing his alternative view on social value and well-being, Sen builds into his work an Aristotelian theory of political distribution and an analysis of eudaimonia (human flourishing) (see Nussbaum and Sen, 1993). This notion of human flourishing has its roots in philosophy and psychology. It is noted, in passing, that Cook's own view of well-being, from a Community OR perspective, is close to Sen's. The link between social value, well-being and OR intervention was discussed by Cook via the notion of "social well-being" and "happiness"**,** where he proposed that we should adopt the concept of "eudemeny (sic)" (Cook, 1973: 653). Indeed, today, the call for a definition and measures of happiness constructed from an analysis of eudaimonia has now been realised across the globe (Blanchflower & Oswald, 2011). Next, Sen's work is looked at more closely.

Sen argues that the correct focus for gauging well-being is by the beneficiaries'

capability to live a life they have reason to value, and not their resources or subjective well-being (Sen, 1985). He claims that one should consider what people are actually able to do or aspire to achieve (Sen, 1985). In doing so he states that social value is best understood through the concepts of 'functionings' and 'capabilities' rather than through more traditional economic concepts, such as choice, desire or fulfilment (Sen, 1993; 1985). Functionings are often referred to as various states of an individual's *beings and doings*, which can range from the basic ones for *being*, such as being adequately nourished, to complex ones, such as being part of a supportive social network. And for *doings*, examples can be caring for a child or an elderly relative, voting in an election or taking part in a public debate. Capabilities are referred to as the abilities to achieve a given functioning (Sen, 1985; 1987).

So, for example, while travelling is a *functioning*, the opportunity to travel is the corresponding *capability*. Thus, there can be the same level of travelling for an individual with a car as for one without access to a car, but the former has a different capability than the latter. In sum, "[w]hile functionings are, in a sense, more directly related to different aspects of living conditions... capabilities, in contrast, are … opportunities you have regarding the life you may lead" (Sen, 1987: 36).

The essence of focusing on capability is to expand the beneficiaries' freedom to choose amongst their functionings those that they value the most - these then become their achieved functionings if they so choose. What is then important is that beneficiaries have the capabilities to lead the kind of lives they want to lead, to do what they want to do and be the people they want to be. Once they effectively have these capabilities, they can choose to act on them in line with their own ideas of the kind of life they want to live. Therefore, the notion of social value can be improved if both the possibilities for what beneficiaries can do are expanded and, more importantly, the ability to realise those possibilities is developed (Sen, 1985).

DIFFICULTIES IN MEASURING SOCIAL VALUE OR WELL-BEING

However, there is still the need to understand how the different elements of capabilities work together for social value. For example, the differentiation between one type of capability and another might hold only if one type of created value

clearly dominates the other. There are instances where this has been interpreted as a *zero-sum game* (Elkington et al, 2006) involving trade-offs across the various dimensions and measures (Maas and Likert, 2006). In contrast, some studies are beginning to suggest that there can be a balance between the different components, and they can be viewed as integrative or as a positive sum (Elkington et al., 2006).

A notable exception to this move away from trade-off thinking is the Social Return on Investment (SROI) framework that was developed to measure and communicate a broad concept of value, incorporating the social, economic and environmental outcomes generated by the activities of a social purpose organisation (Cabinet Office, 2009). The SROI framework is based on traditional cost-benefit analysis (Dey & Gibbon, 2011) and has recently been promoted as a more 'holistic' approach to demonstrating value for money (Banke-Thomas et al 2015). The framework incorporates monetisation approaches to compare the value of the benefits to the costs of an intervention in the same 'currency' (Emerson, 2003; Cabinet Office, 2009). However, a number of challenges are associated with the SROI approach. First, it is argued that deriving financial proxies for the outcomes of social purpose interventions can be a challenging and in some cases an impractical process (Banke-Thomas et al., 2015), due to the soft, subjective and intangible nature of these outcomes (Poister, 2003). The value created by social purpose organisations is broad and complex, making it difficult to apply objective monetisation techniques. Second, the challenge of measuring social change is significant due to the 'nonquantifiability, multicausality, temporal dimensions, and perceptive differences of the social impact created' (Austin et al., 2006: 3). Finally, in light of these problems, there are concerns that the more intangible and harder to quantify social benefits may be overlooked and omitted from an analysis of social impact (Polonsky and Grau, 2011).

It should be noted that these concerns are also echoed within the literature surrounding cost-benefit analysis (CBA), from which SROI has been partially developed. Classical approaches from management and economics point chiefly to efficiency and cost minimisation arguments as the main benefit-creating mechanisms for social purpose organisations. However, the issue of incommensurability between different forms of value (so they cannot be easily

traded) has grown to be the single most controversial issue in CBA (Pearce, 1998; Tuan, 2008). CBA approaches have also received continued criticism over the years, particularly due to their inability to properly value and measure social benefits (see Rosenhead & Thunhurst, 1979, for an example of a critique from an OR perspective) and are difficult to pursue in the face of great complexity (Midgley and Reynolds, 2001). In fact, it is argued that a simple cost-benefit ratio is inadequate for interventions with goals beyond simply maximising return on public investment (Mustafa, 1994).

In relation to the above, Cook argued for the need to develop methods to measure social value that would involve "some sort of advanced cost-benefit analysis incorporating non-linear, non-additive interactions of resources and values" Cook (1973: 654). However, there has been relatively little work on this perspective in the Community OR literature (Johnson & Smilowitz, 2007). In essence, this literature has argued there is great difficulties and ambiguity involved in developing an integrative approach (Midgley et al., 2013; White, 2006).

DEVELOPING THE FRAMEWORK

The main conclusion of the above discussion is that there seem to be two requirements for the development of a framework for appraising the impact of social purpose organisations. First, a different view of social value is examined based on the capability approach. However, one central question that emerges is around the scope to apply this perspective to social purpose organisations. Second, it seems from the extant literature that to appraise the effectiveness of social purpose organisations there is a need to develop methods that would involve some sort of enhanced or integrative approach. However, the literature provides very little guidance as to how the elements of social value work together.

In order to develop the framework, responses to these two requirements are given below.

Applying the Capability Approach to Social Purpose Organisations

The organisational literature has shown that the management and performance of social purpose organisations are complex and multidimensional (Sowa et al.,

2004). Their achievements are judged by a diverse array of constituencies, such as beneficiaries, employees, policy-makers and politicians, each of which may have very different views on what constitutes a desirable outcome and elements (LeRoux and Wright, 2010). Given this context, the capability approach relates to social purpose organisations in the following way.

First, social purpose organisations are purported to be organisationally participative (Chen et al., 2013), where the organisations' stakeholders and beneficiaries are encouraged to jointly share responsibilities for management (through management committees and governance arrangements) and the delivery of the social good (Montgomery et al., 2012). This arrangement requires a high degree of involvement of the organisation's different stakeholders and beneficiaries. The participative mode has the potential to build on the complementarity between the organisation and the beneficiaries and allows synergistic combinations of resources (Christensen et al., 2006). In this way, the participative element is able to address social concerns, help the organisation to meet its objectives and, therefore, also create social value.

However, the notion of organisational participation needs to be complemented by a theory that explores the nature of peoples' lives and the relationships between the multiple dimensions of well-being (Cornwall, 2008). There is a need to conceptualise organisational participation through analysing the complex linkages between intervention, participation and empowerment (Midgley & Ochoa-Arias, 1999; White, 2006). The work from a Community OR perspective is acknowledged here on the problem of a discursive ethic or 'communicative competency' inherent in these linkages (see Romm & Hsu, 2002, and Gregory & Romm, 2001, 2004; Laouris & Michaelides, 2017; Midgley et al, 2017; for discussions).

Therefore, if one of the goals of social purpose organisations through organisational participation is to enable beneficiaries to become agents in their own lives (Brinkerhoff, 2002), this links directly to their capabilities. As Sen explains, beneficiaries have to be seen to be given opportunities and to be actively involved in shaping their own lives (Sen, 1999), and not just as passive recipients of social purpose interventions (Sen, 1985). He also advocates the use of bottom-up processes incorporating participation and deliberation (Sen, 1999), rather than the

use of universal lists of 'necessary' services drawn up by experts. When social purpose organisations and individuals are recognised as agents, and they help design or decide on what kinds of intervention they would like, priorities can be defined as well as choices made on the means to achieve them (Ballet et al., 2007). Thus, agency can intentionally bring about fundamental change through improving organisation and commitment (Bandura, 2006). Agency can also expand prospects beyond a person's own well-being, and this is directly linked to other concepts such as empowerment, autonomy and self-determination (Ballet et al., 2007; Ibrahim & Alkire, 2007). This suggests that there is a strong participative ambition for agency, and social purpose interventions should, therefore, advance deliberation and interaction (see Taket & White, 1997). In sum, participation that enhances well-being is an important capability (Nussbaum and Sen, 1993).

