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**Evaluating social procurement: A theoretically informed and methodologically robust social return on investment (SROI) analysis of a construction training initiative developed to reduce the risk of youth homelessness in Wales.**

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**Abstract**

Despite widespread claims about the benefits of social procurement, there is little robust evidence that emerging social procurement policies are achieving their intended outcomes. Addressing this gap in research, this paper presents a case study of a theoretically informed and methodologically robust evaluative social return on investment (SROI) analysis of a construction training initiative developed in Wales to reduce the risk of youth homelessness. Utilising Sen's Capability Empowerment Approach, the results contribute to social procurement research by providing much needed empirical legitimacy to an under theorised field. Ensuring that new social procurement initiatives developed by the construction industry

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are theoretically and empirically sound is critical to ensure they are transparent, robust, testable, reliable and replicable in achieving the social outcomes they purport to deliver.

Key Words: Social procurement, social value, social impact, social return on investment (SROI), employment, young people, homelessness, corporate social responsibility

## **Introduction**

Social procurement involves the strategic use of purchasing to create social value (Barraket et al 2016). In the context of the construction industry, it involves procurers of construction services and products leveraging their construction supply chains to create social value as a condition of securing construction contracts (Loosemore 2016). Different countries adopt different approaches to social procurement. For example, the UK's voluntary and non-prescriptive Public Services (Social Value) Act 2012 requires government procurement authorities to explicitly evaluate the social value in construction contract tenders, where appropriate. Social value is defined through a series of five broad priority themes and eight related policy outcomes, which include: COVID-19 recovery; Tackling economic inequality; Fighting climate change; Equal opportunity; Wellbeing (Cabinet Office 2020). In contrast, Australia has developed a highly focused array of mandatory social procurement policies at the federal, state, local government and government agency level (Denny-Smith et al 2021). Canada and Sweden employ an approach similar to Australia, with policies which create employment requirements for specific disadvantaged groups (Dragicevic and Ditta 2016, Troje and Gluch, 2019). In Wales, where this research was conducted, pioneering legislation known as the Well-being of Future Generations (Wales) Act (2015) has been enacted to improve Wales's social, economic, environmental and cultural well-being (Future Generations Commissioner for Wales, 2021). The Welsh Government (2021) explains that the Act gives a

legally-binding common purpose detailing how public bodies must work to improve the well-being of Wales including when making decisions about procurement. More recently, the Social Partnership and Public Procurement (Wales) Bill has been introduced, which is likely to become law in 2023. This provides a framework to enhance the well-being of the people of Wales, including by improving public services through social partnership working, promoting fair work and socially responsible public procurement (Welsh Government, 2022). Welsh Parliament (2022) explains that the legislation will place a statutory duty on certain public bodies to consider socially responsible public procurement, to set objectives based on well-being goals and publish a procurement strategy.

Regardless of the policy approach, procuring authorities need to reliably evaluate social procurement tender submissions to ensure that the social value benefits claimed by a tendering contractor from its social procurement programs are likely to eventuate. To minimise the risk of contractors over-claiming, some countries provide detailed guidance to procuring authorities to assist in the tender assessment process. For example, the UK government have developed a social value model (Cabinet Office 2020), which provides a transparent and systematic approach to evaluating tenders for government works.

While such guidance is valuable, the problem for procuring authorities and tendering contractors is the dearth of prior empirical evidence of social impact of social procurement initiatives to draw from. With the exception of Bridgeman et al.'s (2016) and Watson and Whitely's (2017) SROI analyses and Loosemore et al.'s (2021) qualitative analysis of specific social procurement initiatives, empirical research relating to social procurement program design and evaluation is minimal. The field of construction social procurement, and the wider field of mainstream social procurement, is typified by highly anecdotal case studies

and is also under-theorised, which means there is currently no sound empirical and conceptual basis for assessing the social impact of initiatives being advanced (Barraket et al., 2016; Troje and Gluch 2019). This reflects a wider lack of theoretically informed research in construction management generally, especially focusing on employment and disadvantaged people (see Addis et al 2016). This lack of evidence and theory, coupled with a widespread lack of expertise in social impact measurement (Raiden et al., 2019), currently undermines the legitimacy of social procurement as an effective policy intervention for governments to address social disadvantage. It also prevents the practical and theoretical development of the field, inhibits innovation and learning between organisations responsible for implementing these policies and enables unscrupulous or innocently ignorant organisations to over-claim the social impact that they purport to deliver. This is worrying because as Loosemore et al. (2021) warn, if social procurement initiatives are poorly designed and have no underlying theory of change and evidence base, there is a real danger that they could do more harm than good to the already vulnerable people they are meant to help.

The aim of this paper is to address this critical gap in social procurement theory and evidence by presenting a case study of a theoretically informed and methodologically robust evaluative social return on investment (SROI) analysis of a construction training and employment program developed in Wales to reduce the risk of youth homelessness. The SROI methodology is employed because it is a widely used evaluation methodology within and outside the field of construction (Corbey, 2018; Watts, 2019; Raiden et al., 2019). However, despite the widespread use of the term ‘theory of change’ as one step in the methodology, few studies are underpinned by a theoretically robust methodology. The term ‘theory of change’ as it currently stands, is therefore deceiving and inaccurate. This research addresses this problem by incorporating a robust theoretical foundation into SROI analysis. It also

responds to Gosselin et al. (2020) and Ruiz-Lozano et al. (2020) call for more SROI analyses to be published in peer-reviewed contexts to enable learning and continuous improvement in social impact methodologies and programs. We focus on a youth homelessness initiative because it is a significant and growing social problem in many countries (Crisis, 2020, Australian Government, 2021). The health implications for young people of being homeless are profound. For example, in Wales, where this research took place, 4,085 households were identified as unintentionally homeless in 2022, an increase of 8% on the previous year (Welsh Government, 2022b). Research shows that homeless young people are especially vulnerable to sexual exploitation, mental ill health, harmful substance misuse and offending, with young people explaining they had re-offended because being in prison was a better option than being homeless (Bridgeman and Russell, 2020; Russell et al., 2019). In Canada, research has reported that 85.4% of young people experiencing homelessness had poor mental health, 42% had attempted suicide and 35.2% had suffered a drug overdose that required hospitalisation (Gaetz et al., 2016). In Australia, Flatau et al.'s (2016) report that young people make up forty-two per cent of the entire Australian homeless population, with fifty-three per cent reporting that they had been diagnosed with at least one mental health condition in their lifetime. As Qian et al. (2019) note, unemployment is one of the primary causes and consequences of youth homelessness. Nevertheless, although the construction industry is a significant employer of youth, there has been virtually no empirical research into the industry's contribution to reducing youth homelessness. Furthermore, Morton et al.'s (2020) found scant and inconclusive evaluative evidence of employment initiatives for young people experiencing homelessness.

### **The SROI methodology**

In recent years SROI has emerged as a popular and more accessible tool for organisations to measure and report social impact (Raiden et al., 2019; Watts, 2019; Maldonado and Corbey, 2018). SROI is a bottom-up approach which can be used in two main ways: to evaluate the ‘realised outcomes’ of completed activities, projects, or programs (an evaluative SROI); or to ‘predict’ the social value which could potentially be created by planned activities, programs, and projects (a forecast SROI). SROI aims to capture social, economic, and environmental changes that traditional accounting methods do not measure, adopting an interpretive approach which tells a ‘story of change’ from the perspective of those affected, combined with a monetary value ratio to represent changes (Nicholls et al. 2012, 2017). As Maldonado and Corbey (2018) note, most organisations only report the financial value they create for shareholders. The ‘social value’ created for other stakeholders are typically labelled as ‘qualitative externalities’ and are not widely assessed and reported (Glass 2012, Afzal et al 2017). When they are, this is typically done separately from financial results using cost-benefit analysis (CBA) techniques developed by economists to calculate the societal worth, utility or benefit of organisational activities.

Both CBA and SROI use money as a proxy for the relative value of outcomes. However, SROI differs from CBA in its consultative approach (which allows stakeholders to decide what outcomes are measured) and in its use of mixed qualitative and quantitative methods to collect and report social impact data. Unlike CBA, SROI only includes outcomes which are considered ‘material’ to key stakeholders and it requires external verification of results through independent assurance and other verification methods such as stakeholder consultation. Furthermore, while CBA tends to be undertaken by trained economists using econometric techniques such as randomised control trials at a high level of complexity and detail, SROI principles can be applied at any level of detail which is ‘proportionate’ to the decision and resources available. SROIs therefore can take many forms although they must

comply with the eight key principles of social value measurement developed by the SROI Network (Nicholls et al., 2012): involve stakeholders; understand what changes; value the things that matter; only include what is material; do not overclaim; be transparent; verify the result; and be responsive (Social Value International, 2021). The first seven principles were developed from social accounting and cost-benefit analysis to underpin how the six steps of SROI should be applied (Nicholls, 2012). For example, as the application of SROI is subjective, it is underpinned by the principle ‘be transparent’ throughout the analysis with each decision relating to outcomes, indicators and benchmarks needing to be explained and documented (Nicholls et al., 2012). The eighth principle, ‘be responsive’, has been recently added. Unlike the seven existing principles that aim to underpin an SROI analysis, this is a management principle and represents how organisations should respond to the analysis and embed social value in their organisation (Social Value International, 2022).

Underpinned by these eight core principles, an SROI analysis involves the six steps in Table 1, which were followed in this research. .

Table 1 SROI steps (Nicholls et al., 2012)

Step	Name	Description
1	Establish scope and identify stakeholders	The scope or boundaries of the project are defined and the main stakeholders are selected and involved.
2	Mapping outcomes	An impact map (theory of change or logic model) is developed, which depicts relationships between the activities involved in delivering a project/program, the inputs (resources needed to make those activities happen), outputs (quantitative results of the activity such as numbers of people employed or trained) and outcomes (the immediate, intermediate and long-term changes that will occur in rightsholders’ lives such as improved physical and mental health from employment).



3	Evidencing outcomes and giving them a value	Evidencing outcomes and giving them a monetary value by developing outcomes indicators (objective and subjective/self-reported), collecting outcomes data, establishing how long outcomes last, and putting a value on the outcomes based on research into publicly available sources of data and research or proprietary data banks. SROI explicitly uses assumptions and proxies, which estimate a monetary value associated with an outcome when exact measures are not available.
4	Establishing impact	Establishing the actual impact of a project or program by allowing for negative and positive outcomes and counterfactuals such as deadweight (what would have happened anyway), drop-off (reducing benefit over time), attribution (what else could have contributed to the change), displacement (opportunity costs for those involved), substitution (losses for others) and culture (cultural differences in perceptions of value). Again, this is based on publicly available or proprietary data and baseline studies with any assumptions being documented.
5	Calculate the SROI	The SROI (ratio) is calculated from a projection of the inputs and benefits over the project horizon and by using a discount rate to calculate the Net Present Value (NPV). The SROI ratio is then calculated by dividing the Net Present Value of Impact by the Net Present Value of inputs. An SROI ratio of 3:1 means that for every pound invested, the project will generate a social benefit of three pounds. Qualitative and descriptive evidence should accompany the SROI ratio to tell the story of change produced from the perspectives of those affected. Sensitivity analysis is undertaken to identify which estimates have the most significant impact on social returns, informing resource allocation to ensure continual improvement.
6	Reporting using and embedding	Verification of results and communication with stakeholders.

The main strengths of SROI have been associated with its holistic and bottom-up approach (Maldonado and Corbey, 2018). Proponents argue that compared to CBA, this enables managers and policymakers to understand more deeply how organisations contribute to fulfilling social goals from their beneficiary’s perspectives (Jackson and McManus, 2019; Watson and Whitley, 2017). Empowering stakeholders is essential in accommodating their varying notions of social value, which may be culturally dependent – such as for Indigenous peoples (Denny-Smith et al., 2021). SROI is also a useful communication tool, expressing social value in a common currency (money) and a language people understand. This provides

important legitimisation benefits, increasing transparency and supporting greater confidence in potential funders' outputs (Maier et al., 2015; Watts, 2019).

However, SROI has also been criticised for contributing only a symbolic business-like legitimacy which 'values measures' more than it 'measures value' (Maier et al., 2015). The SROI ratio and the use of financial proxies to monetise social impact have attracted criticism for reductionist approaches which reduce social value to monetary values and for oversimplifying and distorting social impact assessments. Gibbon and Dey (2011) and Maier et al. (2015) argue that SROI's utilitarian underpinnings (monetisation) are rarely questioned by decision-makers who uncritically accept that the best course of action is the one that maximises economic value and utility as expressed in the SROI ratio. While Lingane and Olsen (2004) and Nicholls et al. (2012) explain that an SROI analysis should also tell the story of change for the beneficiaries affected and while standardised proxy data bases such as HACT (2018) and New Economy Manchester (2018) have been developed to increase reliability of valuation, many social impacts are difficult to monetise and identifying appropriate financial proxies can be complex because reliable benchmark financial proxies are often not available (Arvidson et al., 2013; Maldonado and Corbey 2018).

