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This is the Published version of the following publication

Lou, Xiaocui, Natoli, Riccardo, Goodwin, David, Bok, Barbara, Zhao, Fang and Zhang, Peng (2023) A systematic literature review of research on social procurement in the construction and infrastructure sector: barriers, enablers, and strategies. Sustainability, 15 (17). ISSN 2071-1050

The publisher's official version can be found at https://www.mdpi.com/2071-1050/15/17/12964 Note that access to this version may require subscription.

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Review

# A Systematic Literature Review of Research on Social Procurement in the Construction and Infrastructure Sector: Barriers, Enablers, and Strategies

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Abstract: In Australia, a new feature of public policy is the requirement by governments that large-scale infrastructure projects integrate social procurement practices that alter the traditional focus on balancing price and quality. Social procurement has been gradually developing in practice, but the academic literature has not kept pace. Although past research has identified some of the barriers affecting social procurement implementation in the construction industry, the nature of the barriers impeding its proliferation has not to date been systematically reviewed. This paper undertakes a review of the social procurement literature published from January 2012 to 30 June 2022, with 49 papers chosen under selective criteria. This critical review employs the "Preferred Reporting Items for Systematic Reviews and Meta-Analyses" (PRISMA) technique to retrieve secondary data on social procurement from available peer-reviewed academic papers through three databases (Scopus, EBSCOhost, Web of Science). The literature analysis focuses on three themes: (1) barriers; (2) enablers; and (3) strategies to overcome the barriers. The paper finds that social procurement as a field of practice is evolving and expanding, but its role in contributing to social value creation remains an under-theorised concept. Recommendations for practice and future research are identified, including the need to measure the real-world impacts of policy.

Keywords: barriers; enablers; construction industry; infrastructure; social procurement



Citation: Lou, C.X.; Natoli, R.; Goodwin, D.; Bok, B.; Zhao, F.; Zhang, P. A Systematic Literature Review of Research on Social Procurement in the Construction and Infrastructure Sector: Barriers, Enablers, and Strategies. Sustainability 2023, 15, 12964. https://doi.org/10.3390/ su151712964

Academic Editor: Antonio Caggiano

Received: 15 July 2023 Revised: 19 August 2023 Accepted: 22 August 2023 Published: 28 August 2023



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#### 1. Introduction

Traditionally, across a range of industries, procurement activities have focused on balancing price and quality. Increasingly, with the assistance of government initiatives, there has been an observable shift in focus in many large-scale procurement programs, drawing upon the social benefit potential of procurement. Social procurement differs from traditional procurement. It provides social benefits to local communities, in addition to the direct contribution of product and service purchasing activities [1]. Although government expenditure has long been recognised for its potential to deliver social impact via sustainable public procurement [2], in recent times, governments have used their considerable purchasing power to influence supply chains indirectly by mandating social outcome conditions in their contracts with suppliers [3].

Social procurement has been required by many government-initiated projects. For example, the State Government of Victoria in Australia announced a social procurement

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framework and associated policies in 2018, requesting all its departments and agencies to embed a prescribed social procurement framework and approach within their buying activities [4]. Similar initiatives have since been established in other Australian states, such as New South Wales [5], Western Australia [6], and Queensland [7]. Consequently, across the Australian continent, an increasing number of projects integrate social value creation elements into their processes. In the United Kingdom, Social Value Act 2012 requires all public bodies to consider how what they are proposing to buy might improve economic, social, and environmental well-being [8]. A policy procurement note states that all central government departments and agencies must evaluate social value with a "minimum overall weighting of 10%" for the total procurement [9].

Conversely, barriers have been identified in various projects by researchers such as Loosemore, et al. [10] and Loosemore, et al. [11]. For instance, industry practitioners and small and medium sized enterprises (SMEs) find it difficult to embed social procurement in practice, and have little knowledge of social procurement. Barriers to social procurement implementation in the construction industry have been discussed in prior research. Such studies explored this from the perspective of either tier-one construction contractors [12], social enterprises [13,14], Indigenous enterprises [15], migrants and refugees [16], exoffenders [17,18], youth homeless [19], or from performance perspectives such as cross-sector collaboration [14].

However, such barriers are yet to be systematically reviewed for social procurement in the construction and infrastructure sectors. In fact, according to Troje and Kadefors [20], despite the prominence of social procurement from a policy perspective, there remains a fundamental lack of knowledge regarding the barriers that have impeded implementation of those policies and how they can be overcome. Furthermore, the manner in which social procurement is embedded into daily practices also remains something of a mystery, notwithstanding that social procurement implementation has been slowly developing in practice. Loosemore [13] stated the importance of more extensive research into social procurement barriers and the OECD [3] opined that the literature on the risks, barriers, and enablers of promoting the responsible conduct of non-governmental businesses throughout supply chains had received little attention.