Social purpose organisations also play a fundamental role in helping a beneficiary to choose the life he/she values. They provide a space for formulating and articulating shared values (White & Bourne, 2006) and are instrumentally important for pursuing them. However, capability building and diffusion in contexts characterised by complex social needs is no easy task; the beneficiaries are often isolated from the resources required and there is a lack of the (collective) action often necessary to achieve organisational goals (Alkire, 2005). In a similar way, many scholars of Community OR are also concerned that stakeholders and beneficiaries can be disadvantaged in exercising their agency within a group (Thunhurst & Ritchie, 1992; Taket & White, 1997; Boyd et al, 2007), thereby making them even more excluded (White & Taket, 1997, Midgley & Milne, 1995; Liebl, 2002). Here, some stakeholders rather than others may dominate the decision-making processes, which potentially may reproduce patterns of exclusion (White & Taket, 1997).

In addressing the above, OR scholars have, however, tended to highlight how much attention is paid to what people can't do rather than their capabilities (Phillips, 1984), and there has been a tendency to focus on individual behaviours rather than collective ones (White, 2016). In a social purpose context, individual capabilities may be insufficient to produce change, whereas it is suggested that collective capabilities are often necessary to achieve changes to broader complex societal problems (De Tombe, 2001). Furthermore, multiple practices of collective agency must be

understood as individuals' willingness to get along together (Cook, 1973). Indeed, Cook (and others) recognised that when human beings interact socially, they engender something truly collective (Cook, 1973; Ochoa-Arias, 2004). In a similar vein, Phillips suggests that the importance of collective action in decision making is not only about directly promoting choices through collective action but also in shaping what people value (Phillips, 1984). In sum, collective action that enhances well-being is also seen as an important capability (Nussbaum and Sen, 1993). However, the outcome of collective action is greatly influenced by social structures, as they can enhance or restrain the exercise of agency (White & Bourne, 2006). Thus, appraising collective capabilities requires an analysis of the types of capabilities promoted through group membership as well as the ways in which social arrangements or social network relationships enable or disable collective action (White, 2016).

The second means by which the capability approach relates to social purpose organisations is that social purpose organisations rely on social innovation (Mulgan, 2006; Nicholls & Murdock, 2012). Social innovation is the means by which the social purpose organisation searches for superior and innovative solutions in order to improve the circumstances of their beneficiaries, which may, in turn, potentially increase the beneficiaries' well-being (Mulgan, 2006). The primary factor of social innovation, however, is that the innovation must be driven by, and dedicated to, unmet social needs, problems, objectives and transformation (Phills et al, 2008). Therefore, innovative activities and services motivated by this factor are predominantly distributed through the organisation whose main purposes are social (Mulgan, 2006). In other words, the social purpose organisations generally aim to innovate in social relationships, social organisation, governance and participation, as well as its practice and interventions (Mumford, 2002; Nicholls & Murdock, 2012). Indeed, it has been said that social innovation ultimately produces *social value* (Phills et al., 2008). However, social innovation itself may not be enough to generate social value, as one cannot appreciate the creation of social value without grasping how effective the social purpose organisation has been in delivering its objectives (Sahra et al, 2009).

How does social innovation have an effect on capabilities? The enhancement of capabilities is not just a function of resources but also the choices afforded by the social innovation. Fundamentally, this depends on the capability space (Frediani, 2007) whereby choices are afforded by the presence of freedoms which then translate into functionings based on certain values. In this regard, the question of collective capabilities within a capability approach tries to pursue choices through creating capability spaces through social innovation (Ballet et al., 2007; Alkire, 2002). The pursuit of these choices may be enacted through opportunities made possible by social innovation and organisational participation. Thus, the significance of the negotiated exercise of collective agency lies at the intersection of three considerations: organisational participation, the individual capability to pursue a better life, and the opportunities for beneficiaries created by organisational support or social innovation.

Finally, reconceptualising social purpose activities as enabling the expansion of beneficiaries' capabilities implies a quite different set of allocation or decisions and in the setting of priorities and strategies for their well-being. As the beneficiaries acquire and develop more capabilities, they may be able to take advantage of economic and social opportunities. Thus, the capability approach can be seen as a practical framework in which the social purpose interventions can be evaluated and better understood. When applied as an analytical framework, the capability approach captures the freedoms and opportunities that are within a 'person's reach' (a person's 'capability set') as well as the underlying variables that explain this set (entitlements, contextual variables, conversion factors, etc.) (Alkire, 2002).

Developing an enhanced or integrative approach: A configurational perspective

It seems from the extant literature that social value creation for social purpose organisations is more effective when a high level of organisational participation is complemented with effective social innovation. What conceptually underlies this complementarity perspective is mutual enhancement (Cook, 1973): the participation element and social innovation are suggested to operate in a complementary manner because their mutual presence increases the effectiveness of each. This perspective

suggests that the combination of the elements could create social value. However, the literature provides very little guidance as to how these elements work together.

To address this gap, it is argued that there is a need for a more integrated method of analysis, in that outcomes such as social value creation rarely have single causes but rather result from the interdependence of multiple conditions. Standard approaches to undertaking an analysis, such as linear regression, are not designed for enhanced interactions. These approaches are marked by general linear reality and net effects thinking and test theories shaped by concepts such as independence and additive relations. A method such as regression analysis, which identifies the incremental contribution of each factor to the outcome, is not designed to capture the complexity of successful (or unsuccessful) pathways to the outcome. Also, while regression captures the combination of effects through interactions, interpreting more than two-variable interactions is challenging.

Therefore, to capture the associations between capabilities of organisational participation, social innovation and social value, a configurational view is adopted. Configurations can be regarded as a 'Gestalt' of crucial, interdependent elements (Meyer et al., 1993). This has some similarities with systems theory, where a system is characterised by an assemblage of parts whose relations make them interdependent (Katz & Kahn, 1978; Simon, 1962; Beer, 1966). Configurations are shown to vary in their internal relationships so that grouping must precede extrapolation in organisational analysis (Miller, 1990).

The messiness of the context in which to find evidence of the effectiveness of social purpose organisations (Taket & White, 1997) then entails two further principles for an integrative approach: *equifinality* and *causal asymmetry*. Equifinality refers to a situation where a system can reach the same final state from different initial conditions and by a variety of different paths (Katz & Kahn, 1973). It emphasises the idea that several causal paths to an outcome exist. This is not a new concept in OR (see Beer, 1966). *Causal asymmetry* implies that there is an expectation that the patterns of attributes will exhibit different features and lead to different outcomes depending on how they are arranged. As a result, relationships need not be symmetric (Black & Boal, 1994). This perspective has implications for an understanding of how configurational relationships combine to achieve outcomes,

i.e. that causes leading to the presence of an outcome of interest may be quite different from those leading to the absence of the outcome (Ragin, 2008). However, these concepts of asymmetry and equifinality have not been well translated into empirical settings.

There is also an aim to place the concepts of causal necessity and sufficiency at the centre of analysis (e.g. Ragin, 1987, 2008). Specifically, it is suggested that causal relations in organisational practices, as well as the social world more broadly, are usually best understood in terms of set-theoretic relations (Ragin, 2008). It is argued that set-theoretic methods are uniquely suitable for analysis because such methods explicitly conceptualise cases as combinations of components and emphasise that it is these very combinations that give cases their unique nature (Ragin, 2008). There is a need for a technique grounded in set theory that allows for detailed analysis of the cases. It should (i) maximise the number of comparisons that can be made across the cases under investigation (i.e. the technique should be scalable), and (ii) show how causal conditions contribute to an outcome in question.

The analytic approach adopted therefore draws on a configurational notion and set theoretic analysis combined in a unique way to help in thinking and theorising about complexity inherent in organisational situations. The approach identifies cases as configurations, uses calibration to measure cases' set membership in terms of the attributes and outcomes of interest, and assesses causal relations through necessary and sufficient conditions.

Thus, the analytic approach described above is a particularly powerful approach because, unlike conventional statistical analyses, it does not identify the independent effect of a variable on the likelihood of an outcome. Instead, it is premised on identifying causal combinations—configurations of key attributes associated with an outcome of interest. In this way, the analytical approach has several strengths for studying organisational systems and outcomes in the social purpose sector. First, it is compatible with organisational theories (e.g. Greckhamer et al, 2008). It enables holistic comparisons of organisations as configurations to unveil patterns of similarities and differences among them (Ragin, 2008). Second, the approach has been developed for rigorous analyses in settings with relatively small samples (Ragin, 2008).