In the field of construction, Raiden et al. (2019) also problematize the use of the SROI methodology, arguing that they are rarely theoretically robust (despite claiming to have a 'theory of change'). Furthermore, by reducing everything down to a single monetary value, SROI reinforces the commercial institutional logic of the sector which is at the heart of resistance to the implementation of social procurement in the first place (see Loosemore et al 2020). While SROI is attractive to policy-makers and managers because money is a common language and currency which provides accountability and everyone in business and

government understands, putting a capitalist face on social procurement could inadvertently undermine its impact by ignoring the many different ways in which intended beneficiaries perceive social value which may be at complete odds with the concept of financialization. See for example Denny-Smith et al's (2021) critique of Indigenous social procurement policies in Australia. While SROI is meant to be a consultative approach which involves stakeholders in the process of evaluation and monetisation, the danger in reducing social impact to a monetary value and ratio is that busy decision-makers tend to over-rely on it as a singular proxy for social value. There is also a tendency to wrongly assume the financial valuations and resultant SROI ratio can be used for comparing different projects. However, the lack of standardised methodologies and causal assumptions underpinning the SROI process make cross-program comparisons problematic and easily manipulated to magnify social outcomes (Arvidson et al., 2013; Maldonado and Corbey 2018, Raiden et al 2019). Other criticisms which can lead to over-claiming of social impacts revolve around data quality, availability, validity, reliability and transparency of assumptions and methods used, particularly in measuring and monetising soft outcomes (Watson and Whitley, 2017; Nicholls, 2017, Maldonado and Corbey, 2018). Hard outcomes refer to tangible results that can be quantified, measured and reliably monetised; they include participation in training, educational achievement and gaining employment. In contrast, soft outcomes are intangible and more challenging to observe, measure and monetise and include increased self-confidence, managing dysfunctional behaviours and feelings and self-discipline. In measuring soft outcomes, one is inevitably dealing with a range of people's perspectives about social value (both beneficiaries and researchers) which means there is inevitably some subjectivity in the process. McNeil et al., (2012) explain that these soft outcomes underpin young people's progress since soft skills are often deficient and are a pre-requisite for

achieving hard outcomes such as gaining employment. However, because they are hard to assess, they can often be ignored.

Finally, significant time and resources are needed to perform SROI studies in any detail, which can be a barrier for small organisations which dominate industries like construction and for the not-for-profit organisations which social procurement policies seek to support (Barraket et al 2016, Loosemore and Denny-Smith 2016, Watson and Whitley, 2017). The could lead to market distortions as smaller organisations are forced out of the market because they cannot meet the social procurement requirements being imposed on construction projects (see Loosemore et al 2022).

Despite the above criticisms, as Millar and Hall (2013) argue, SROI can be useful internally as a framework for organisational learning to examine what is and is not working and improve monitoring and management systems to help organisations analyse and improve services. The key to overcoming the above limitations and harnessing the strengths of SROI is to ensure that any analysis is based on a clear theory of change and research design where causal assumptions are transparent and theoretically sound and limitations acknowledged. To this end, the following section describes a theoretically informed evaluative SROI of a construction training program developed to reduce the risk of youth homelessness in Wales.

## **Method**

While we recognise the inherent limitations of generalisation associated with using a single case study approach (see Yin 2017), Flyvbjerg (2006) argues that the in-depth insights and high validity provided by good quality case studies can be highly valuable. This is especially in fields like social procurement which are in their exploratory stages of field development (see Loosemore et al 2022, Troje 2020). Referring to Yin (2017), the use of an in-depth

single case is appropriate is this study because the program being analysed is a unique or ‘atypical’ case of social procurement in the construction industry. Flyvberg argues that the value in such case study research is that “atypical cases often reveal more information [than other types of case studies] because they activate more actors and more mechanisms in the situations studied” (2001: 78). Furthermore, as Ruiz-Lozano (2020: 1) states in their single case study SROI analysis of a special education centre for disabled youths in Spain, single case studies “can serve as a reference in assessing the management processes of similar entities and can also highlight SROI usefulness for public administrations as an assessment tool for subsidies granted on social criteria”.

#### Case study description

The case study, set in Wales (UK), was a construction focussed training program called Symud Ymlaen/ Moving Forward (SYMF) which provided tailored and individualised packages of training, support and work experience for young people at risk of homelessness. The program was flexible based on the needs of the young person. Participants were put in different routes depending on how work ready they were. Route 1 if they were work ready, Route 2 if they were work ready and had a basic skills need and Route 3 if they were not work ready and needed pre-employability support before they could start a placement. Young people who are ‘care experienced’ and known to the youth justice system are at a higher risk of experiencing homelessness (Schwan et al., 2018). Research in the UK found that 22-33% of young people experience homelessness within a year of leaving care and a Canadian study found 57.8% of homeless youth had been in the child welfare system (Schwan et al., 2018). The construction industry provided work placements to young people on the SYMF program as part of their social value commitments on specific construction contracts and wider corporate social responsibilities.

To be eligible for the SYMF program, young people could not be in education, employment, or training (NEET), have had an experience of state care or the youth justice system and be at risk of homelessness. Of the 1,116 young people referred to the SYMF program 212 young people (19%) were homeless or living in temporary accommodation at the time of referral. Twenty-six week work placements were provided in several industries, including construction, retail, administration, mechanics, catering, etc. The pre and post-employment wrap-around and customised training and support provided by the program (such as mentoring, mock interviews, clothing and transport assistance, CV advice etc.) were designed to help participants overcome barriers to work, build positive and supportive social networks, gain essential workplace skills and confidence and provide on-going work-readiness support and mentoring, culminating in a twenty-six-week paid work placement. In total, 437 young people completed a work placement as part of the SYMF program, of which 52 were in construction.

#### Theoretical approach

To produce a theoretically sound SROI assessment of SYMF, the Capability Empowerment Framework developed by Sen (1985) and Nussbaum (1993, 2000, 2011) was employed – see Table 2. The Capability Empowerment Framework was used based on the previous research of Tanekenov et al. (2018) who demonstrated the value of the Capability Empowerment Framework in the homelessness context. In particular, the value of using this approach is its ability to examine a multi-dimensional approach to meeting the complex support needs of people experiencing homelessness and supporting them into employment and its underlying premise that people’s risk of homelessness and associated unemployment is determined by structural disadvantage rather than a personal failure (Tanekenov et al. 2018). Building the capabilities in Table 2 can reduce these structural disadvantages.

Table 2: The Capabilities Empowerment Framework (Nussbaum, 2011)

Empowerment Domain	Capabilities
Life	Being able to live to the end of a human life of normal length, not dying prematurely, or before one's life is so reduced as to be not worth living.
Bodily Health	Being able to have good mental and physical health, including reproductive health; to be adequately nourished; to have adequate shelter.
Bodily Integrity	Being able to move freely in safety and security and having one's bodily boundaries treated as sovereign.
Senses, imagination and thought.	Being able to use imagination and thought freely in connection with experiencing and producing works and events of one's own choice, religious, literary, musical, etc.- informed and cultivated by an adequate education, literacy, and basic mathematical and scientific training.
Emotions	Not having one's emotional development blighted by fear and anxiety. Being able to have attachments to other things and people, to love and to grieve, to experience desire, gratitude and justified anger.
Practical Reason	Being able to engage in conceptions of good and critical reflection about the planning of one's life.
Affiliation	Being able to live with, socialise with and show concern for other humans, being allowed self-respect and non-humiliation, being treated equally as a dignified being and non-discrimination based on race, ethnicity, caste, religion and national origin.
Other Species	Being able to live with concern for and about animals, plants, and the world of nature
Play	Being able to laugh, play, to enjoy recreational activities.
Control over One's Environment: Political & Material	Being able to participate effectively in political choices and free speech and association. Being able to hold property rights on an equal basis with others; equal employment opportunities; freedom from unwarranted search and seizure; having access to human rights at work.

Source: Adapted from Nussbaum (2011: 103-105)

Utilising Sen's Capabilities Empowerment Framework in Table 2 as our conceptual framework, the following section describes the SROI methodology, which was used to explore the social value created by the case study program and the extent it built capabilities in youth which could potentially reduce the risk of continued homelessness in the future.

#### Data collection

In line with the recommended SROI methodology documented in Table 1 (Nicholls et al., 2012), data were collected using a mix of qualitative and quantitative methods and primary and secondary data.

#### *Focus group*

Professional stakeholders involved in the delivery of the SYMF program also participated in a one day long (8 hour) focus group workshop to develop an evaluative theory of change (Step 2 in Table 1) for the SYMF program. Workshop participants included: The SYMF project manager, The Deputy CEO of the Charity which ran the program, and the Head of the charity's education and learning programme); SYMF project lead and the Regional Manager of a Trust established to support youth in the construction sector. Participants in the focus group were selected as they were the operational managers of the program and as key informants could provide detailed insights and a broad overview of the program's inputs, activities, outputs and outcomes. As part of the process of developing the theory of change, practical issues were also discussed in the focus group, including inputs to the program, costs, and intangibles such as volunteer time and the time of construction industry staff. The theory of change created through the focus group workshop is presented as part of our results in Figure 1. It explains the intended path to impact from inputs through activities to outputs and



outcomes achieved and eventually impact. The data collection strategy and the evidence needed to evidence each outcome were also discussed, notably the documentary analysis and interviews described below.

### *Semi-structured interviews*

First, semi-structured interviews were conducted with ten young people (Table 3) who purposefully sampled because they had undertaken construction work placements in the SYMF program and were willing to consent to be interviewed (19.2% of the sampling frame which had undertaken construction work placements). All had experienced homelessness; some lived in temporary accommodation at the time of the interview and resided in various rural, town and city areas.

**Table 3: The Sample**

	Gender	Age at referral	Geographical Area	Eligibility Requirement	Housing Status at referral	Placement Provider	Outcome
1	Male	18	Southeast Wales	Known to Criminal Justice Sector (CJS)	Homeless (supported housing)	Civil engineering	Retained by employer
2	Male	18	Southeast Wales	Known to CJS	Independent housing	Construction social enterprise	Completed placement & progressed to a civil engineering apprenticeship
3	Male	17	Southeast Wales	Known to CJS	Independent housing	Roofing	Progressed to an apprenticeship

							with a placement provider
4	Male	16	Southeast Wales	Care experienced	Homeless (supported housing)	Plumbing	Progressed to an apprenticeship with a placement provider
5	Male	18	Southeast Wales	Care experienced	Homeless (supported housing)	Housing maintenance	Retained by employer
6	Male	17	North Wales	Care experienced & known to the CJS	Homeless (supported housing)	Plumbing	Became street homeless during placement & was unable to continue
7	Male	16	Southeast Wales	Care experienced & known to the CJS	Independent housing	Building contractors	Project complete working towards opportunities in rail.
8	Male	17	Southwest Wales	Care experienced & known to the CJS	Homeless (supported housing)	Housing maintenance	Retained by employer
9	Male	16	Southeast Wales	Care experienced & known to the CJS	Homeless (supported housing)	General construction	Exited project due to a chaotic lifestyle
10	Male	18	North Wales	Care experienced	Homeless (supported housing)	Roofing	Project complete secured employment in care.

Semi-structured interviews were used to collect data from these participants because they provided flexibility for the researcher and participants to move outside narrow question frames. As Keene et al. (2016) note, allowing people to tell their stories in their own way is a powerful method for researchers and respondents to collectively make sense of complex

interconnected social concepts such as those in Table 2, which can be difficult to describe through more structured methods like surveys. Recognising the importance of trust in undertaking research with vulnerable, disempowered populations (Schelbe et al., 2015), semi-structured interviews also empowered our respondents and gave them a voice in the research process. The interviews were facilitated by researchers from the charity which ran the SYMF program and were undertaken in locations nominated by the interviewees. The semi-structured interview questions covered each of the capability domains listed in Table 2. Researchers working on the programme conducted the interviews. All data had been completely and robustly anonymised by researchers working at the homelessness organisation that ran the project. Ethical review and approval were unnecessary as all data had been robustly anonymised.

#### *Documentary data*

In addition to the ten interviews, various documents relating to each program participant in the construction pathway (N=52 background and progress before, during and after the SYMF program) were analysed. This documentary data was used for all participants in the SYMF program and represented how the progress of all participants in the program was captured.