It is noted here that there are similar concerns in the evaluation literature, where there is a concern for mismatch of theory and method for attributing causal relations with an over reliance on multivariate regression methods that involve additive, non-complex effects and methods that take into account counterfactual considerations. In this literature it is found that the dominance of quantitative and counterfactual methods is being increasingly eroded by a growing interest in exploring, developing and testing a range of rigorous alternative evaluation approaches (Befani, 2013).

In summary, if the ultimate purpose of the social purpose organisation is to create social value (Mulgan, 2006) by improving the capability of the beneficiaries or disadvantaged individuals (Martin & Osberg, 2007) through social innovation and participation, then this means that there is a need to explicitly support (and assess) the effectiveness of social purpose organisations in this endeavour. As such, the effectiveness of a social intervention is the degree to which an organisation is configured to reduce a beneficiary group's social need, which can be compared across different interventions and organisations (Kroeger & Weber, 2014). It is suggested that the capability approach, combined with a configurational view, could make a substantial contribution to this endeavour. This is conceived as a flexible and multi-purpose framework and takes a multi-dimensional approach (Sen, 1992). It is contended here that a framework is an alternative evaluative approach that can replace traditional economic analysis (Alkire, 2002), and may be of use for measuring and comparing the value creation of social interventions. Therefore, this paper posits that a framework combining the capability approach and a configurational perspective can appraise the social value impact of social purpose organisations, aligning perfectly with current social value research (Manetti, 2014).

RESEARCH METHODS AND DATA

Methodologically, the empirical work presented is grounded on a kind of theory building that is usually labelled abduction (Locke et al., 2008), stemming originally from Peirce (see Fann, 2012). Abduction is taken as a starting point for developing a fuller and more explicit account of social value. The logic of abduction is to begin with some actions or effects that one wishes to explain and then assume some underlying "generative mechanisms" which, *if they existed*, would give rise to the

effects that have been observed. In the case, the effects to be explained are the necessary and sufficient conditions for social value creation by social purpose organisations. The condition is social innovation and the various properties and powers of organisational participation that constitute it. However, given that the interest is in the interplay between conditions leading to the outcome, the study does not specify any hypotheses or propositions as to which configurations will be most associated with high or low capability.

The approach prompts a focus on social value from an in-depth and iterative analysis of a range of data gathered. There is no claim to have comprehensively considered all relevant materials and data. However, the study is guided by Ketokivi and Mantere (2010) and others (e.g. Cornelissen & Durand, 2012) who argue that it is down to the researcher to select the best from among competing materials and artefacts. In this way 'best' or 'good enough' can be defined by pragmatic qualities such as whether the materials are interesting, useful, straightforward and so on (Kirsh and Maglio, 1994).

Context

The context for the study is work on the impact of social purpose organisations. Fifteen case-studies in total were conducted over a period of 2 years (see Table 1). The organisations in the studies are responsible for social innovation, policy formulation and implementation in the area of mental health. The organisations vary greatly in size and budget, depending on their sources of funds and responsibilities. The organisations also have legal forms (charitable status, etc.) as well as objectives. In theoretical and empirical terms, the cases as a whole set provide a novel context in which to study social innovation and impact, and one that has been understudied in recent times (Manetti, 2014).

INSERT TABLE 1 HERE

Method, Coding and Analysis of the cases

As previously discussed, there is a need for a technique grounded in set theory that allows for detailed analysis of the cases. It should (i) maximise the number of

comparisons that can be made across the cases under investigation (i.e. the technique should be scalable), and (ii) show how causal conditions contribute to an outcome in question. Thus, Fuzzy-set Qualitative Comparative Analysis (fsQCA), an analytic approach to social science grounded in set theory (Ragin, 1987), is adopted. It is a particularly powerful approach because, unlike conventional statistical analyses, it does not identify the independent effect of a variable on the likelihood of an outcome. Instead, it is premised on identifying causal combinations—configurations of key attributes associated with an outcome of interest. In this way, fsQCA has several strengths for studying organisational systems and outcomes in the social purpose sector. First, it is compatible with organisational theories (e.g. Greckhamer et al, 2008). It enables holistic comparisons of organisations as configurations to unveil patterns of similarities and differences among them (Ragin, 2008). Second, the approach has been developed for rigorous analyses in settings with relatively small samples (Ragin, 2008).

In the current study, fsQCA is used to identify configurations of organisational attributes that contribute toward the creation of social value as capabilities in social purpose organisations. To achieve this, fsQCA treats each possible configuration as a single case. Through comparison, it identifies the causal conditions associated with each outcome including the minimal causal conditions necessary or sufficient for the outcome to occur. Causal conditions are necessary when the outcome cannot occur without them. Causal conditions are sufficient when the outcome always occurs when the condition is present, although the outcome could also result from other conditions (Rihoux & Ragin, 2009). The basis of the fsQCA analysis is that patterns of causal necessity and sufficiency can be expressed in set-theoretic terms.

Coding into fuzzy sets

Given the discussion on social value and the need for a capability approach, there has been a call for using fuzzy set analysis in the capability approach (Martinetti, 2006) in order to depict capability in a gradual rather than in a dichotomous way. Fuzzy sets are also useful to provide a means to see capabilities as intertwined facets. Fuzzy set operators also make it useful to aggregate the different measures. Thus, each of the mechanisms of capability is combined via both the 'fuzzy or' and

the ‘fuzzy and’ operations. ‘Fuzzy or’ uses the maximum value for each case on the combined sets (i.e., the union), and thus allows one to examine whether the mechanisms of capability serve as trade-offs; i.e., one could be present while the other is absent. In contrast, when mechanisms complement each other, all mechanisms need to be present. This can be captured via the ‘fuzzy and’ operation (Verkuilen, 2005). While this does not entirely capture mutually enhancing effects, it is nevertheless conceptually consistent with a capability approach where all the mechanisms of capability need to be present.

Concepts describing ideal-typical cases are often those organisational qualities describing *only the extremes*. In reality, most organisations fall somewhere in between the extremes, as captured through their partial membership of *fuzzy sets* of components (Verkuilen, 2005). As Ragin points out, specifying fuzzy sets are different and more complex than specifying variables (Ragin, 2000). For example, while an ordinal scale is a mere ranking of categories, the fuzzy sets approach translates these ordinal ranks into fuzzy membership scores or degrees that are capable of reflecting the content of the ordinal categories in line with a conceptual understanding of the phenomenon to be described (Ragin, 2008). Thus, the measures of organisational components are transformed into fuzzy sets as they allow for partial group membership; the variables are assigned thresholds for full membership, full non-membership, and the crossover point. For full membership, it is assumed that only the clearest instances of the presence of the concept receive a high membership score. The crossover point is the point of maximum ambiguity when assessing whether a case is more in than out of a set, and is qualitatively assessed and anchored as the mid-point between full and non-membership of the set. For the calibration into fuzzy sets, the procedure demands a theory or knowledge base for coding of fuzzy sets to assess both theoretically and practically meaningful crossover points (Ragin, 2008). The calibration rule was developed by re-examining the data collected in order to integrate theoretical and substantive knowledge linked to the measures. The variables were converted into fuzzy sets by transforming them using the direct method of calibration (Ragin, 2008) and the variables scores were translated into the metric of log odds using:

$$Degree\ of\ membership = \frac{e^{\log\left(\frac{p}{1-p}\right)}}{1-e^{\log\left(\frac{p}{1-p}\right)}} \qquad (1)$$

The rescaled measures range from 0 to 1 and are tied to their respective membership thresholds and crossover points.

Measures

Capability

Having previously defined the notion of capability, this is explored as an approach to capturing the social value created by social purpose organisations. In order to apply this approach, there is a need to decide which are the *beings and doings* that matter (the selection of functionings and capabilities) and to examine how or whether each of the various functionings or capabilities can be aggregated into one overall assessment of well-being or of freedom to achieve well-being. Many specifications have emerged from the literature in determining capability, particularly the choice between functionings and capabilities, the selection of relevant capabilities, and the issue of weighting the different capabilities for an overall assessment (Martinetti, 2006). Generally, the literature suggests demarcating capabilities by limiting the relevant capabilities to those that are needed in order for the beneficiaries be able to participate as a citizen (Alkire, 2002). Interestingly, as suggested by Sen (1999), by choosing and valuing capabilities and functionings through participatory methods, the process is part of the capability approach which can also improve the beneficiaries' well-being.

For selecting the capabilities, participatory workshops (with a range of stakeholders and beneficiaries) were ran in each organisation, which surfaced a list of functionings and capabilities by iteratively asking "Why do you do what you do?" This list was then used as a point of departure for a further iterative participatory process that aimed at the identification of the capabilities, which an organisation, its stakeholders and beneficiaries find valuable. It should be noted that there is a range of OR methods capable of ensuring practical reasoning in eliciting capabilities (Mingers & Rosenhead, 2002). It should also be noted that there is an

acknowledgement of questions relating to truth, sincerity and moral acceptability in the application of these methods (Gregory and Romm, 2001, 2004), aligning well with the capability approach (Sen, 1999). For the workshop, the oval mapping technique was used (Eden & Ackermann, 2001). The exercises identified a number of functionings and capabilities, including reducing social isolation; engaging better with the services available; developing lasting changes in quality of life; adding value to the community; connecting with external agencies; developing social networks (with concerned others); and moving off benefits into employment. These were then clustered into four capability components: social interaction, economic status, health status and cultural activities. To capture the multidimensionality of the goals and outcomes of capabilities in a single measure, each organisation were allowed to decide on the relative importance of the each of the capability clusters, which was done by a participatory technique of pairwise comparison (Friend & Hickling, 2005). From these, an index for each of the four separate clusters of capability for each organisation was constructed, which ranged from 1 to 5, where a higher score indicated a better performance. Each of these clusters were therefore calibrated with the (summed) score of 1.5 as fully out, 3 as the crossover point, and 4.5 as fully in.

Organisational participation

While there is a lot of discussion of participation in the Community OR literature, the concept has its limits in its understanding of power and as a social and political process (see Midgley & Ochoa-Arias, 1999; White & Taket, 1997). Thus, participation may unearth who gets what and when, but not necessarily the processes by which this happens or the ways in which the knowledge produced through participatory approaches reflects and articulates wider power relations in society (Cooke & Kothari, 2001). In terms of measures of organisational participation, Callon et al. (2009) is useful in this regard, and they identify three possible candidates: intensity, openness and quality, as indices for assessing the extent of organisational participation. Intensity refers to how early on beneficiaries are involved in the organisation, and how intense is the concern around the inclusion of different stakeholders. Openness refers to the diversity of the groups or stakeholders consulted, as well as the extent to which stakeholders are allowed to speak on

behalf of their constituencies. Quality refers to the seriousness of voice – the extent to which stakeholders are allowed to deploy their arguments and claims. A measurement survey was constructed to use in each organisation. A simple question-answer approach was not adopted; instead, each indicator of organisational participation has a set of related questions designed to allow the interviewer to make a reasonable assessment of the quality of participation in the organisation. This is based on open-ended questions (i.e. "can you tell me how you engage your users") – together with examples – rather than closed questions (i.e. "do you engage your users in decision-making [yes/no]?"). The prompting questions (and examples) are designed to allow the interviewer to understand the actual organisational participation practices in the organisation.

For each indicator, the interviewer reported a score between 1 and 5, a higher score indicating a better performance. An index of the overall extent of organisational participation for each organisation was constructed by adding the scores from 1 to 5 for each of the 3 separate indicators. The sum of the scores for each organisational participation dimension was divided by the maximum possible score (i.e., 15). For the fuzzy sets, the thresholds were set based on Ragin's (2008) recommendation. The value above the 90th percentile was set as fully in, below the 10th percentile as fully out, and the mid-point as the cross-over.

Social innovation

Mulgan and others stress that social innovation is developed and diffused via organisations, whose primary purposes are not centred on mere profit maximisation (Mulgan, 2006; Phills et al, 2008). In considering the measure of social innovation the literature associated with "The Theoretical, Empirical and Policy Foundations for Building Social Innovation in Europe (TEPSIE)" was drawn on, providing a definition of social innovation which includes the following elements (Borzaga & Bodini, 2014): social innovations must meet a social need, have some innovative element, must be implemented (they are more than just ideas) and they must work (they are more effective than existing solutions). From interviews and documents, each organisation was assessed according to their potential for social innovation; i.e., whether they have the potential to lead to new or improved capabilities, assets and/or relationships so that they have the prospect to enhance

the capacity of the organisation to act in the future (Krlev et al., 2014). The ratings were calibrated as follows: A sample item reads: "Does your organisation provide the possibility for innovative interventions that depart from what is provided as standard with regard to XXX…? The data were coded for each item indicating whether the innovation was possible or not (0 = no; 1 = yes). An index was then created summing the number of innovations offered to beneficiaries. This index was calibrated using the sum of responses that were present (ranging from 0 to 4), with 0 as fully out, 3 as fully in, and 1 as the crossover point because this marks the difference between those who provided innovation (1 or above) and those who did not (0).

Other measures

Finally, a comprehensive set of secondary quantitative data on each organisation were drawn from published reports and local authority records. These were used to construct attributes gauging other potential conditions associated with capability as an outcome. The size of the organisation was included and the amount of funding, as these are commonly added to social purpose organisational analyses as control variables (Glisson & Martin, 1980). The number of volunteers is an indication of an organisation's social purpose (Hwang & Powell, 2009), and is measured to capture the broad connection the organisation has to its local community. To evaluate the anchors for the calibration, for each of the above measures the direct method was used for coding. Following Ragin (2008), the 95th percentile was used as fully in, the 5th percentile as fully out and the median as the cross-over.

Analysis

Using crisp-sets, the relationship between cause and effect is evaluated using conditional probabilities; i.e. P(Y| X), where a high conditional probability indicates a greater correspondence with the statement X is a subset of Y. Evaluating subset relationships is different with fuzzy sets (Verkuilen, 2005). The fact that fuzzy sets can range between 0 and 1 prohibits the use of a simple conditional probability to evaluate the degree of subsetness for each configuration with a given outcome. A common approach is to explore the data for consistency, which can be estimated as the proportion of cases consistent with the outcome (i.e. the number of cases that

exhibit a given configuration of attributes as well as the outcome divided by the number of cases that exhibit the same configuration of attributes but do not exhibit the outcome), which, according to Ragin (2008), is computed as the inclusion coefficient of the configuration of the outcome set. The inclusion coefficient is estimated using:

$$I_{XY} = \sum \min(x_i, y_i) \,/\, \sum x_i \qquad (2)$$

Where x_i stands for each case's membership in the configuration *X* and y_i stands for each case's membership in the set *Y* (Ragin, 2006). The resulting number is analogous to a fuzzy conditional probability, with numbers closer to 1 signifying a closer empirical correspondence to a subset relation or equivalence, and thus greater truth value for the logical statement "if *X* then *Y*". For this reason, the value is referred to as the consistency score (Fiss, 2007; Ragin, 2008).

The analysis involved the following steps. First, after the measures were transformed into fuzzy sets, a data matrix (or truth table) was constructed with 2^k rows, where *k* is the number of causal conditions used in the analysis (in total eight). Each row of the matrix is associated with a specific combination of attributes and the full matrix lists all possible combinations. The empirical cases are sorted into rows of the matrix based on their values on these attributes. Some rows contain many cases, some just a few, and some contain no cases if there is no instance of the particular combination of attributes associated with a given row. Causal necessity demonstrates that the outcome constitutes a subset of the causal conditions. An attribute is defined as necessary if it must be present for a certain outcome to occur, and an attribute is defined as sufficient if by itself it can produce a certain outcome. So, if Y represents the outcome and X represent the cause, empirical support for the necessity of a causal combination X is provided if it can be shown that set membership in the outcome Y is consistently less than or equal to membership in the causal combination X (Yi ≤ Xi); i.e., if X embeds the Y set completely, then X is necessary for Y. A consistency score of 1 indicates that a causal condition is present in all cases. However, often the cases fail to meet the consistency criterion, therefore a consistency score lower than 1 is often used (Ragin, 2008). The analysis

of necessity of each cause was achieved by looking for cases where the outcome is present but the cause is absent. If there are such cases, then for that particular cause the test of necessity fails.

The second step was the analysis of sufficiency, where the number of rows in the matrix is reduced in line with the minimum consistency level of a solution, in that whether membership in the outcome is consistently more than or equal to membership in the combination (i.e., Xi ≤ Yi) was explored. In other words, if Y embeds the vector X completely, then X is sufficient for Y. Sufficiency of causal combinations is assessed through the use of fsQCA's truth table algorithm as described above. For consistency, there are a number of methods for deciding whether each configuration of predictors (*X*) should "count" as a (probabilistically) sufficient condition for *Y*. One approach, advocated by Ragin (2000; 2006), is to determine a numeric benchmark and code all configurations for which I_{XY} is greater than this number as sufficient. In this study, the lowest acceptable consistency (I_{XY}) was set at 0.8, which is associated with the linguistic quality "almost always sufficient" (Ragin, 2008). The results produced provided a list of all the configurations that passed the sufficiency test.