Documents included:

- A referral and risk assessment completed by a referral agency (job centre, care teams, probation/police) or young person (if self-referred) describing the young person's background and support needs (justice or care-experienced, accommodation status, basic skills, mental health and risks of alcohol or substance misuse etc.). This provided a baseline on the participant's background history and capabilities across the capability empowerment approach.

- An interview assessment captured more details about each young person's communication, literacy, numeracy, ICT, and employability skills, enabling transition into various employment pathways with different levels of training and support. This included information on eligibility and a skills check.
  - A soft outcomes interview assessment to capture distance travelled on a Likert Scale across a range of categories such as healthy relationships with friends and family; ability to sustain a tenancy; money management; plans for the future; confidence and self-esteem and physical health. This contained supporting comments for young people to report on their progress throughout the program.
  - A personal development plan (PDP) for each young person is completed regularly in an interview covering prior learning experiences and progress against life and employability skills goals. This documented young people's aspirations, preferred learning styles and choice of occupation. PDP reviews captured young people's progress towards goals and accreditations.
  - Each person completes a participant pathway form regularly to assess employment pathway progress and additional support needed. This recorded a change of pathway for a young person.
  - An employment monitoring form was completed by a SYMF staff member, work placement provider and the young person to monitor work performance.
  - An exit evaluation was completed when they finished the program or exited early, which recorded whether they had achieved their PDF goals and progressed into employment, education, or training.

*Publicly available information*

Various sources of publicly available data were also used to underpin the SROI analysis – specifically, the theory of change (Step 2 in Table 1) and the proxies used to value the outcomes (Step 3 in Table 1). This is explained in more detail in the results section below. Where financial proxies have been used, they have also been underpinned by primary data from the charity's internal evaluation and the funder's external evaluation of the program (Tamburello and Morris, 2015; ICF, 2015), peer-reviewed academic research in Google Scholar, Scopus and the Web of Science (see Table 4 and 5 for the literature used to underpin the assumptions used in the SROI analysis). Relevant completed SROI studies can also be a reliable data source when they have been externally accredited and are of sufficient quality. Therefore, only SROI reports in s such as Social Value UK (2021) HACT (2018) and New Economy Manchester (2019) have been used as a source for financial proxies to inform this study. Before using databases such as the HACT Value Bank it was considered how they arrived at their financial proxies to ensure they were valid. For example, HACT & The SROI Network (2015) explored the linkages between the SROI methodology and the HACT, social value bank, explaining that the social value bank uses a wellbeing valuation an approach used by the UK Government in its Green Book Guidance. This employs average values of predetermined outcomes to understand the value of subjective changes such as improved wellbeing. Gosselin et al. (2020) explain that the HACT value bank uses the results of national surveys to identify different variables; these can include an increase in confidence or an improvement in health to discover the amount of money needed to achieve the same change.

## **Results**

The mix of qualitative and quantitative and primary and secondary data described above was analysed following the established six-step approach to SROI analysis documented in Table 1. The outcomes achieved in the evaluative theory of change and the interview and documentary data were mapped against Nussbaum's capability empowerment framework in Table 2 to identify the outcomes listed in Table 4 that were valued as part of the SROI analysis and the chain of events and underpinning literature that underpinned each outcome that was selected in table 5. These are discussed in more detail below in relation to each of the domains within Nussbaum's capability empowerment framework in Table 2.

### **Step One: Setting the Scope and Consulting Key Stakeholders**

The scope of this evaluative SROI analysis is a sample of ten young people in Table 3 who participated in the construction pathway of the SYMF program. Purposive quota sampling was chosen as the sampling method for the study. Quota subgroups were chosen so that the sample would be representative of the project population: eligibility and the area of Wales they were referred to the SYMF program from (south east, south west, mid and north Wales). Details of the sample are listed in Table 3. This evaluation is based on the range of primary and secondary data described above.

### **Step Two: Mapping Outcomes**

A theory of change (Figure 1) was developed through the focus group process described above. It illustrates the building blocks that enable the SYMF program to reach its intended outcomes, as defined in Table 1.

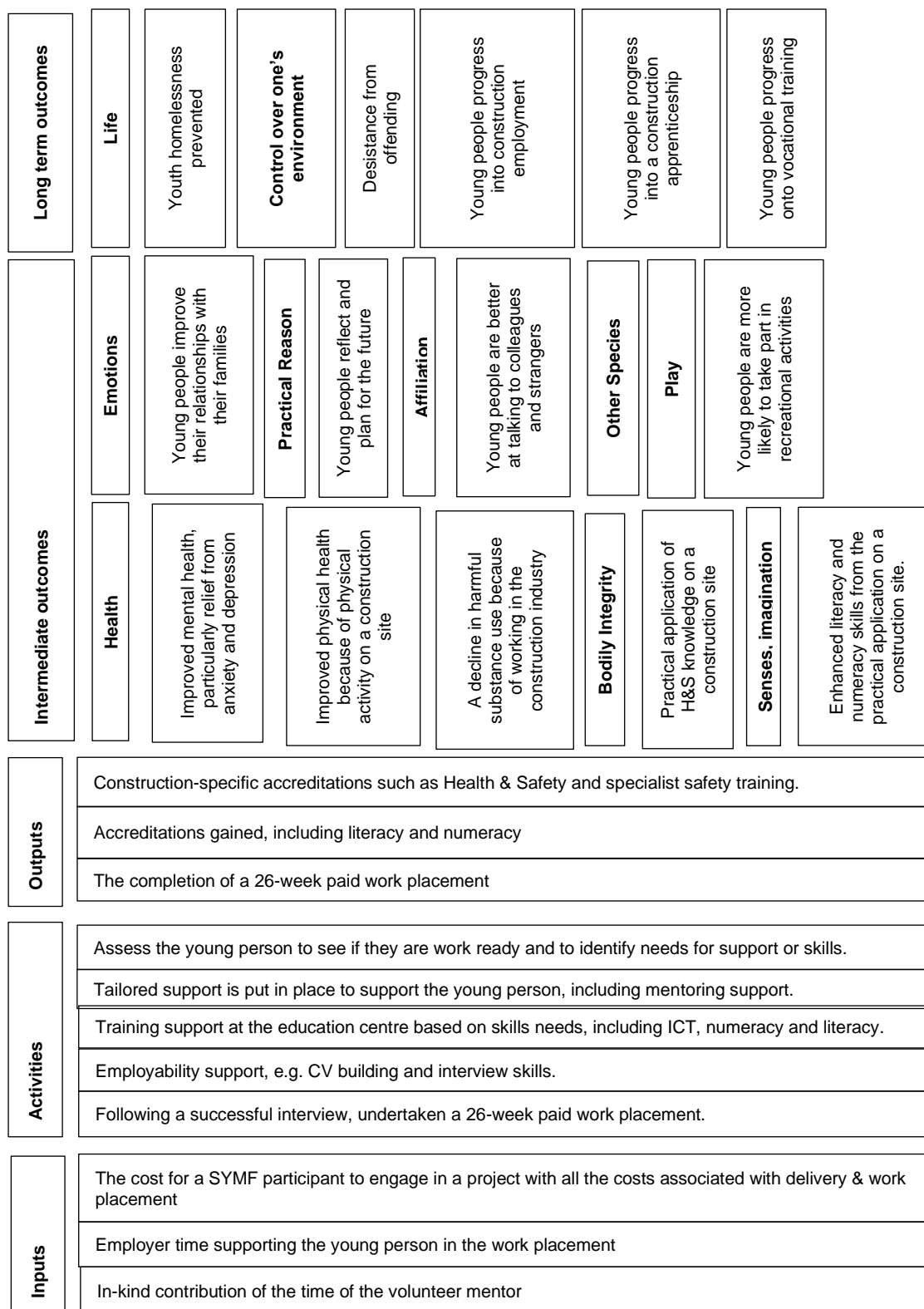


Figure 1 Caption: Theory of Change for the SYMF Programme



Figure 1 ALT Text: The Theory of Change for the SYMF program. The theory of change shows all the stages of the SYMF program needed to reach the intended outcomes. Listing the inputs and activities needed to achieve the outputs, intermediate and long-term outcomes. Following Nicholls et al. (2012), focus group participants identified and valued the ‘inputs’ of the SYMF program as the costs of pre-employability support and work placements, the in-kind contributions of volunteer mentors, and the time of construction industry employers. The cost of pre-employment support was valued as a paid 26-week work placement per participant (£13,477), totalling £134,770 for all ten participants. Volunteer mentors’ time on the SYMF program was valued at £3,081 (£11.85 p/h a week for 26 weeks, £308.1) for the ten participants in the sample, assuming one hour of mentoring support a week for 26 weeks. Each young person needed significant extra supervision on a construction site which was valued at the cost of staff time for the first six months of an apprenticeship - £3,292 (Hogarth et al., 2012).

### Step Three: Evidencing Outcomes and Giving them a Value

The semi-structured interview data with program participants was analysed to identify program outcomes for participants using deductive thematic analysis based on a Capabilities Empowerment framework in Table 2 and using thematic analysis protocols described by Guest et al. (2012) and Gioia et al. (2013). This first involved the researchers immersing themselves in the data by repeatedly reading the interview transcripts and documentary data to obtain a high level of familiarity with the data. Second, researchers conducted directed (deductive) coding, organising, and generating an initial list of items/codes (first-order coding) from the data-set that using the analytical framework in Table 2. Third, researchers searched for recurring patterns, linkages, categories, and subcategories within the first-order

codes relating to each domain in Table 2. Forth, researchers examined how codes combined to form over-reaching themes. Any instances of disagreement were resolved through discussion, a process which continued until 100% inter-rater agreement was achieved, providing a high level of 'fit' with the data and confidence in the theoretical validity of the emergent themes. Tables 4 and 5 summarise the indicators and values attributed to each Capability Empowerment domain in Table 2 which are explained in more detail below with selective quotations from the interviews and documentary data to illustrate how the coding worked.

While participating in the SYMF program led to positive outcomes for most participants, two young people left the project early (see Table 3 for the sample). Participant 6 became street homeless when completing the work-experience element of the program. He was supported by SYMF staff to access a supported housing project. Unfortunately, he did not continue on the program. Only one change has been valued for him, which is practical reason: the ability to plan for the future. His PDP Reviews and Exit Form showed growth and ability to plan for the future. Participant 9 exited the program due to a chaotic lifestyle. His exit interview showed he was hopeful for the future, wanted to work on the rails, and was taking the practical steps to get there. SYMF staff provided him with post-program support and he was successful in securing vocational construction training.

### *Life Domain*

In interviews, nine young people said that their housing situation had improved or stabilised since being involved in the SYMF program because of improved relationships and increased income, meaning they were at a decreased risk of homelessness (Schwan et al., 2018). For example, participant 5 explained that his life had changed since the project “*quite a bit, really. I got my own flat, so I moved out*”. DFCLG (2012) explains there are challenges in calculating the costs of homelessness partly because studies contain different groups of people experiencing homelessness, incurring different costs to the government. In finding the most appropriate financial proxy to value this outcome, after reviewing various studies in Tables 4 and 6 (e.g., DFCLG 2012, New Economy Manchester 2019, HACT 2018), the SROI of the Nightstop youth homelessness prevention service was used £26,000 (McCoy and Kempton, 2016). This proxy was chosen because it valued a reduction in youth homelessness and not adult homelessness. Young people experience homelessness differently than adults, they experience unique challenges and barriers and it will be more difficult for them to stay safe because of their age and developmental stage (Schwan et al., 2018). Therefore, as it was unclear whether other proxies were of adults or young people experiencing homelessness a proxy explaining the cost of youth homelessness was considered most appropriate.

### *Bodily health*

Research has demonstrated that homelessness is linked to a wide range of harmful physical and mental health impacts and that improved mental health can reduce homelessness risk (Youngbloom et al., 2021). After reviewing various studies in Table 4 (Le et al., 2021; Kimberlee et al., 2013, Suffolk County Council, 2016), when finding the most appropriate

financial proxy to value the mental health outcomes. In interviews, four participants reported improved mental health, particularly with anxiety (participants 1 and 2) and depression (participants 1, 9 and 10). For example, Participant 9 reported improved mental resilience and reduced anxiety because “*was in a good part of his life and '(could) deal with it if something went bad*”. When finding the most appropriate financial proxy to value this outcome , after reviewing various studies in Tables 4 and 5 (Frontier Economics, 2011; Murphy, 2020 etc.), the financial proxy of £9,926 was used to value relief from depression and anxiety based on an SROI of a program which aimed to support veterans with mental health issues, substance misuse and criminal justice and housing issues (Lloyd, 2018). This proxy was chosen because It had been used as a financial proxy to value an improvement in mental health in a National Health Service (NHS) SROI report in Wales, the same part of the UK where the SYMF program was delivered (Lloyd, 2018). This financial proxy is related to improved mental health based on estimated costs to the NHS in Wales.