Some of the groupings that pass the sufficiency test, however, are contained within other groupings and thus are logically redundant. As a third step, therefore, an algorithm based on Boolean algebra was used to logically reduce the matrix rows to simplified combinations (Ragin, 2008; Rihoux & Ragin, 2009). The logical reduction was conducted using the Quine–McCluskey algorithm (see Ragin, 2008), which is used to reduce the configurations into a more parsimonious solution. For example, if both a • B • C and A • B • C were coded as sufficient, this would reduce to B • C. In this way, one can obtain a logical description of the conditions sufficient to produce a particular outcome. The summary equation describes, in a parsimonious way, the causes or combination of causes that are sufficient for the outcome. Each of the final reduced solutions was evaluated with respect to its coverage of the outcome. Coverage is simply an indicator of how much of *Y* is covered by *X*. It is computed as follows:

$$C_{XY} = \sum \min(x_i, y_i) \,/\, \sum y_i \qquad (3)$$

Although computationally similar to the consistency measure, the coverage measure helps to answer how much of the outcome is understood by taking into account the final solution set. If multiple combinations are sufficient for an outcome, coverage provides assessments of their relative empirical importance. The measures of consistency and coverage are used to assist in interpreting the results. They are two key measures for assessing the fit of the fsQCA results.

Findings

First of all, whether any condition is necessary for the high-capability outcome was tested. The findings indicated that the all the actual consistency scores were below 0.90. It was therefore conclude that there are no necessary conditions in the analysis. All conditions were included in the subsequent analysis of sufficiency.

Next the focus was on the analysis of sufficiency. Table 2 shows the output of the reduced truth table, following the use of the Quine–McCluskey algorithm, depicting rows with more simplified combinations. The table presents the solutions that explain the outcome. The full circle in the table represents the presence of the condition and the barred circle represents a condition's absence. Where there is no symbol, this indicates that the condition does not matter. The standard analysis of the truth table reveals several useful statistics, including the consistency and coverage scores. The scores are important parameters. The solution consistency offers an assessment of the degree of fit of the solution with the fuzzy-set scores for each condition. As stated earlier, the consistency score measures the degree to which cases sharing a given configuration are associated with an outcome. The coverage score is the degree to which a configuration accounts for instances of an outcome. There are differences between the raw and unique measures for coverage. The raw score indicates the coverage of a configuration over cases, allowing for overlap with other possible combinations, and the unique score refers to coverage of cases uniquely due to a particular combination. Finally, the two global measures, overall solution consistency and overall solution coverage describe the extent of instances of the outcome collectively explained by all the configurations in a solution, and the combined coverage of all the configurations associated with an outcome (this is similar to R^2 in regression analysis (Fiss, 2009)), respectively.

In conducting the analysis both measures of high capability (trade-off) and the measure of low capability were used to identify those subsequent solutions that best fit the data and whether subsequent analyses captured any empirically relevant configurations. Table 2 represents the different causal combination of conditions linked to the respective outcome (Ragin, 2008).

INSERT TABLE 2 HERE

Table 2 indicates that there are two conditions (HCT1 and HCT2) associated with high capability in which all of the capability combinations were entered as trade-offs (overall coverage =0.41). These two configurations are sufficient for high capability. Table 2 also indicates that there were three conditions (HCB1, HCB2 and HCB3) that are sufficient for high capability in which all of the capability combinations were integrative (overall coverage 0.53). Here, the fit (overall coverage) for the integrated solutions was superior compared to the ones with the trade-off measures. It should be noted also that the solutions for the integrated outcome also seem more complex that the trade-off outcome. Thus, the solutions for high (integrated) capability were examined. Specifically, the solutions HCB1, HCB2 and HCB3 are the sufficient combinations associated with the high-capability, whereas the other two LCB1 and LCB2 are the sufficient combinations associated with the low-(integrated) capability. With respect to the solutions for high capability, Solution HCB3 is the most frequent solution, with a coverage of 46% (.46). Solutions HCB1 and HCB2 are less frequent but had high consistency scores.

The sufficiency analysis in Table 2 also indicates that there is a main condition associated with high capability, namely a presence of *social innovation*. In fact, this condition is present in all the causal combinations making up the solutions derived for high (integrated) capability. As Mulgan (2006) argues, social innovation as a strategy is at the core of social value. In terms of the capability approach, the solution suggests that organisations try to pursue choices through creating capability opportunities through social innovation (Alkire, 2002). The pursuit of these choices may be enacted through opportunities made possible by the high potential for social innovation. Furthermore, in addition to the presence of social innovation,

organisational participation also plays a key role. It seems that high capability is conditioned on high organisational participation associated with high intensity, openness and quality of the participation of stakeholders. This is an important result confirming Cook's claim.

There appear to be two solutions that seem similar conditions for high capability (HCB1 and HCB2, with scores of 0.82, 0.88, respectively for consistency and 0.27, for coverage). Here it is seen that that conditions of funding and volunteers are complementary. Thus it seems that these solutions represent organisations that are purely not-for-profit. They seem likely to have the higher capability if they have a strong volunteering base and major funding. The two organisations, which uniquely exhibit this complex configuration are Family Action and SATH. Sustainable funding may be particularly important to these organisations, due to the policy-specific expertise on which they rely. It is especially interesting to note the asymmetric roles that participation and innovation play in the high capability for these organisations. It seems that these attributes are substitutes for these types of organisations.

For the third configuration (HCB3, with consistency 0.86, raw coverage 0.48), this is the most frequent solution. The organisational conditions of participation and social innovation are complementary. Hence these are more dynamic organisations that appear more likely to have high capability if there are higher flexibility and autonomy, and this is seen by the lack of dependence on funding. These organisations' income derives mostly from fees. The organisations that exhibit this complex configuration are Core Inc, KWADS and Off-Centre. From the interviews, they identify themselves as social enterprises.

The results presented in Table 2 also highlight that the presence of two conditions is associated with low capability (LCB1 and LCB2). These are characterised by the absence of participation, innovation, volunteers and service users; spread over the two different causal combinations of conditions identified in the table. The analysis of the determinants of low capability identified that the size of the organisation was a key condition shaping low capability, in that it seems to be a proxy for low agility and a lack of responsiveness to change. It is conceivable that the large organisations with a low level of innovation reflect the comparative lack of agility in comparison with other smaller ones. These were the housing associations in the sample. The

issue of agility would be something that would be interesting to explore in more depth in subsequent research, given the prevalence of these organisations in previous Community OR studies (Thunhurst & Ritchie, 1992; Rosenhead & White, 1996, Johnson, 2007; 2016; White 2002)

DISCUSSION AND CONCLUSION

For over 50 years, there has been a persistent call for Operational Research to be used for the benefit of society. In light of this, the paper has tried to address three concomitant perennial interests for Community OR. These are the concerns with identifying which clients are appropriate for Community OR (Parry, 1991; Parry & Mingers 1991); the pursuit of an alternative, enhanced kind of practice (Jackson, 1987); and the kinds of value that Community OR should help to create for their clients or beneficiaries (Midgley & Ochoa-Arias, 1999; White, 2006). Despite the extensive work in this area and the development and adoption of many novel methods, the choices of clients, methods and the kinds of outcomes to maximise, to date, have remained under-researched. Thus, it is possible to address the limitations in the extant literature in three main ways.

First, the article focuses on social value as manifested in Sen's capability approach (Sen, 1985, 1987, 1993). The study is an example of how Sen's theory can be applied to social value and extended to the debate on the impact of social purpose organisations (Alkire, 2005). Previous research has treated well-being as essentially a trade-off between economic and social values. However, this simple conception no longer captures the complexities of the interventions of social purpose organisations that deliver complex public or social services. This complexity has been fuelled by a move away from a focus on simply dealing with market and government failure to one that promotes social innovation (Mulgan, 2006), where this is within the remit of a policy intention of creating the opportunity for hybrid organisational contexts (Battilana & Dorado, 2010). Instead of trade-offs, a concern for the extent to which different values are mutually enhancing (Emerson, 2002) was focused on. Although more recent approaches, such as SROI, have been explored, it is argued that, by focusing on capabilities (broadly defined), one can better understand how capabilities can be expressed to include measures increasingly prevalent in the

public sphere, such as meeting the needs of society and its vulnerable clients (Alkire, 2002). Thus, the concept of capability was employed to measure the outcomes of social purpose organisation activities. In this way, it is possible to compare solutions that are measured both as trade-offs and complementary values. It is found in the study that outcomes that were more complementary offered a more holistic understanding of the conditions that lead to high capability, including how social innovation and organisational participation need to interact.

Second, the problem relating to evaluating social purpose organisations was dealt with by applying a configuration strategy. In doing so an approach was outlined that is multi-dimensional and encompasses both objective and subjective data. Employing a configurational strategy enables one to accommodate complex conditional relationships that may arise between an organisation's different interventions and strategies. The study of each organisation captures aspects of organisational characteristics and capabilities that are distinctive to social purpose organisations, such as service user focus, organisational form and social relationships, as well as other aspects, such as the use of effective participatory approaches, beneficiary responsiveness, and extent of resources available. In this respect, the research approach offers a valuable means to capture the distinctive social purpose sector setting to illustrate the multidimensional nature of social purpose activities. The solutions incorporating the different conditions highlight that the approach is able to identify equifinality in the relationships between organisational attributes and capability. In other words, organisations can "reach the same final state, from different initial conditions and by a variety of different paths" (Katz & Kahn, 1978: 30). In this way, it is believed that the study contributed to developing a framework for organisational evaluation that is more generic, and that is consistent with the contemporary view of social purpose organisations as flexible and individualised, and is less dependent on government funding for specific practices or innovations.

Third, the configurational-based modelling strategy enabled an examination of whether or not the performance effects of social purpose organisations are conditional on the presence of other factors (Fiss, 2011), in particular, the different manifestations of organisational participation and social innovation as reflected in

the definition of social purpose organisations. This enabled an accommodation of the complex relationships that may arise between an organisation's different forms. The results suggest that there are multiple configurations that can lead to high and low capability, and so the relationship is subject to asymmetry (see: Fiss, 2011; Ragin, 2008). In all, the findings of asymmetry and equifinality (for both high and low capability) contributes to the long-running debate on the heterogeneous nature of interventions and context (Midgley et al., 2013), where the study of the impact of interventions has been dominated by scholars of the expectancy theory approach (Bell et al, 1988) and by decades of debating the question of multiplicative versus additive value usage. The core finding attests to the importance of taking a more holistic approach, as advocated by Cook and others (Cook, 1973; Jackson, 1997; Midgley & Ochoa-Arias, 2004), to understanding the relationship between organisational practices, stakeholder/beneficiary participation and organisational outcomes - one that also takes account of the context within which an organisation is situated.

In terms of the practical implications of the study, a constituency within the OR field has demonstrated how OR processes can transform social relations, focusing on processes of deliberation in the organisational space (Jackson, 1987; Taket and White, 1997; Boyd et al, 2007; Keisler et al, 2014; Midgley & Ochoa-Arias, 1999; Mingers & Rosenhead, 2004). OR scholars concur that participatory processes and co-production are two activities that aim to bring about more equitable relationships between stakeholders, through involved conversation and consensus-building among different users, resulting in more inclusive intervention scenarios (Mingers & Rosenhead, 2004). Reflecting on the previous point about social innovation, it is observed that scholars of participatory OR processes and Community OR suggest that participatory OR processes can produce more meaningful innovations or practices that more closely reflect the needs of different users (Taket & White, 1997; Boyd et al, 2007; Keisler et al, 2014; Midgley & Ochoa-Arias, 2004). They argue, in addition, that participatory processes can be the means to achieve wider social transformation, locating the opportunity created by the intervention as the medium through which social processes occur and have the possibility to be magnified (Taket & White, 1997; Midgley & Ochoa-Arias, 1999; Liebl, 2007). Cook saw great

possibilities in the participation of beneficiaries through Community OR, and argued that the level of social value and well-being might be increased by participation (Cook, 1973). Interestingly this also builds on Ackoff's (1970: 770) perspective, when he claims that he "knows of no better way to develop such skills than by the democratic process of giving collective control over an authority to those who are individually controlled by that authority. Such control can even be built into bureaucracies by use of participative-management schemes. Such schemes have been suggested by many but tried by few." As Foucault suggests, practices and interventions can resolve social problems if they coincide "with the real practice of people in their exercise of their freedom" (quoted in Rabinow, 1991: 246). In much the same way, Sen's capability approach requires many more value choices to be made explicitly—whether by institutions that can be publicly scrutinised, by participation in community focused meetings, or by public debate—rather than relying on the market. These points also relate to Community OR practice that seeks the widest participation, i.e., of all those affected by the decision situation.

Finally, the paper set out to show Cook's legacy, in that the aggregation of his work forms a complex of ideas and values which has helped shape the direction of Community OR (Cook, et al., 1984), and has set out the conditions of possibility for widening the scope of the subject, while, at the same time, staying true to the spirit of some of the founders of the discipline. It is highlighted that the capability approach and much of the activities of Community OR are in his debt.

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References

Ackoff, R. L. (1970). A black ghetto's research on a university. *Operations Research 18*(5), 761-771.

Ackoff, R. L. (1974). The social responsibility of operational research. *Journal of the Operational Research Society*, *25*(3), 361-371.

Alkire, S. (2002). *Valuing Freedoms: Sen's Capability Approach and Poverty Reduction*. Oxford University Press, New York.

Alkire, S. (2005). Why the capability approach?. *Journal of human development*, *6*(1), 115-135.

Anheier, H. K., & Seibel, W. (Eds.). (1990). *The third sector: Comparative studies of nonprofit organisations*. DeGruyter, Berlin and New York:

Ansari, S., Munir, K., & Gregg, T. (2012). Impact at the 'bottom of the pyramid': The role of social capital in capability development and community empowerment. *Journal of Management Studies*, *49*(4), 813-842.

Austin, J. Stevenson, H. Wei-Skillern, J. (2006) Social and Commercial Entrepreneurship: Same, Different, or Both? *Entrepreneurship Theory and Practice*, *30*(1), 1-22

Bajgier, S. M., Maragah, H. D., Saccucci, M. S., Verzilli, A., & Prybutok, V. R. (1991). Introducing Students to Community Operations Research by Using a City Neighborhood As A Living Laboratory. *Operations Research*, *39*(5), 701–709.

Ballet, J., Dubois, J. L., & Mahieu, F. R. (2007). Responsibility for each other's freedom: agency as the source of collective capability. *Journal of Human Development*, *8*(2), 185-201.

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on psychological science*, *1*(2), 164-180.

Banke-Thomas, A O. Charles, A. Madaj, B. Van den Broek, N. (2015) Social Return on Investment (SROI) methodology to account for value for money of public health interventions: a systematic review. *BMC Public Health*, *15*(1), 582.

Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organisations: The case of commercial microfinance organisations. *Academy of Management Journal*. *53*(6), 1419-1440.

Beer, S., 1966. Decision and Control: The Meaning of Operational Research and Management Cybernetics. John Wiley & Sons, Chichester.

Befani, B. (2013). Between complexity and generalization: Addressing evaluation challenges with QCA. *Evaluation*, *19*(3), 269-283.

Bell, D. E., Raiffa, H., & Tversky, A. (1988). *Decision making: Descriptive, normative, and prescriptive interactions*. Cambridge University Press, Cambridge.

Belton, V., & Stewart, T. J. (1999). *DEA and MCDA: Competing or complementary approaches?* (pp. 87-104). Springer, Dordrecht

Black, J. A. & Boal, K. 1994. Strategic resources: Traits, configurations and paths to sustainable competitive advantage. *Strategic Management Journal*, *15*(S2), 131–148.

Blanchflower, D. G., & Oswald, A. J. (2011). International happiness: A new view on the measure of performance. *The Academy of Management Perspectives*, *25*(1), 6-22

Borzaga, C., & Bodini, R. (2014). What to make of social innovation? Towards a framework for policy development. *Social Policy and Society*, *13*(3), 411-421.

Boyd, A., Geerling, T., Gregory, W. J., Kagan, C., Midgley, G., Murray, P., & Walsh, M. P. (2007). Systemic evaluation: a participative, multi-method approach. *Journal of the Operational Research Society*, *58*(10), 1306–1320.

Brinkerhoff, J. M. (2002). Government–nonprofit partnership: a defining framework. *Public administration and development*, *22*(1), 19-30.

Cabinet Office (2009). *A Guide to Social Return on Investment*. Society Media, London.

Callon M, Lascoumes P and Barthe Y (2009). *Acting in an uncertain world: an essay in technical democracy*. MIT Press, Cambridge MA.

Chell, E. (2007) Social Enterprise and Entrepreneurship: Towards a Convergent Theory of the Entrepreneurial Process. *International Small Business Journal*, *25*(1**),** 5-26.

Chen, K. K., Lune, H., & Queen, E. L. (2013). How Values Shape and Are Shaped by Nonprofit and Voluntary Organisations The Current State of the Field. *Nonprofit and Voluntary Sector Quarterly*, *42*(5), 856-885.

Chesterton, K., R. Goodsman, et al. (1975). "Social-Responsibility of Operational Research - Comment." *Operational Research Quarterly,* 26(1), 91-95.

Christensen, C. M., Baumann, H., Ruggles, R., & Sadtler, T. M. (2006). Disruptive innovation for social change. *Harvard Business Review*, *84*(12), 94.

Cook, S. L. (1973). Operational Research, social well-being and the zero growth concept. *OMEGA, 1*(6), 647-667

Cook, S., M. Luck, et al. (1984). *The writings of Steve Cook: alternative futures, managerial innovation, education in O.R. and systems science*. Operational Research Society, Birmingham.