Seven participants also reported improved physical health due to playing more sports, undertaking manual work on their work placement and sleeping better. Participant 1 explained that due to his new income, he now “*attended gym*” regularly and his sleep had improved so much that he went from “*not being a morning person*” to “*planning for sleep needed to work on-site*”. Participants identified improvements in physical health as an essential change after reviewing various studies as listed in Table 4 (HACT 2018, Kimberlee et al., 2013, Suffolk County Council, 2016); a proxy of £32 to value GP prescription costs was selected (New Economy Manchester, 2019). This proxy was selected because it valued a change that was important to participants, but it was a low value. As improved mental health had already been

used, there was a need to be conservative when selecting a proxy to value improved physical health.

Interviews showed that seven participants reported a decrease in harmful substance misuse. "*I had issues with drinking and drugs when I was homeless...I'm no longer addicted to anything*" (Participant 5). Nine participants also reported that the health and safety training and experience they received working on a live construction site helped them maintain their bodily integrity within and outside work. In finding the most appropriate financial proxy to value physical health outcomes, after reviewing various studies in Table 4 (Kimberlee et al., 2013; Davies et al., 2021), the HACT (2018) value of £2,507 of general work-related training was used to value this change and after reviewing various studies in Table 4 (Frontier Economics, 2011; Bradly and Bolas, 2013), The New Economy Manchester database (2018) was used of £4,215 to represent savings in health and social care due to reduced substance abuse. This proxy was chosen because it was the most conservative financial proxy that valued reduced harmful substance use. For example, Frontier Economics (2011) valued the costs of non-problematic drug use at £21,300 to £45,100. The proxy selected of £4,215 was initially in an SROI of a youth work program. While there may be higher costs of harmful substance use over time outcomes are being claimed for three years. Conversely, the HACT database values the relief from drugs and alcohol for a young person at £25,616. This was an important change as identified by participants but as mental health and physical health had been considered it was important to be conservative.

#### *Bodily integrity*

Research indicates that homeless young people are often pushed into remote and dangerous workplaces where they are at an increased risk of toxic exposure, injury, or death (Toolis and Hammack, 2015; McNaughton Nicholls, 2010). The PDPs of nine participants showed that they had received safety training, including control of hazardous materials. Participant 4 commented that he didn't know "*how harmful cement dust was and that it can cause a rash*". He now wears the appropriate PPE when mixing cement. In finding the most appropriate financial proxy to value bodily integrity after reviewing various courses for dealing with hazardous chemicals in Table 4 (Asbestos Training Ltd 2022), the HACT (2018) value was used £2,507 for general work-related training. This financial proxy was used to value training on sealing with hazardous chemicals in the workplace. This proxy was selected because it represented general work-related training. Other financial proxies considered were asbestos training and control of substances harmful to health (COSHH) courses (Asbestos Training Ltd. 2022; ARC, 2022c). General work related training was considered the most appropriate financial proxy based on the amount of support and training evident in PDP Reviews and interviews that young people received dealing with hazardous materials. One COSHH or asbestos awareness course would only partially represent the value of this change, especially with the amount of experience young people gained handling hazardous materials appropriately on a construction site.

### *Senses, imagination and thought*

Research indicates that youth homelessness is related to poor literacy and numeracy (Noble and Oseni, 2013). Our results indicated that nine participants gained accreditations in many subjects, including literacy, numeracy, communication skills and money management, as part

of the SYMF program. Participant 4 commented, "*I enjoyed learning new skills and getting better at maths and English on my work placement.*" In finding the most appropriate financial proxy to value literacy and numeracy skills, after reviewing various studies in Table 4 (Paterson-Young & Denny, 2020; Seaward, 2018), the HACT (2018) value bank a proxy of £484 to value employment training was used as PDPs showed that participants gained from developing their literacy and numeracy skills on a construction site. This proxy was chosen because the evidence from soft outcomes assessments and PDP Reviews demonstrated that young people valued being able to contextualize learning, particularly literacy and numeracy, on a construction site. There was no financial proxy around contextualized learning on a construction site. As Raiden et al. (2018) note, there is no database of financial proxies for the built environment. A HACT (2018) value of employment training was used as this valued employment skills training, while other financial proxies considered valued qualifications or basic skills courses (Paterson-Young and Denny, 2020: Seaward, 2018).

### *Emotions*

Research indicates that positive social connections and positive relationships are protective factors that can help prevent homelessness (Gaetz et al., 2019). Interviews revealed three participants had more positive relationships because of participating in the SYMF program. Participant 1 explained, "*(my family) thought I was a scumbag before I started this project*". After reviewing various studies in Table 4 (Knapp et al. 2011, HACT 2018), to select the most appropriate financial proxy to value improved family relationships. The cost of six family therapy sessions, £600, was used to value a parenting programme as it reduced anxiety and stress and improved family relationships (Barnardo's Cymru, 2017).. This proxy was chosen because it was the market cost of six family therapy sessions initially used in an SROI of a program that supported parents in dealing with negative situations more positively (Barnardo's

Cymru, 2018). This program is from the same part of the UK as the SYMF program. Family mediation and reunification are effective at diverting young people from temporary accommodation and show promise in homelessness prevention (Schwan et al., 2018). While family support and reunification are considered critically important in homeless prevention, the most conservative financial proxy was chosen of £600; for example, HACT (2018) suggest a proxy of £10,855 to be able to rely on family.

### *Practical reason*

Studies demonstrate that young people who have experienced homelessness constantly fear becoming homeless again and feel unable to make long-term plans (Gaetz et al., 2019). Interviews and analysis of participants' PDPs demonstrated improved critical reflection and planning in all ten participants' lives as a result of participating in the SYMF program. For example, Participant 9 commented that he was "*focusing on (his) future*" after reviewing various studies in Table 4 in order to select the most appropriate financial proxy to value this program (HACT 2018, Seaward 2018). Leathem and Bradley (2014) valued the outcome of reduced time wasted because of better career decisions valued at £1,316, the market value of a career development course; this was the financial proxy used to value this change. This proxy was chosen because the participants' PDPs showed that they were motivated to plan for the future and secure appropriate employment. Participant 2 explained that he was "*110% prepared to look for work.*" While participants did feel more in control of their lives, meaning the HACT (2018) value of £14,399 could have been used and had increased aspiration meaning the cost of a Prince's Trust £2,300 course to improve aspiration could have been used. The market value of a career development course was considered most appropriate as participants



demonstrated that they had developed the ability to plan for the future and make better career decisions.

### *Affiliation*

Research suggests that affiliations to peers, families, and meaningful adults, as well as connections to groups, neighbourhoods and communities, are important protective factors that can prevent youth homelessness (Gaetz et al., 2019). Eight participants reported improvements in the affiliation domain, participant 2 “*got on with colleagues*”, participant 3 “*met new friends and new people*” and participant 10 “*helped peers with work*”. For example, Participant 1 commented that “*his confidence had grown and he wanted to become a buddy and work with young people experiencing drug and alcohol problems*”. In finding the most appropriate financial proxy to value affiliation and increased connectedness to community, after reviewing various studies in Table 4 (Schoen et al., 2020; Kimberlee et al., 2013; Seaward, 2018), we used the HACT (2018) value of £740 to value reduced isolation as used by Barnardo’s Cymru (2018). This financial proxy was chosen because it was used initially in an SROI in Wales to value reduced isolation it represents the costs of a young person being a group member (Barnardo’s Cymru, 2018). Schoen et al. (2021) present an example of an SROI in the academic literature; they used a proxy of £8,500 to value reduced isolation and increased confidence at £3,500 in a study of a community garden. These were considered too high in this case. Conversely, Kimberlee et al. (2013) use the wage cost of a befriending service at £43.33 per participant; this was considered not too low to represent improved relationships with colleagues and strangers. While the costs of young people being in a social group would be similar in the same part of the UK.

### *Other species*

Connections with nature can provide opportunities for time away from the stress of homelessness (Peters et al., 2021). Bramley and Fitzpatrick (2017) argue that there needs to be more research on how the natural environment can alleviate poverty and potentially have a role in preventing issues like homelessness. However, only one participant in the SYMF program demonstrated an increased connection to nature as a positive outcome of the program. He explained this was because of the benefits of working outside because of his construction placement. Participant 2 explained *“I enjoyed being outdoors and seeing more parts of Wales.”* After reviewing various studies in Table 4 (Greenspace Scotland 2011, HACT 2018), a financial value has not been claimed for this output since the evidence of causation needs to be stronger. This does not necessarily mean that participants did not have a concern for nature it, might be that there was no change in their concern for nature as a result of the programme if they were already living in a rural area. Five out of ten of the young people in the sample lived in a rural area and this had been identified as a barrier to gaining employment. This proxy was selected because it was initially used by Bagnall et al. (2019) in an SROI analysis of a wildlife program. It is based on regular engagement in gardening as a hobby and seems an appropriate way to value nature-relatedness. Similarly, HACT (2018) values regular participation in gardening at £2,258. While this was not taken forward as part of the value to be calculated for the SROI of the SYMF programme, it is valuable. If the young people had not been from Wales, where even in towns and cities you are close to nature, this would need to be considered in a similar supported employment programme.

### *Play*

Studies suggest that play, particularly for young people, can help alleviate the stress caused by poverty and homelessness and help prevent feelings of being marginalised (Trussell and Mair, 2010). Two participants told us they were more likely to participate in recreational activities following the SYMF program. Participant 2 had joined a local martial arts group he explained that he had “joined a martial arts club, he was feeling good about it and he enjoyed the range of activities” and participant 9 had joined the football team at his supported housing project he commented “I started playing football, so I met a few people and it felt quite good.’. When selecting the most appropriate financial proxy to value play and participating in recreational activities, after reviewing various studies in Table 4 (HACT 2018, Davies et al. 2021; Seaward, 2018), The HACT (2018) database value of attending a youth club at £2,464 was chosen as a proxy to value this change. This proxy was chosen because it valued youth work and being a member of a club. While participants had identified that they had joined sports teams or organisations and a proxy could have valued participation in sport, e.g. HACT (2018) valued a young person playing football and £4,942. However, this change was about participating in recreational activities rather than sporting ones and improvements in health had already been valued in this study.

### *Control over one’s environment*

Axe et al. (2020) suggest that the income generated from employment not only acts as an economic stabiliser but also increases desistance to reoffend and improves housing security. In total, four participants secured employment and three went into an apprenticeship. Participant 1 described that his work placement provider was “*getting him an apprenticeship because (he wanted) to do carpentry.*” Participant 5 explained that he “*had been employed, (he had) got a*

*full time job out of it with the maintenance team.*” Participant 8’s work placement took him on full-time they said he was *“the best placement they had ever had off any program.”* In finding the most appropriate financial proxy to value entering employment, after reviewing various studies in Table 4 (HACT 2018, ONS 2016, Every 2012), the cost savings of decreased welfare benefits (Job Seekers Allowance £4,112.64, (Gov UK 2021a and Local Housing Allowance, Welsh Government 2021) and the increased income of minimum wage (GOV.UK 2021b, MSE 2021) £8,483 was used to value the change of gaining work totalling £15,325.64. After reviewing various sources in Table 4 (Hogarth et al. 2012, HACT 2018), to value an apprenticeship, the hourly minimum wage rate for an apprentice was used at £3.90 (Gov.UK, 2021b). This proxy was chosen because it is based on UK Government (2021a, 2021b) unemployment benefits and minimum wage for both an employee and an apprentice and Welsh Government (2021) housing benefit. This is the minimum a participant would earn and the benefits they would forego by being in employment. Every (2012) used the same method to value the tenants of a housing association entering employment, but these have been updated and, where necessary, include figures on Welsh benefits.

Two participants did not secure employment following the SYMF program but were both accessing vocational training. Participant 7 did not get offered full-time employment but signed up for a carpentry course and participant 9 enrolled on a railway training course. Participant 7 commented that he *“enjoyed working (for the) construction company he had been doing painting, now he was doing carpentry (vocational training) and he was really enjoying it.”* After reviewing various studies in order to select the most appropriate financial proxy and the cost of vocational training courses in Table 4 (ARC Training 2022a, 2022b, New Economy Manchester 2019), the HACT (2018) value of £1,019 the value of training for young people was used to value this change. This proxy was chosen because it valued a move into vocational

training from the HACT (2018) database valued at £1,798. Although these two young people did not secure employment, their exit interviews demonstrated that they wanted to work in construction. They were taking the practical steps to get there and had enrolled on vocational training.

Finally, the documentary analysis showed that seven participants had been referred to the SYMF program because of involvement in the criminal justice system. At the end of the program, interviews and documentary data, including from referral agencies, provided evidence that four participants were less likely to reoffend and re-enter the justice system. For example, participant 1 commented, *"I am more sensible. I won't offend anymore. I am more aware of situations"*. After reviewing various studies to find the most appropriate financial proxy in Table 4 (Paterson-Young and Denny, 2020; Jardine and White, 2013), the 'average cost across all prisons, including central costs (costs per prisoner per annum)' from New Economy Manchester (2019) of £37,543, was claimed to acknowledge reduced strain on the prison system. This proxy was chosen because £37,543 was the average cost across all prisons per prisoner per year (New Economy Manchester, 2019) as the SYMF program prevented participants from entering the adult justice system. The young people at risk of re-offending were already known to the youth justice system. While youth justice costs were considered, such as Nevil and Lumley's (2011) cost to society for a prolific young offender of £80,000 a year and Patterson-Young and Denny's (2020) £9,823.67 the average cost of young offenders to the criminal justice system. The New Economy Manchester (2019) value was chosen because young people were already known to the youth justice system and the SYMF program prevented them from entering the adult system.

#### Step Four: Establishing Impact

Once the young people identify the changes that happened to them and the most appropriate financial proxy has been selected, impact needs to be established. These changes could have happened without the SYMF and need to be removed from consideration (Nicholls et al., 2012). Establish impact consists of calculating deadweight, attribution, drop-off, displacement and duration.

Deadweight refers to what extent young people would have got a job without the SYMF programme. We need to count all the people who engaged with the SYMF programme that would have got a job without the program. For example, HACT estimates a 15% deadweight for outcomes related to employment (HACT, 2018). Considering all the disadvantages SYMF participants face in the labour market, 15% is likely to be a conservative estimate of deadweight for all outcomes related to employment. There will be different levels of deadweight for different outcomes. In terms of deadweight, Participant 1 reflected when he stated that without the program, he would not have "*(got the opportunity) to do something with construction*". The HACT (2018) social value bank is increasingly used for benchmarking in SROI studies (see Bagnall et al. 2019) and employs a deadweight of 15% for all outcomes related to employment. After reviewing the evidence and young people's interviews, this was considered the appropriate benchmark to use.

Attribution refers to how much of an outcome must be attributed to other stakeholders, including other organisations and young people's families. In an SROI of Veterans Contact Point, they used an attribution rate of 40% as a median average of other SROI reports ranging

from 20% to 60%. As SYMF was a tailored employment project with wrap-around support. We will claim an attribution rate of 20%. Regarding attribution, there was evidence that friends and family supported participants in achieving outcomes. For example, participant 8's mother told SYMF staff before the program that she thought "he would never amount to anything' and was "*delighted with his progress*".

We considered claiming no drop-off because we have claimed employment outcomes for three years. However, if we were claiming for a more extended period, then drop-off would need to be considered as other factors would come into play. Tomorrow's People claimed a drop-off rate of 5%; to be conservative, we will also claim a 5% drop-off rate (Dattani and Trussler, 2011).

Displacement looks at whether our programme displaces another activity. SYMF was a unique project that met an unmet need to provide supported employment opportunities for young people furthest away from the labour market. The next best alternative to SYMF was likely to refer young people to SYMF to progress rather than becoming less viable or losing clients. However, Tomorrow's People uses a displacement rate of 20% because other programmes may become less viable or lose participants (Dattani and Trussler, 2011). However, displacement was not claimed because the SYMF program was unique and offered a much-needed progression route for young people rather than competing with other programs. If 20% displacement had been claimed this would have reduced the SROI ratio from £3.66 to £2.93.

The duration of each outcome is for three years because we tracked the young people for two years and we know they were either still in employment or completing an apprenticeship or training. The training and support element of the program was based on need, but typically lasted around six months, although it could be longer. The work placements lasted 6 months. Post-placement activities were built into the SYMF program; at the end of the placement, participants had an exit review and continued to be supported by mentors and SYMF staff. Monitoring was completed for two years after the construction placement had ended.



Table 4: Sources of data for financial proxies

<b>Empowerment Domain</b>	<b>Outcome</b>	<b>Financial Proxy Used</b>	<b>Financial Proxies Considered</b>
Life	Youth homelessness prevented	£26,000 Cost of youth homelessness (McCoy and Kempton 2016).	The costs of homelessness are £24,000 to £30,000 (DfLG, 2012). Cost to LA of a rough sleeper is £9,189 (New Economy Manchester 2019). Move from rough sleeping to secure housing for £24,467 (HACT, 2018).
Bodily health	Improved mental health	£9,926 Relief from anxiety and depression for an adult (Lloyd, 2018)	Relief from anxiety and depression for a young person aged under 25 £31,914 (HACT 2018). The cost of one person receiving secondary care psychiatric services is £10,927 (Kimberlee et al., 2013). The average annual cost of lost employment is £7,230 for someone with depression (Suffolk County Council 2016).
Bodily health	Improved physical health	£32 GP prescription costs (New Economy Manchester 2019)	Reduced GP attendance £452 (Kimberlee et al., 2013). Frequent mild exercise' at £2,130 and frequent moderate exercise at £3,729 (HACT 2018). Reduced risk of CHD/ stroke in active men and women by 30% £3,635 (Davies et al., 2021).
Bodily health	Reduced harmful substance use	£4,215 Based on reductions in drug-related offences and structured and effective social care treatment programmes Murphy (2020).	Costs of harmful substance misuse for non-problematic drug users are £21,300 - £45,100 (Frontier Economics, 2011). Relief for drugs and alcohol for a young person is £25,616 (HACT 2018). The average costs of non-problematic drug use, including health and crime, are between £21,300 and £45,100 over 20 years (Bradly and Bolas, 2013).
Bodily integrity	Knowing how to deal with hazardous	£2,507 The cost of general work-related training (HACT 2018).	Asbestos training for a new operative £594 (Asbestos Training Ltd. 2022). The Level 2 principle of the COSHH course is £65.00 (ARC, 2022c).

	chemicals in the workplace.		
Senses, imagination and thought	Improved basic skills	£484 The value of employment training HACT (2018)	Increased earning potential due to qualifications in English and maths £9,526,939 (Paterson-Young and Denny, 2020). Entry qualification is £12.50 and assessment at £16.00 for functional skills across all learners £28.50 (Paterson-Young and Denny, 2020). Better Basic Skills £622 cost of the course that builds an introductory course (Seaward, 2018).
Emotions	Improved family relationships	£600 The cost of six family therapy sessions (Barnardo's Cymru no date)	Being able to rely on family £10,855 (HACT, 2018). A group-based parenting programme is £952 and individual interventions are £2,078 (Knapp et al., 2011).
Practical reason	Improved ability to plan for the future	£1,316 The market value of a career development course Leathem and Bradly (2014),	Feeling in control of own life £14,399 (HACT 2018). Increased positive development £207.00 (Leathem and Bradly, 2014), Increase aspiration £2,300 Cost of Prince's Trust course to improve aspiration (Seaward, 2018).
Affiliation	Improved relationships with colleagues and strangers	£740 Being a member of a social group (Barnardo's Cymru no date)	Reduced isolation £8,500 (Schoen, 2020). Increased confidence and self-esteem £3,500 (Schoen, 2020). Reduced social isolation cost of befriending service (£6.19 minimum wage x 7) £43.33 per participant (Kimberlee et al., 2013). Improved ability to build new relationships £549 cost of course on building relationships personally and professionally (Seaward, 2018).
Other species	More engaged with the natural environment	Not taken forward to be valued. £847 Increase in nature relatedness (Bagnall et al., 2019).	Regular participation in gardening £2,258 (HACT 2018). The value of adult membership in an environmental organisation is £35.33 (Greenspace Scotland, 2011).
Play	A young person is	£2,464	Value of a young person playing football is £4,942 (HACT 2018).

	more likely to take part in recreational activities.	The value of attending a youth club (HACT 2018)	Higher subjective wellbeing as a result of sports participation £1,127 (Davies et al., 2021). Increased likelihood of participating in activities £78 average membership fee being in a sports club (Seaward, 2018).
Control over one's environment	Desistance from offending	£37,543 the 'average cost across all prisons, including central costs (New Economy Manchester 2019)	The cost to society of a prolific young offender is £80,000 a year (Nevil and Lumley, 2011). An SROI from Scotland used a range of proxies to value desistance from offending SROI the highest figure of £162,255 was made up of court costs, prison costs, treatment to victims and damage to property and costs to the offender, e.g., lost earnings and the lowest cost £33,244 is the average cost per prisoner in 2003-04 (Jardine and White, 2013). Reduced costs to the criminal justice sector of £9,823.67, the average cost of young offenders to the criminal justice system (Paterson-Young and Denny, 2020).
Control over one's environment	Secures employment	£15,325.64 Made up of:  £8,483 Minimum wage Gov.UK (2021a) £2,730 Shared Accommodation Rate (SAR) Welsh Government (2021) £4,112.64 Universal Credit (Gov. UK, 2021b).	The value of a young person from outside London moving from unemployment to employment is £13,702 (HACT 2018). Increased income due to wages and increased tax take and national insurance (NI) contributions. In the ONS (2016) Annual Survey of Household Earnings, the average weekly gross salary of an 18-21 construction worker in the UK in 2016 was £328.40. In the tax year 2015/16, this would equate to £17,077 annual gross pay, £14,699 take-home pay, National insurance £1,082 and tax paid £1,295 (MSE, 2022). The average weekly wage of £247.60 = £11,290.32 take-home pay per annum (Every, 2012).
Control over one's environment	Secures an apprenticeship	£15,325.64 Made up of: £8,483	The value of a young person from outside London moving from unemployment to employment is £13,702 (HACT 2018). Increased income due to wages and increased tax take and national insurance (NI) contributions. In the ONS (2016) Annual Survey of

		<p>Minimum wage Gov.UK (2021a) £2,730</p> <p>Shared Accommodation Rate (SAR) Welsh Government (2021) £4,112.64 Universal Credit (Gov. UK, 2021b).</p>	<p>Household Earnings, the average weekly gross salary of an 18-21 construction worker in the UK in 2016 was £328.40. In the tax year 2015/16, this would equate to £17,077 annual gross pay, £14,699 take-home pay, National insurance £1,082 and tax paid £1,295 (MSE, no date).</p> <p>The average weekly wage of £247.60 = £11,290.32 take-home pay per annum (Every, 2012).</p>
Control over one's environment	Enrolls in vocational training	<p>£1,019</p> <p>The value of training for young people (HACT 2018).</p>	<p>The Personal Track Safety (PTS) course costs £930 (ARC Training 2022).</p> <p>L1 H&amp;S in a Construction Environment with CSCS card and test £195 (ARC Training 2022b).</p> <p>NVQ Level 3 Qualification £597 – annual fiscal and economic benefits (New Economy Manchester, 2019).</p> <p>City &amp; Guilds Qualification £862– annual fiscal and economic benefits (New Economy Manchester, 2019).</p>



Table 5: Underlying Mechanisms

<b>Empowerment Domain</b>	<b>Chain of Events</b>	<b>Underpinning literature</b>	<b>Outcome</b>
Life	Young people access tailored education, training and support → identify goals and career paths → improve their relationship with families → access a paid work placement → secure sustainable employment → move into independent housing with the support of family or return home → youth homelessness prevented.	Hassanally and Miqdad (2018). Toolis and Hammack (2015), Tanekenov (2018), McCoy and Kempton (2016). DfCLG (2012), Schwan et al. (2018).	Homelessness prevented
Bodily Health	Young people have more opportunities in the labour market →, a lower prevalence of risk-taking behaviour, smoking, and alcohol consumption and a healthier lifestyle →, a reduction in poverty and financial anxiety, → increased social activity and participation.	Lloyd (2018) Schwan et al. (2018).	Improved mental health
Bodily Health	Completing work placement in a physically demanding role → Increased time doing physical construction activities → improved physical health.	Currie et al. (2012),	Improved physical health
Bodily Health	Completing a work placement in a more regulated industry where harmful substance use is not acceptable → drug testing on construction sites → young people decrease or stop using harmful substances.	Frontier Economics (2011). Murphy (2020), Bartlett et al. (2012)	Reduced harmful substance use
Bodily Integrity	Young people complete an H&S accreditation → they undertake a site visit → they have a site induction → they attend a daily toolbox talk → they complete a placement where they follow safe systems of work, including how to deal with hazardous chemicals in the workplace.	Bridgman (2001) United Nations (2019)	Follow safe working practices