Cooke, B., & Kothari, U. (2001). *Participation: The new tyranny?* London, Zed Books.

Cornelissen, J., & Durand, R. (2012). More than just novelty: Conceptual blending and causality. *Academy of Management Review*, *37*(1), 152-154.

Cornwall, A. (2008). Unpacking 'Participation': models, meanings and practices. *Community Development Journal*, *43*(3), 269-283.

DeTombe, D. J. (2001). Compram, a method for handling complex societal problems. *European Journal of Operational Research*, *128*(2), 266-281.

Dey, C. Gibbon, J. (2011) Developments in Social Impact Measurement in the Third Sector: Scaling Up or Dumbing Down? *Social and Environmental Accountability Journal*, *31*(1), 63-72

Eden, C., & Jones, S. (1984). Using repertory grids for problem construction. *Journal of the Operational Research Society*, *35*(9), 779-790.

Eden, C., & Ackermann, F. (2004). Cognitive mapping expert views for policy analysis in the public sector. *European Journal of Operational Research*, *152*(3), 615-630.

Eden, C. and Ackermann, F. (2001), 'SODA and Mapping' in Practice' In: Rosenhead, J. and Mingers, J. (ed). Rational Analysis for a Problematic World, Wiley, Chichester. 43-60

Elkington, J. Emerson, J. Beloe, S. (2006) The Value Palette: A Tool for full spectrum strategy. California Management Review, *48*(2), 6-28.

Emerson, J (2000) The Nature of Returns: A Social Capital Markets Inquiry into Elements of Investment and The Blended Value Proposition. Social Enterprise Series 17. Harvard Business School, Boston.

Emerson, J. (2003). The blended value proposition: Integrating social and financial returns. *California Management Review*, 45(4), 35–51.

Fann, K. T. (2012). *Peirce's theory of abduction*. Springer, Dordrecht .

Fiss, P. 2007. A set-theoretic approach to organisational configurations. *Academy of Management Review*, *32*(4), 1180-1198.

Fiss, P. 2011. Building better causal theories: a fuzzy set approach to typologies in organisation research. *Academy of Management Journal*, *54*(2), 393–420.

Foote, J. L., Gregor, J. E., Hepil, M. C., Baker, V. E., Houston, D. J., & Midgley, G. (2007). Systemic Problem Structuring Applied to Community Involvement in Water Conservation. *The Journal of the Operational Research Society*, *58*(5), 645–654.

Frediani, A. A. (2007). Amartya Sen, the World Bank, and the redress of urban poverty: A Brazilian case study. *Journal of Human Development*, *8*(1), 133-152.

Friend, J. K., & Hickling, A. (2005). *Planning under pressure: the strategic choice approach*. Routledge, Amsterdam

Gasper, D. (2004). *The Ethics of Development*. Edinburgh University Press, Edinburgh

Glisson, C.A., & Martin, P.Y. (1980). Productivity and Efficiency in Human Service Organisations as Related to Structure, Size, and Age. *Academy of Management Journal*, *23*(1), 21-37

Greckhamer, T., Misangyi, V. F., Elms, H. & Lacey, R. 2008. Using qualitative comparative analysis in strategic management research: An examination of combinations of industry, corporate, and business-unit effects. *Organisational Research Methods, 11*(4), 695–726.

Gregory WJ and Romm N (2001). Critical facilitation: Learning through intervention in group processes. *Management Learning*, 32(4), 453-467.

Gregory, W. J., & Romm, N. (2004). Facilitation as fair intervention. In Midgley, G., & Ochoa-Arias, A. (Eds). *Community Operational Research: OR and Systems Thinking for Community Development* (pp. 157-174). Kluwer/Plenum, New York

Harlock, J. (2013) Impact measurement practice in the UK third sector: a review of emerging evidence. University of Birmingham. Third Sector Research Centre. Working Paper 106

Hwang, H., & Powell, W. W. (2009). The rationalization of charity: The influences of professionalism in the nonprofit sector. *Administrative Science Quarterly*, *54*(2), 268-298.

Ibrahim, S., & Alkire, S. (2007). Agency and empowerment: A proposal for internationally comparable indicators. *Oxford Development Studies*, *35*(4), 379-403.

Jackson, M. C. (1987). Community operational research: purposes, theory and practice. *Dragon*, *2*, 47–74.

Jackson, M. C. (1991). *Systems Methodology for the Management Sciences*. Plenum, New York.

Johnson, M. (2016). *Decision science for housing and community development : localized and evidence-based responses to distressed housing and blighted communities*.: John Wiley & Sons, New Jersey.

Johnson, M. P. (2007). Planning models for the provision of affordable housing. *Environment and Planning B: Planning and Design*, *34*(3), 501–523.

Johnson, M.P. and K. Smilowitz. 2007. *Community-Based Operations Research*, in (T. Klastorin, Ed.) Tutorials in Operations Research 2007. Hanover, MD: Institute for Operations Research and the Management Sciences, p. 102 – 123.

Jones, S., & Eden, C. (1981). OR in the community. *Journal of the Operational Research Society*, *32*(5), 335-345.

Kahneman, D. Diener, E. Schwarz, N. (1999) Well-being: The Foundations of Hedonic Psychology. Russel SAGE Foundation. New York

Katz, D. & Kahn, R.L. 1978. *The Social Psychology of Organisations* (2nd ed.), New York: Wiley.

Keisler, J., Turcotte, D. A., Drew, R., & Johnson, M. P. (2014). Value-focused thinking for community-based organisations: objectives and acceptance in local development. *EURO Journal on Decision Processes*, *2*(3), 221–256.

Ketokivi, M., & Mantere, S. (2010). Two strategies for inductive reasoning in organisational research. *Academy of Management Review*, *35*(2), 315-333.

Keyes, C L M. (1998) Social Well-Being. *Social Psychology Quarterly*, *61*(2), 121-140.

Kirsh, D., & Maglio, P. (1994). On distinguishing epistemic from pragmatic action. *Cognitive Science*, *18*(4), 513-549.

Krisic, N. Hill, M J, Hanson, C. Soudée, N J. (2014) *Understanding Social Impact Practice a UK-FR perspective.* Impact and ValuESS cross border cooperation. South West Forum. Réso Solidaire and Adess Brest. Exeter. Rennes.

Krlev, G., Bund, E., & Mildenberger, G. (2014). Measuring what matters—Indicators of social innovativeness on the national level. *Information Systems Management*, *31*(3), 200-224.

Kroeger, A., & Weber, C. (2014). Developing a conceptual framework for comparing social value creation. *Academy of Management Review*, *39*(4), 513-540.

Laouris, Y & Michaelides, M. (2017). Structured Democratic Dialogue: An Application of a Mathematical Problem Structuring Method to Facilitate Reforms with Local Authorities in Cyprus. *European Journal of Operational Research,* forthcoming

Le Grand, J. (1997). Knights, knaves or pawns? Human behaviour and social policy. *Journal of social policy*, *26*(2), 149-169.

LeRoux, K., & Wright, N. S. (2010). Does performance measurement improve strategic decision making? Findings from a national survey of nonprofit social service agencies. *Nonprofit and Voluntary Sector Quarterly*, *39*(4), 571-587

Liebl, F. (2002). The Anatomy of Complex Societal Problems and Its Implications for OR. *The Journal of the Operational Research Society*, *53*(2), 161–184.

Manetti, G. (2014) The Role of Blended Value Accounting in the Evaluation of Socio-Economic Impact of Social Enterprises. *Voluntas*, *25*(2),443–464.

Maas, K., & Liket, K. (2011). Social impact measurement: Classification of methods. In *Environmental management accounting and supply chain management* (pp. 171-202). Springer, Dordrecht.

Martin, R. L., & Osberg, S. (2007). Social entrepreneurship: The case for definition. *Stanford Social Innovation Review*, *5*(2), 28-39.

Martinetti, E. C. (2006). Capability approach and fuzzy set theory: description, aggregation and inference issues. In *Fuzzy set approach to multidimensional poverty measurement* (pp. 93-113). Springer, New York.

Meyer, A. D., Tsui, A. S. & Hinings, C. R. (1993). Configurational approaches to organizational analysis. *Academy of Management journal,* 36**,** 1175-1195.

Midgley, G., Cavana, R.Y., Brocklesby, J., Foote, J.L., Wood, D.R.R., Ahuriri-Driscoll, A., 2013. Towards a new framework for evaluating systemic problem structuring methods. *European Journal of Operational Research*, *229*(1), 143–154.

Midgley, G., & Milne, A. (1995). Creating employment opportunities for people with mental health problems: A feasibility study for new initiatives. *Journal of the Operational Research Society*, *46*(1), 35-42.