Senses, imagination and thought	Opportunity to gain qualifications → overcome negative experiences of school → new challenges to use literacy, numeracy and ICT skills on a construction site → a sense of personal achievement.	Edidin et al. (2021), Gaetz and O’Grady (2013) and Schwan et al. (2018), McNaughton Nicholls (2010).	Improved basic skills
Emotions	Conversations about future → less conflict about future → better communication → less argument → young person can remain in or return to family → if unable to return home, the improved relationship makes sustaining a tenancy more likely.	Saini and Soni (2016). Canadian Homelessness Research Network (2013), Keats et al. (2012). Schwan et al. (2018).	Improved family relationships
Practical Reason	Identified learning targets to gain and succeed in a work placement → Received feedback from tutors, ELOs and employers (depending on the programme stage) and implemented feedback to achieve goals → improved own learning → improved ability to plan for the future.	Leathem and Bradly (2014). Bridgman (2001), Curry et al. (2013), Trypuc and Robinson (2009)	Improved ability to plan for the future
Affiliation	The opportunity to meet new people at the education centre and on work placement → complete classroom activities and work placement jobs → increased confidence in meeting new people → the ability to build new relationships.	Roberts et al (2015). Ivenson and Cornish (2016), Kidd (2009), Johnstone et al.(2016).	Better at forming relationships with colleagues and strangers
Other species	More opportunities to see more of Wales → learns about nature and sustainability → build bat boxes → experience working outside because of construction placement.	Bagnall et al. (2019). Batterham (2019), Roberts et. Al. (2015), Currie et al. (2001).	More engaged with the natural environment
Play	More willing to take part in recreational activities → more likely to join new groups → experiences increased positive competition → increased motivation.	Rutenfrans-Stupar et al. (2019), Tanekenov et al. (2018).	More likely to take part in recreational activities

Control over one's Environment	Engagement in employment and training → improved family relationships → more to lose if they offend → more positive peer associations → improved income → offending prevented.	House of Commons (2018), The Centre for Justice Innovation (2018), PWC (2017).	Desistance from crime
Control over one's Environment	Participation in SYMF → sets new goals → works towards new goals → improves employability skills → improves functional skills → improves vocational skills → increased confidence → successful at interview and gains a work placement → completes work placement → progresses into employment.	Loosemore (2016), Gaetz and O'Grady (2013).	Young person secures employment.
Control over one's Environment	Participation in SYMF → sets new goals → works towards new goals → improves employability skills → improves functional skills → improves vocational skills → increases confidence → successful at interview and gains a work placement → completes work placement → progresses into an apprenticeship.	Loosemore (2016), Gaetz and O'Grady (2013).	A young person secures an apprenticeship.
Control over one's Environment	Participation in SYMF → sets new goals → works towards new goals → improves employability skills → improves functional skills → improves vocational skills → increased confidence → successful at interview and gains a work placement → did not secure employment or an apprenticeship → identifies construction as an industry of choice and enrolls on vocational construction training.	Loosemore (2016), Gaetz and O'Grady (2013).	Young person enrolls on vocational training.



### Step Five: Calculating the SROI

Step five involves calculating the initial SROI ratio and the sensitivity analysis (Nicholls et al., 2012); for this SROI study, the total value of the outcomes after counterfactuals were valued at £625,393.62 and the inputs valued at £170,771. To obtain the SROI ratio, the values after the counterfactuals are established of £625,393.62 were divided by the inputs into the program of £170,771. This resulted in an SROI ratio of £3.66. This means this study concluded that for every £1 invested in the SYMF program, there was wider social value creation of £3.66. The sensitivity analysis examined the difference different decisions would have made to the financial ratio. The sensitivity analysis is used to identify the key factors influencing projected outcomes and helps understand the SROI impact and the social value created (Lingane and Olsen, 2004). Lingane and Olsen (2004) suggest that sensitivity analysis is fundamental because of the lack of standards in social impact measurements and how dependent they are on the assumptions of analysts. Watson and Whitley (2017) explain that the sensitivity analysis is used to identify which estimates had the most significant impacts on social returns and the most impact on the overall ratio; the standard sensitivity checks include selecting different financial proxies, adjusting the quantities of outcomes, estimates of deadweight and attribution and adjusting the value of the inputs.

The sensitivity analysis is where an SROI analyst can examine the difference different decisions would have made to the SROI ratio. For example, in the practical reason domain claiming the higher financial proxy of £14,399 to value feeling in control of one's life (HACT 2018), instead of £1,316, the value of a career development course (Leathem and Bradly, 2014) increases the ratio from £3.66 to £4.84. Conversely, if (Paterson-Young and Denny's, 2020) lower financial proxy of £9,823.67 average cost of young offenders to the criminal

justice system is used instead of New Economy Manchester's (2019) £37,543 average cost of prison for a year, the SROI ratio would be £3.15. If construction industry time were deducted from the project's inputs, meaning inputs would total £137,851 instead of £170,771, the ratio would increase to £4.54. The sensitivity analysis demonstrates the difference in the financial ratio that different decisions would have made. It illustrates that a positive return with supporting information should be the aim of an SROI analysis and not a single financial ratio.

### Step Six: Reporting Using and Embedding

Step six involves verification of results. In this study, independent external assurance was not sought, but key stakeholders were consulted throughout the process and their feedback was incorporated into the results reported here. Furthermore, in line with the recommendations of Gosselin et al. (2020) and Ruiz-Lozano et al. (2020), these results are offered for peer review and feedback from the peer-review process has been incorporated in this paper. In stage six, the usefulness of this theoretically informed SROI analysis was considered. The aim was to report on the methodology and to explain the strengths and weaknesses of this theoretically informed approach.

The capability empowerment framework was used as a multi-dimensional approach to examine the complex support needs that young people at risk of homelessness may have. In the lifetime domain, participants explained that their housing situation had improved because of increased income and improved relationships. The outcome of an improved living situation might be seen as the most critical outcome, especially when trying to prevent youth homelessness. However, the other components of the empowerment capabilities framework help explain the other support needed and there is more to do than just improving young people's living situation. For example, in the bodily domain, participants demonstrated improved mental and physical health and reduced harmful substance use. Participants

reported reduced anxiety and depression because they “*were in a good part of their life*” and could deal with things better. Improved mental health can reduce the risk of homelessness (Youngbloom et al., 2021). While young people reported an improvement in physical health as a result of working in construction, one young person described how he had been supported to plan “*for the sleep needed to work on site*” a relatively simple thing that helped him sustain his work placement and improve his physical health. This demonstrates the value of the bespoke support offered on the program. There was also a reduction in harmful substance misuse. Participants explained that this resulted from the on-site health & safety training and work experience that they could maintain both inside and outside work. This demonstrates how work placements in the construction industry were instrumental in a decrease in harmful substance use and improved health.

Selecting financial proxies to value inputs and represent change in the construction industry was challenging. Two challenging things to financialize were the input of construction industry time and the value of contextualised learning. This could be because there is no built environment database of financial proxies (Raiden et al., 2018). To value the input of construction industry time the cost of supporting an apprentice for the first six months of an apprenticeship valued at £3,292 was used (Hogarth et al., 2012). In the senses, imagination and thought domain evidence from participants' PDP Reviews and Soft Skills forms showed that participants preferred contextualised learning on a construction site more than traditional classroom-based learning. A proxy of £484 was selected to value this change (HACT). However, it is a proxy to value employment training rather than contextualised learning on a construction site. If there were to be continued SROI reporting in construction, an open-access repository of built environment financial proxies would be helpful.. Similar to the model developed for social housing (HACT, 2018).

The capability empowerment approach also provided the theoretical underpinning to value soft outcomes, including emotions and affiliation. Research shows that positive social connections and positive relationships, affiliation to peers, families, and meaningful adults, as well as connections to groups, neighbourhoods and communities, are critical protective factors that can prevent youth homelessness (Gaetz et al., 2019). In the emotions domain, young people had more positive relationships with their families and attributed that change to participating in the SYMF program. The financial proxy used to value this change was £600, the cost of six family therapy sessions (Barnardo's Cymru, 2017). In the affiliation domain, young people explained that they got on well with their colleagues and met new friends and new people. The financial proxy selected to value this change was £740, it represents the cost to a young person of being a member of a group (Barnardo's Cymru, 2018). These are relatively low financial proxies, but these changes were still valuable for the young people. While soft skills are difficult to measure, they are a pre-requisite for achieving hard outcomes (McNeil et al., 2012). The approach used was to capture the market value of an intervention with a similar outcome.

## **Conclusion**

This research contributes to the advancement of social procurement research by addressing the need for more methodologically robust and theoretically informed empirical evidence about the impact of social procurement initiatives. This undermines the legitimacy of claims made about social impact of social procurement by those who are practicing and researching in this area and enables unscrupulous organisations to over-claim the social impact that they

purport to deliver. Conversely. It also makes it difficult for genuine organisations tendering on social procurement requirements to differentiate their programs and provide confidence to clients that they will have their intended social impact. On the client-side, the lack of robust evidence makes tender decisions a highly subjective and arbitrary process, despite requirements that exist in social procurement regulations like the UK's Social Value (Public Services) Act (2013) to be transparent in tender decisions. Finally, the lack of robust evidence prevents the advancement of social procurement by inhibiting learning, improvement and innovation since the evidence on which such advances could be built are methodologically flawed.

In responding to contemporary calls for more SROI analyses to be published in peer-reviewed contexts, this research presented a case study example of a theoretically informed and methodologically robust evaluative SROI analysis of a construction training program developed in Wales (UK) to reduce the risk of youth homelessness. Following established SROI methodologies combined with The Capability Empowerment Framework and acknowledging the inherent limitations and potential criticisms of the SROI approach, the results show that the SYMF program helped reduce the risk of homelessness by building capacity across many Capability Empowerment Framework domains. For example, the life domain was improved by increased housing security from higher income and more positive relationships, as were the affiliation and emotions domains. The health and bodily integrity domains were improved by improving participants' mental and physical health and increasing awareness of health and safety issues. Senses and imagination and practical reason were improved by greater numeracy and literacy and by having the confidence to forward-plan their lives.

The analysis shows that the application of the SROI methodology, coupled with the Capability Empowerment Framework, to analysing the case study program not only allowed these social impacts created to be defined and quantified in the context of a widely respected theoretical framework, but also enabled the valuation of the wider economic value that was generated by investing in this program.

There are also lessons to be learned about the program design which can help improve future social procurement initiatives aimed at helping reduce youth homelessness.

There are clear lessons from this analysis to inform future social procurement programs that aim to prevent youth homelessness. The program provided bespoke and individualised wrap-around support to young people to help them overcome barriers to work. The program was flexible; while there was a set time of 26 weeks for work placements, other parts of the project were based on the support needed. Pre-employment support was based on basic skills and employability needs and was not time-limited. Young people progressed to a work placement when they were work ready. Social procurement programs often list disadvantaged groups as needing support accessing employment. It is also essential to identify within these groups that people will have individual needs and some will need more support and training than others. However, the level of support offered by the SYMF program was expensive. The cost of pre-employment support, including a 26-week paid work placement, costs £13,477 per participant. So while the SYMF program was successful because of the resources required, it would not be easy to replicate unless it was underpinned by appropriate resources.

However, in undertaking this study, as one of the very few published explorations of SROI in a construction management context, we found that the SROI methodology had limitations

which must be considered in interpreting this research and any similar future research. For example, despite being transparent and open with our assumptions, we found social impact challenging to identify because of the difficulties in establishing direct causal links between the SYMF program analysed and the outcomes valued. Furthermore, there were challenges in selecting appropriate proxies for valuing outcomes. Also, while the Capability Empowerment Framework was considered the most appropriate theory for this particular case study because of its relevance to understanding the causes of homelessness, other theoretical frameworks may provide different insights. Furthermore, it is important to note that analysis of social procurement programs which focus on resolving other social issues such as health, gender diversity, drug addiction or disability employment will require other relevant theoretical frameworks.

Nevertheless, despite these challenges and limitations, the results presented here are a significant step forward compared to the anecdotal case studies which currently characterise the field of social procurement. Research like this is critically important in avoiding the overclaiming of social procurement outcomes by unscrupulous or ignorant contractors and in assisting clients assess the likelihood that they will deliver the social outcomes that they purport to deliver and that they do no harm to the vulnerable people they are meant to help. As Maldonado and Corbey (2018) note, we live in an age of growing demands from society to account for the social, economic, and environmental value that result from organisational activities, both public and private.

**Data Availability Statement**

The participants of this study did not give written consent for their data to be shared publicly, so due to the sensitive nature of the research supporting data is not available.

**Disclosure Statement**

No potential conflict of interest was reported by the authors.



## References

Addis M, Boyd D and Raiden A (2016) Special Issue: Theorizing Expertise in Construction, *Construction Management and Economics*, 34:7-8, 433-438,

Afzal, F. Lim, B. and Prasad, D. (2017). An Investigation of Corporate Approaches to Sustainability in the Construction Industry, *Procedia Engineering*. *Procedia Engineering*. 180, 202-210.

Alpha Safety (2022) NEBOSH Construction. Available at: NEBOSH Construction | Alpha Safety (alphasafetytraining.co.uk). [accessed 7 March 2021].

Alpha Safety (2022) CITB Health and Safety Awareness Labourers. Available at: CITB Health & Safety Awareness (HSA) Labourers | Alpha Safety (alphasafetytraining.co.uk). [accessed 7 March 2021].

ARC Training (2022a) PTS Courses - PTS Courses - ARC Rail Training Company f(thearcgroup.co.uk) [accessed 7 March 2022].

ARC Occupational Safety Training (2022b) Health & Safety. Available at: Health & Safety - ARC Training Co [accessed 7<sup>th</sup> March 2022].

ARC Training (2022c) L2 Principles of COSHH. Available at: Health & Safety - ARC Training Co. [accessed 7 March 2022].

Arvidson, M. Lyon, F, McKay, S. and Moro, D. (2013) Valuing the social? The nature and controversies of measuring social return on investment (SROI), *Voluntary Sector Review*, 4 (1), 3-18.

Asbestos Training Ltd. (2022) New Operative. Available at: New Operative | Asbestos Training Limited. [accessed 4 April 2022].

Australian Government (2021) Homelessness and overcrowding, Australian Institute of Health and Welfare, <https://www.aihw.gov.au/reports/children-youth/homelessness-and-overcrowding> [accessed 1 April 2021].

Axe, J. Childs, E. and Manion, K. (2020) In search of employment: Tackling youth homelessness and unemployment. *Children and Youth Services Review*, 113, 104704. <https://doi.org/10.1016/j.chilyouth.2019.104704>.

Bagnall, A. Freeman, C. Southby, K. and Brymer, E. (2019) Social return on investment analysis of the health and wellbeing impacts of Wildlife Trust programmes. Leeds: Leeds Beckett University.

Barnardo's Cymru (2018) Social Return on Investment (SROI) Evaluation Report: Nurturing Parents: Mindfulness for Parents, Gwynedd: Barnardo's Cymru.

Banke-Thomas, A.O., Madaj, B., Charles, A. and 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), pp.1-14.

Barraket, J. Keast, R. and Furneaux, C. (2016) *Social Procurement and New Public Governance*. New York: Routledge.

Bartlett, B. Dalglish, J. Mao, S. and Roberts, E. (2012) *Reconnecting disaffected youth through successful transition to work*, Griffiths University, Queensland, Australia.

Bates, B. and Yentumi-Orofori, R. (2013) Veterans Contact Point Social Return on Investment Report. Available at:  
[https://www.socialvalueuk.org/app/uploads/2016/03/vcp\\_sroi\\_final\\_draft\\_complete.pdf](https://www.socialvalueuk.org/app/uploads/2016/03/vcp_sroi_final_draft_complete.pdf).  
(Accessed: 22 November 2022).

Batterham, D. (2019) Homelessness as Capability Deprivation: A Conceptual Model, *Housing, Theory and Society*, 36 (3) 274-297.

Bradly, J. and Bolas, C. (2013) Social Return on Investment (SROI) of Substance Misuse Work Leicestershire Youth Offending Service. Leicester: Leicestershire County Council.

Bramley, G. and Fitzpatrick, S. (2017) Homelessness in the UK: Who is Most at Risk? *Housing Studies*. 33 (1): 96–116. doi:10.1080/02673037.2017.1344957.

Bridgeman, J. Maple, P. Murdock, A. Hardy, S and Townley, C. (2016) Demonstrating the Social Value of a Schools Engagement Programme: Introducing Young People to the Construction Professions. In: Chan, P W and Neilson, C J (Eds.), *Proceedings 32nd Annual ARCOM Conference*, 5-7 September 2016, Manchester UK. Association of Researchers in Construction Management, 1007–1016.

Bridgeman, J., & Russell, H. (2020). Don't let me fall through the cracks: homelessness amongst care-experienced young people in Wales. Cardiff: End Youth Homelessness Cymru.

Bridgman, R. (2001) I helped Build That: A Demonstration Employment Training Programme for Homeless Youth in Toronto, Canada. *American Anthropologist*. 103 (3), 779-795.

Cabinet Office (2020) Policy paper Procurement Policy Note 06/20 – taking account of social value in the award of central government contracts, Cabinet Office. London: UK. HM Government.

Canadian Homeless Research Network. (2013) Case Study Choices for Youth Train for Trades. In: Gaetz, S. O'Grady, B. Buccieri, K. Karabanow, J. and Marsolais, A. *Youth Homelessness in Canada: Implications for Policy and Practice*. Toronto: Canadian Homeless Research Network. 311-322.

Crisis (2020) About homelessness. Available at: <https://www.crisis.org.uk/ending-homelessness/about-homelessness/>. [accessed 20 July 2020].

Currie, S. Foley, K. Schwartz, S. and Taylor-Lewis, M. (2001) *BladeRunners and Picasso Cafe: A Case Study Evaluation of Two Work-Based Training Programs for Disadvantaged Youth*. Ottawa, Ontario: Social Research and Demonstration Corporation (SRDC).

Dattani, P. and Trussler, S. (2011) *Measuring the Social Impact of Tomorrow's People Welfare to Work and youth programmes between 2006/7 and 2010/11*. London: FTI Consulting.

Davies, L. E., Taylor, P. Ramchandani, G. and Christy, E. (2019) Social return on investment (SROI) in sport: a model for measuring the value of participation in England, *International Journal of Sport Policy and Politics*, 11:4, 585-605, DOI: 10.1080/19406940.2019.1596967.

Davies, L. E. Taylor, P. Ramchandani, G. and Christy, E. (2021) Measuring the Social Return on Investment of community sport and leisure facilities, *Managing Sport and Leisure*, 26:1-2, 93-115, DOI: 10.1080/23750472.2020.1794938.

Denny-Smith, G. Sunindijo, R.Y. Loosemore, M. Williams, M. and Piggott, L. (2021) How construction employment can create social value and assist recovery from COVID-19, *Sustainability*, 13(2), 988; <https://doi.org/10.3390/su13020988>.

Department for Communities and Local Government (2012) *Evidence Review of the Costs of Homelessness*. London: DFLG.

Dragicevic, N. and Ditta, S., 2016. Community benefits and social procurement policies: a jurisdictional review. Mowat Centre for Policy Innovation, University of Toronto, Toronto, Canada.

Eddidin, J. P. Ganim, Z. Hunter, S. J. and Karnik, N. S. (2012) The Mental and Physical Health of Homeless Youth: A Literature Review. *Child Psychiatry and Human Development* (2012) 43:354–375 DOI 10.1007/s10578-011-0270-1.

Every, S. (2012) Social Return on Investment Report: Ashram Employment and Skills Service, Birmingham: Ashram Housing Association.

Flatau, P. Thielking, M. MacKenzie, D. Steen, A. Bauskis, A. and Nolan, K. (2016) *The Cost of Youth Homelessness in Australia Study Snapshot Report 1*, Centre for Social Impact, Swinburne University, Melbourne, Victoria, Australia.

Flyvbjerg, B. (2006) Five misunderstandings about case study research Case Study, *Qualitative Inquiry*, 12 (1) 219-245.

Frontier Economics (2011) *Specialist drug and alcohol services for young people – a cost benefit analysis*. Sheffield: Department for Children, Schools and Families.

Furey, R. and Harris-Evans. (2021) Work and resilience: Care leavers' experiences of navigating towards employment and independence. *Child & Family Social Work*. 1 - 11. DOI: 10.1111/cfs.12822.

Future Generations Commissioner for Wales (2021). Procuring Well-Being for Wales: A Review into how the Well-being of Future Generations Act is informing procurement in Wales. Cardiff: Office of the Future Generations Commissioner.

Gaetz, S. O'Grady, B. Kidd, S. and Schwan, K. (2016) *Without a home: The national youth homelessness survey*. Toronto: Canadian Observatory on Homelessness Press.

Gaetz, S. and O'Grady, B. (2013) Why don't you just get a job? Homeless youth, social exclusion and employment training. In S. Gaetz, B. O'Grady, K. Buccieri, J. Karabanow & A. Marsolais (Eds.), *Youth homelessness in Canada: Implications for policy and practice* (pp. 243-268). Toronto: Canadian Observatory on Homelessness Press.

Gaetz, S. Ward, A. and Kimura, L. (2019) Youth homelessness and housing stability: What outcomes should we be looking for? *Healthcare Management Forum*, 32(2), 73–77.  
<https://doi.org/10.1177/0840470418817333>.

Gibbon, J. and Dey, C. (2011) Developments in social impact measurement in the Third Sector: scaling up or dumbing down? *Social and Environmental Accountability Journal*, 31(1), 63-72.

Glass, J. (2012) The state of sustainability reporting in the construction sector. *Smart and Sustainable Built Environment*, 1 (01), 87-104.

Gluch, P. and Bosch-Sijtsema, P. (2016) Conceptualizing environmental expertise through the lens of institutional work, *Construction Management and Economics*, 34:7-8, 522-535, DOI: 10.1080/01446193.2016.1177191

Gosselin, V. Boccanfuso, D. and Laberge, S. (2020) Social return on investment (SROI) method to evaluate physical activity and sport interventions: a systematic review. *Int J Behav Nutr Phys Act* 17, 26. <https://doi.org/10.1186/s12966-020-00931-w>.

Gov.UK (2021a) Universal Credit, Available from: <https://www.gov.uk/universalcredit/what-youll-get> [Accessed 13 July 2021].

Gov.UK (2021b) National Minimum Wage and National Living Wage Rates, Available from: <https://www.gov.uk/national-minimum-wage-rates> [Accessed 13 July 2021].

Greenspace Scotland (2011) Glen Mile mountain bike trail Cumbernauld. Available at: SROIurbannature\_Glen20Mile1GreenspaceJuly-2011.pdf (socialvalueuk.org). [Accessed 13 July 2021].

HACT & The SROI Network (2015) SROI and the UK Social Value Bank: linkages paper. London: HACT.

HACT (2018) Social Value Calculator V 4.0, London: HACT, Available from: <https://www.hact.org.uk/value-calculator> [Accessed 13 July 2021].

Hassanally, K. and Miqdad, A. (2018) Homeless mortality data from East London. *London J Prim Care (Abingdon)*.10(4):99-102. doi: 10.1080/17571472.2018.1458443.

Hogarth, T. Gambin, L. Winterbothan, M. Baldauf, B. Briscoe, G. Gunstone, B. Hasluck, C. Koerbit, C. and Taylor, C. (2012) Employment Investment in Apprenticeships and Learning: the Fifth Net Benefits of Training to Employers Study, London: Department for Business, Innovation, and skills.



House of Commons (2018) House of Commons Justice Committee. Young Adults in the Criminal Justice System: Eighth Report of Session 2017–19. London. House of Commons Justice Committee.

ICF (2014) Evaluation of Getting Ahead: The Symud Ymlaen/ Moving Forward Project - Interim Report, London ICF.

Ivenson, M. and Cornish, F. (2016) Re-building bridges: homeless people's views on the role of vocational and educational activities in their everyday lives, *Journal of Community and Applied Social Psychology*, 26(3) 253-267.

Jackson, A. and McManus, R. (2019) SROI in the art gallery; valuing social impact, *Cultural Trends*, 28:2-3, 132-145, DOI: 10.1080/09548963.2019.1617937.

Jardine, C. and Whyte, B. (2013) Valuing Desistence? A Social Return on Investment Case Study of a Throughcare Project for Short-Term Prisoners. *Social and Environmental Accountability Journal*, 33 (1): 20-32.

Johnstone, M. Parsell, C. Jetten, J. Dingle, G. and Walter, Z. (2016) Breaking the cycle of homelessness: Housing stability and social support as predictors of long-term wellbeing, *Housing Studies*, 31:4, 410-426, DOI: 10.1080/02673037.2015.1092504.

Keats, H. Maguire, N. Johnson, R. and Cockersell, P. (2012) *Psychologically informed services for homeless people Good Practice Guide*. London: Communities and Local Government.

Keene, K. Keating, K. and Ahonen, P. (2016) *The Power of Stories: Enriching Program Research and Reporting*. OPRE Report# 2016-32a. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services.

Kidd, S. A. (2009) Social Stigma and Homeless Youth. In: Hulchanski, J. D. Campsie, P. Chau, S. Hwang, S. Paradis, E. (eds.) *Finding Home: Policy Options for Addressing Homelessness in Canada* (ebook), Chapter 3.5. Toronto: Cities Centre, University of Toronto.