Midgley, G., & Ochoa-Arias, A. E. (1999). Visions of community for community OR. *OMEGA*, *27*(2), 259–274.

Midgley, G., & Ochoa-Arias, A. (2004). *Community Operational Research: OR and Systems Thinking for Community Development*. New York: Kluwer Academic/Plenum Publishers.

Midgley, G., & Reynolds, M. (2001). *Operational research and environmental management: a new agenda*. Operational Research Society, Birmingham.

Midgley, M., Johnson, M., & Chichirau, G. (2017). What is Community Operational Research? *European Journal of Operational Research,* under review.

Miller, D. 1990. Organisational configurations: Cohesion, change, and prediction. *Human Relations*, *43*(8), 771–789.

Mingers, J. and Rosenhead, J. (2002). Problem structuring methods in action. *European Journal of Operational Research 152*(3), 530-554

Montgomery, A. W., Dacin, P. A., & Dacin, M. T. (2012). Collective social entrepreneurship: Collaboratively shaping social good. *Journal of Business Ethics*, *111*(3), 375-388.

Mulgan, G. (2006). The process of social innovation. *Innovations*, *1*(2), 145-162.

Mumford, M. D. (2002). Social innovation: ten cases from Benjamin Franklin. *Creativity research journal*, *14*(2), 253-266.

Mustafa, H (1994). Conflict of Multiple Interests in Cost-Benefit Analysis. *International Journal of Public Sector Management*, *7*(3), 16-26.

Nevile, A. (2009) Values and the Legitimacy of Third Sector Service Delivery Organisations: Evidence from Australia. *Voluntas*. *20*(1), 71-89.

Nicholls, A. (2009) 'We do good things, don't we?': 'Blended Value Accounting' in social entrepreneurship. *Accounting, Organisations and Society, 34*(6) 755–769

Nicholls, A., & Murdock, A. (2012). The nature of social innovation. In Nicholls & Murdock, (Eds), *Social innovation* (pp. 1-30). Palgrave Macmillan, London

Nussbaum, M., & Sen, A. (1993). *The quality of life*. Oxford University Press., Oxford.

Ochoa-Arias, A. E. (2004). An interpretive systemic exploration of community action in Venezuela. In Midgley, G., & Ochoa-Arias, A. (Eds). *Community Operational Research: OR and Systems Thinking for Community Development* (pp. 275-296). Kluwer/Plenum, New York.

Parry, R. and J. Mingers (1991). Community Operational-Research - its context and its future. *OMEGA*, *19*(6), 577-586.

Pearce, D. (1998). Cost benefit analysis and environmental policy. *Oxford review of economic policy*, *14*(4), 84-100.

Phillips, L. D. (1984). A theory of requisite decision models. *Acta psychologica*, *56*(1-3), 29-48.

Phills, J. A., Deiglmeier, K., & Miller, D. T. (2008). Rediscovering social innovation. *Stanford Social Innovation Review*, *6*(4), 34-43.

Poister, T. H., (2003). *Measuring Performance in Public and Nonprofit Organisations*, Wiley, Chichester.

Polonsky, M J. Grau, S L (2008) Evaluating the Social Value of Charitable Organisations: A Conceptual Foundation. *Journal of Macromarketing*, *28*(2), 130-140

Public Administration and Constitutional Affairs Committee, (2016) *The collapse of Kids Company: lessons for charity trustees, professional firms, the Charity Commission, and Whitehall*, HMSO, London

Ragin, C.C. 1987. *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies*. Berkley, CA: University of California Press.

Ragin, C.C. 2008. *Redesigning Social Inquiry: Fuzzy Sets and Beyond*. University of Chicago Press, Chicago.

Rihoux, B. & Ragin, C.C. 2009. *Configurational Comparative Methods*. Sage, San Fransisco.

Ritchie, C. (1994). Community OR - five years of organised activities and beyond. *International Transactions in Operational Research*, *1*(1), 41–49.

Romm, N. R., & Hsu, C. Y. (2002). Reconsidering the exploration of power distance: an active case study approach. *OMEGA*, *30*(6), 403-414.

Rosenhead, J. (1986). Custom and Practice. *The Journal of the Operational Research Society*, *37*(4), 335–343.

Rosenhead, J. (1992). Into the swamp: the analysis of social issues. *Journal of the Operational Research Society*, *43*(4), 293-305.

Rosenhead, J., & Thunhurst, (1979) Operational Research and Cost Benefit Analysis: Whose Science? In C., Irvine, J., Miles, I., & Evans, J. (Eds)..*Demystifying social statistics,* Pluto Press, London.

Rosenhead, J., & White, L. (1996). Nuclear Fusion: Some Linked Case Studies in Community Operational Research. *The Journal of the Operational Research Society*, *47*(4), 479–489.

Sen, A. (1985). Wellbeing, agency and freedom: the Dewey Lectures 1984. *Journal of Philosophy*, 82, 169–221.

Sen, A. (1987). The standard of living. In G. Hawthorn (ed.), *The Standard of Living*. Cambridge: Cambridge University Press.

Sen, A. (1993). Capability and well-being. In Martha Nussbaum and Amartya Sen (eds), The Quality of Life. Clarendon Press, Oxford

Sen, A. (1999). *Development as Freedom*. Knopf,New York

Smithson, M. & J. Verkuilen. 2006. *Fuzzy Set Theory: Applications in the social sciences*. Sage, London

Sowa, J. E., Selden, S. C., & Sandfort, J. R. (2004). No longer unmeasurable? A multidimensional integrated model of nonprofit organisational effectiveness. *Nonprofit and voluntary sector quarterly*, *33*(4), 711-728.

Stiglitz, J. E. (2012). *The price of inequality*. Penguin, London.

Stiglitz, J., Sen, A., & Fitoussi, J. P. (2009). The measurement of economic performance and social progress revisited. *Reflections and overview. Commission on the Measurement of Economic Performance and Social Progress, Paris*.

Stone, M.M. & Cutcher-Gershenfeld, S. 2001. Challenges of measuring performance in nonprofit organisations. In Flynn, P. & Hodgkinson, V.A. (Eds.) *Measuring the Impact of the Non-Profit Sector*. Kluwer Academic/Plenum, New York.

Taket, A., & White, L. (1997). Wanted: Dead OR Alive—Ways of Using Problem-structuring Methods in Community OR. *International Transactions in Operational Research*, *4*(2), 99–108.

Thunhurst, C., & Ritchie, C. (1992). Housing in the Dearne Valley: Doing Community OR with the Thurnscoe Tenants Housing Co-operative. Part 2--An Evaluation. *Journal of the Operational Research Society*, *43*(7), 677–690.

Tuan, M T. (2008) Measuring and/or estimating social value creation: Insights Into Eight Integrated Cost Approaches. Bill & Melinda Gates Foundation Impact Planning and Improvement. Narberth.

Verkuilen, J. 2005. Assigning membership in a fuzzy set analysis. *Sociological Methods & Research*, *33(*4), 462-496.

Weisbrod, B A. (1975). Toward a Theory of the Voluntary Nonprofit Sector in a Three-Sector Economy. In E. Phelps, ed., Altruism, *Morality, and Economic Theory* (pp. 171-179). Russell Sage Foundation, New York.

White, L. (2002). Community matters: Community operational research work on health needs on the Stonebridge Estate. In Castell, A. M., Gregory, A. J., Hindle, G. A., James, M. E., & Ragsdell, G. (Eds.) (2002). *Synergy matters: working with systems in the 21st century* (pp. 361-366) Springer, New York.

White, L. (2003). The Role of Systems Research and Operational Research in Community Involvement: A Case Study of a Health Action Zone. *Systems Research and Behavioral Science*, *20*(2), 133–145.

White, L. A. (1994). Development options for a rural community in Belise - alternative development and operational research. *International Transactions in Operational Research*, *1*(4), 453–462.

White, L. (2006). Evaluating problem-structuring methods: developing an approach to show the value and effectiveness of PSMs. *Journal of the Operational Research Society*, *57*(7), 842-855.

White, L. (2016). Behavioural operational research: Towards a framework for understanding behaviour in OR interventions. *European journal of operational research*, *249*(3), 827-841.

White, L., & Bourne, H. (2007). Voices and values: Linking values with participation in OR/MS in public policy making. *OMEGA, 35*(5), 588-603.

White, L., & Taket, A. (1997). Beyond appraisal: Participatory appraisal of needs and the development of action (PANDA). *OMEGA,* 25(5), 523-534.

Wong, N., & Mingers, J. (1994). The Nature of Community OR. *The Journal of the Operational Research Society*, *45*(3), 245–254.

Yuchtman, E., & Seashore, S. E. (1967). A system resource approach to organisational effectiveness. *American Sociological Review*, *32*(6), 891-903.

Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, *24*(5), 519-532.