Kimberlee, R. Ward, R. Jones, M. and Powell, J. (2013) Measuring the economic impact of Wellspring Healthy Living Centre's Social Prescribing Wellbeing Programme for low level mental health issues encountered by GP services. Bristol: University of the West of England, 2014.

Knapp, M. McDaid, D. and Parsonage, E. (2011) *Mental health promotion and mental illness prevention: the economic case*. London: Department of Health.

Le LK-D. Esturas A. C. Mihalopoulos C. Chiotelis O. Bucholc J. Chatterton M. L, et al. (2021) Cost-effectiveness evidence of mental health prevention and promotion interventions: A systematic review of economic evaluations. *PLOS Medicine*. 18 (5) 1-27.

Leathem, K. and Bradly, J. (2014) *Creating Social Value in New Communities a Social Return on Investment (SROI) Analysis for Voluntary and Community Action*, Leighton Buzzard, UK: Sandhills Community House and the Sandhills Community Action Project.

Lingane, A. and Olsen, S., 2004. Guidelines for social return on investment. *California management review*, 46(3), pp.116-135.

Lloyd, E. (2018) Change Step: Social Return on Investment Report of the Change Step Service in Partnership with Veterans, NHS Wales Llandudno: Change Step.

Lombardo, G. Mazzocchetti, A. Rapallo, I. Tayser, N. and Cincotti, S. (2019) Assessment of the Economic and Social Impact Using SROI: An Application to Sport Companies. *Sustainability*. 2019; 11(13):3612. <https://doi.org/10.3390/su11133612>.

Loosemore M. (2016) Social procurement in UK construction projects, *International Journal of Project Management*, 34 (1) 133–144

Loosemore, M. and Denny-Smith, G. (2016) Barriers to Indigenous enterprise in the Australian construction industry, In Chan, PW and Neilson, CJ (Eds.), "Proceedings of the 32nd Annual ARCOM Conference", 5-7 September, Manchester, Association of Researchers in Construction Management, Vol. 2, 667-76.

Loosemore M, Alkilani S and Mathenge R (2020): The risks of and barriers to social procurement in construction: a supply chain perspective, *Construction Management and Economics*, 38 (6), 552-569 DOI: 10.1080/01446193.2019.1687923

Loosemore, M. Bridgeman, J. Russell, H. and Zaid Alkilani, S. (2021) Preventing Youth Homelessness through Social Procurement in Construction: A Capability Empowerment Approach. *Sustainability*. 13(6):3127. <https://doi.org/10.3390/su13063127>.

Loosemore, M. Keast, R. Barraket, J. Denny-Smith, G; Alkilani, S (2022) The risks and opportunities of social procurement: a cross-sector collaboration perspective, *International Journal of Managing Projects in Business*. 15(6), DOI:10.1108/IJMPB-11-2021-0300

Maier, F. Schober, C. Simsa, R. and Millner, R. (2015) SROI as a method for evaluation research: understanding merits and limits, *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 26(5), 1805-30.

Maldonado, M. O. and Corbey, M. (2018) Social Return on Investment (SROI): a review of the technique Mayra Ortega pp 80-87. *Management Accounting*. 80-87.

McCoy, S. and Kempton, O. (2020) *More Than Bednights: An Evaluation of the Nightstop Service*, London: Depaul UK.

McNaughton Nicholls, C. (2010) Housing, Homelessness and Capabilities. *Housing Theory and Society*. 27 (1), 23-41.

McNeil, B., Reeder, N. and Rich, J. (2012) *A framework of outcomes for young people*, Young Foundation.

Millar, R. and Hall, K., 2013. Social return on investment (SROI) and performance measurement: The opportunities and barriers for social enterprises in health and social care. *Public Management Review*, 15(6), pp.923-941.

Money Saving Expert (2022) Income Tax Calculator. Available at: Income tax calculator: Find out your take-home pay - MSE (moneysavingexpert.com) [accessed 13 May 2022].

Morton, M. H. Kugley, S. Epstein, R. and Farrell, A. (2020) Interventions for youth homelessness: A systematic review of effectiveness studies. *Children and Youth Services Review*. 116.

Murphy, S. (2020) The Social Value of Youth Work: Social Return on Investment (SROI) Report 2020, Middlesbrough: Hemlington Detached Youth Work Project.

New Economy Manchester (2019) Social Unit Cost Database V 20, Available from: <https://greatermanchester-ca.gov.uk/what-we-do/research/research-cost-benefitanalysis> [accessed 13 July 2021].

Nicholls, J. Lawlor, E. Neitzert, E. and Goodspeed, T. (2012) *A Guide to Social Return on Investment*, Liverpool: The SROI Network.

Nicholls, J. (2017) Social return on investment-development and convergence. *Evaluation and Program Planning*, 64, 127–135.

Noble, A. and Oseni, L (2013) It's Everybody's Business: Raising the Roof's Private Sector Engagement Project. In S. Gaetz, B. O'Grady, K. Buccieri, J.

Karabanow and A. Marsolais (Eds.), *Youth homelessness in Canada: Implications for policy and practice* (pp. 243-268). Toronto: Canadian Observatory on Homelessness Press.

Nussbaum, M. C. (1993) Social justice and universalism: In defence of an Aristotelian account of human functioning, *Modern Philology*, (90) 546-573.

Nussbaum, M. C. (2011). *Creating Capabilities. The Human Development Approach*. Cambridge, MA & London: The Belknap Press of Harvard University Press.

Nussbaum, M. C. (2000) *Women and Human Development: The Capabilities Approach*, Cambridge: Cambridge University Press.

Office of National Statistics (2021) Earnings and hours worked, age group by industry by two-digit SIC: ASHE Table 21. Available at Earnings and hours worked, age group by industry by two-digit SIC: ASHE Table 21 - Office for National Statistics ([cardiff.ac.uk](http://cardiff.ac.uk)). [accessed 1 April 2022].

Paterson-Young, C. and Denny, S. (2020) *Motivational Preparation College Training (MPCT) Social Impact and Return on Investment Report*. Northampton: University of Northampton.

Peters, E. Hovinga, D. Maas, J. and Schuengel, C. (2021) Exposure to a natural environment to improve parental wellbeing in parents in a homeless shelter: a multiple baseline single case intervention study. *Journal of Social Distress and Homelessness*, pp.1-12.

PWC (2011) *PWC centres for social impact – The Fire Station*,

<http://firestation.pwc.co.uk/centre-for-social-impact.html>, (accessed 3 March 2014)

Qian, J. Riseley, E. and Barraket, J. (2019) *Do employment-focused social enterprises provide a pathway out of disadvantage? An evidence review*. Australia: The Centre for Social Impact Swinburne.

Raiden, A. Loosemore, M. King, A. and Gorse, C. (2018) *Social Value in Construction*.

London: Routledge.

Richards, A. (2015) Tomorrow's People Trust Ltd: Getting Out To Work – Social Return on Investment Analysis. London: Tomorrow's People.

Roberts, C. Davies, J. and Maggs, R. G. (2015) Structured community activity for forensic mental health – A feasibility study. *The Journal of Forensic Practice*. 17 (3). 180-191.

Ruiz-Lozano, M. Tirado-Valencia, P. Sianes A, Ariza-Montes, A. Fernández-Rodríguez, V.

López-Martín M.C. (2020) SROI Methodology for Public Administration Decisions about Financing with Social Criteria. A Case Study. *Sustainability*.12(3):1070.

<https://doi.org/10.3390/su12031070>

Russell, H. Jenkins, E. and Bridgeman, J. (2019) Out on the streets: LGBTQ+ youth homelessness in Wales. Cardiff: End Youth Homelessness Cymru.

Rutenfrans-Stupar, M. Van Der Plas, B. Den Haan, R. Van Regenmortel, T. and Schalk, R. (2019) How is participation related to wellbeing of homeless people? An explorative qualitative study in a Dutch homeless shelter facility, *Journal of Social Distress and Homelessness*, 28 (1), 44-55.

Ryan, P.W. and Lyne, I., 2008. Social enterprise and the measurement of social value: methodological issues with the calculation and application of the social return on investment. *Education, Knowledge & Economy*, 2(3), pp.223-237.

Saini, A. and Soni, N. (2016) Role of Emotional Intelligence in Construction Industry: A Review. *International Journal of Civil Engineering and Technology (IJCIET)*. 7 (4), 339-344.

Schelbe, L. Chanmugam, A. Moses, T. Saltzburg, S. Rankin Williams, L. and Letendre, J. (2014) Youth participation in qualitative research: Challenges and possibilities. *Qualitative Social work*. 14 (4). 504-521.

Schoen, V. Caputo, S. and Blythe, C. (2020). Valuing physical and social output: A Rapid assessment of a London community garden. *Sustainability*, 12 (13): 5452.

Schwan, K. French, D. Gaetz, S. Ward, A. Akerman, J. and Redman, M. (2018) *Preventing youth homelessness: An international review of evidence*. Cardiff: Wales Centre for Public Policy.



Scott, L. M. (2016) Theory and research in construction education: the case for pragmatism, *Construction Management and Economics*, 34:7-8, 552-560, DOI: 10.1080/01446193.2016.1151539

Seaward, P. (2018) *The Cornwall Exchange: A Social Return on Investment (SROI) Report: Essential Livings Future's Contribution*. Cornwall: Essential Living Future.

Sen, A. (1985) *Commodities and Capabilities*; Sole distributors for the USA and Canada, Elsevier Science Pub. Co.: New York, NY, USA.

Social Value International (2022) *The principles of social value*. Available at: <https://www.socialvalueint.org/principles> [accessed 4 April 2022].

Social Value International (2022) *Standard on Applying Principle Eight: Be Responsive*, Liverpool: Social Value International.

Suffolk County Council (2016) *The economics of mental ill health*. Available at: [Economics\\_of\\_Mental\\_health\\_and\\_prevention.pdf](#) (healthysuffolk.org.uk) [accessed 20 January 2022].

Tamburello, H. and Morris, F. (2015) *Impact Study of the Symud Ymlaen/ Moving Forward Project*. Cardiff: Llamau.

Tanekenov, A. Fitzpatrick, S. and Johnsen, S. (2018) *Empowerment, Capabilities and Homelessness: The Limitations of Employment-focused Social Enterprises in Addressing Complex Needs*. *Housing, theory, and society*. 35 (1). 137-155.

The Centre for Justice Innovation (2019) *Valuing youth diversion: A toolkit for practitioners*. London: The Centre for Justice Innovation.

Toolis E. E. and Hammack P. L. (2015) *The Lived Experience of Homeless Youth: A Narrative Approach*. *Qualitative Psychology*. 2 (1), 50-68.

Troje, D. and Gluch, P. (2019) *Social procurement in the real world: How employment requirements unfold in construction projects*, In: Gorse, C and Neilson, C J (Eds.), *Proceedings 35th Annual ARCOM Conference, 2-4 September 2019*, Leeds Beckett University, Leeds, UK Association of Researchers in Construction Management, 24-33.

Troje, D. (2020). *Constructing social procurement: An institutional perspective on working with employment requirements*, Unpublished PhD Thesis, Chalmers University of Technology.

Trussell, D. E. and Mair, H. (2010) *Seeking judgment free spaces: Poverty, leisure, and social inclusion*. *Journal of Leisure Research*, 42 (4), 513–533.

Trypuc, B. and Robinson, J. (2009) *Homelessness in Canada: A Funder's Primer in Understanding the Tragedy on Canada's Streets*. Ontario: Charity Intelligence Canada.

United Nations (2019) Principles on human rights and the protection of workers from exposure to toxic substances: Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes. Switzerland: United Nations.

Watts, G. (2019) Measuring and managing the social value created by a diverse construction business, Unpublished PhD Thesis, School of Architecture, Building and Civil Engineering, Loughborough University.

Watson, K. J. and Whitley, T. (2017) Applying social return on investment to the built environment. *Building Research & Information*, 45 (08), 875-91.

Welsh Government (2021) Local Housing Allowance (LHA) rates from April 2021 to March 2022, Available from: <https://gov.wales/local-housing-allowance-lha-rates-april2021-march-2022> [accessed 13 July 2021].

Welsh Government (2022) Social Partnership and Public Procurement (Wales) Bill. Available from: Social Partnership and Public Procurement (Wales) Bill | GOV.WALES [accessed 20<sup>th</sup> April 2023].

Yin, R. K. (2017) *Case study research and applications Design and methods*. Thousand Oaks CA: Sage.

Youngbloom, Amy J. Farnish, K. A. and Schoenfeld, E. A. (2021) Characteristics Associated with Housing Loss Among Youth in a Rapid Rehousing Program. *Child and Adolescent Social Work Journal*. 1-13.