This paper, therefore, addresses the following research questions:

RQ1: What are the documented barriers that impede the proliferation of social procurement? RQ2: What are the countervailing enablers and strategies that can assist its implementation in practice?

A systematic review of the work undertaken in the field of social procurement to date can support academic and industry professionals to attain a more sophisticated understanding of the various barriers, enablers, and potential strategies that could emerge from future studies in the field. Such a review could also provide an overview of the development of social procurement and serve as a guide for practitioners and stakeholders (policymakers, tier-one construction companies, subcontractors, suppliers, social beneficiaries, etc.).

The systematic review undertaken in this study contributes to the extant literature in the following ways. First, it will provide a greater understanding of the enablers, barriers, and associated strategies of the implementation of social procurement. This knowledge gap is important to bridge as it has become increasingly evident that governments alone cannot be responsible for the social well-being of their citizens given the persistence of adverse social conditions faced by disadvantaged people, refugees, and growing inequality [21]. Second, a more advanced understanding of areas benefiting from social procurement could assist governments to better utilise their policy implementation to achieve greater social value creation. Third, this review can form a foundation of fundamental knowledge to assist future studies and provide helpful insights for practitioners and key stakeholders eager to better engage in social procurement.

To achieve this, the present literature review focuses on the following:

(1) Barriers and enablers in the implementation, management practices, and processes of social procurement in the construction and infrastructure sectors;

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(2) Strategies that can be applied to overcome social procurement barriers to take advantage of enablers in the implementation and management of social procurement in the construction and infrastructure sector.

This paper has undertaken a systematic literature review for the period 1 January 2012 to 30 June 2022. The review addresses barriers in the social procurement process for the construction and infrastructure sector and also categorises the strategies via a thematic analysis.

This paper is structured as follows: Section 2 reviews social procurement definitions and their conceptualisation; Section 3 introduces the methodology applied in this study; Section 4 presents the findings from the systematic review; Section 5 sets out some limitations of this research, discusses the findings, investigates the implications from previous studies, makes recommendations for future research, and proposes recommendations that have the potential to positively impact social procurement implementation practices.

# 2. Social Procurement Concept

There are a variety of procurement approaches whose societal contributions are not fully encapsulated by established conceptions of either economic impact or social procurement. Typically, these procurement approaches go beyond the economic and the social and also include the environmental. Examples include public procurement, sustainable procurement, and green procurement, where the latter refers to the integration of environmental criteria (e.g., reduction in greenhouse gas emissions) into the public procurement of products and services [22].

Although strong links can be drawn between social procurement and broader goals of sustainable procurement, this research focuses on social impact related to the sustainability agenda rather than unpacking and outlining the entire field of sustainable procurement.

The focus of this paper is on procurement activities that promote social impact, specifically the creation of social value for communities. Additionally, the scope of this research is confined to social procurement in construction and infrastructure projects.

### 2.1. Definition of Social Procurement

Social procurement has been defined in many different ways. For example, Furneaux and Barraket [23] (p. 269) defined social procurement as: "... the acquisition of a range of assets and services, with the aim of intentionally creating social outcomes (both directly and indirectly)."

There is a tendency in the literature to define social procurement as encompassing all the dimensions of sustainable procurement. For instance, Wirahadikusumah, et al. [24] (p. 939) argued that sustainable procurement can be defined as "an effort of improvement to the traditional procurement by adding sustainability principles into consideration to procurement's important areas."

Willar, et al. [25] (p. 116) defined social procurement in the context of sustainable procurement construction projects as follows: "... sustainable procurement in government projects is understood as a process whereby the government, in the context of meeting the needs for construction works and services, assesses not only the project cost and capability aspects of service providers but also assesses social and economic aspects and the minimum damage to the environment".

Other researchers have provided explanations of what they believe constitutes social procurement while falling short of providing an explicit definition. These explanations are summarised in Table 1 below.

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Table 1. Summary of the main focal points of social procurement.

Researcher	Main Focal Element
Hutchins and Sutherland [26]	Social procurement is a dimension of sustainable and responsible purchasing and procurement practices. It adds the social facets of sustainability that have often been overshadowed by environmental and economic dimensions
Furneaux and Barraket [23]	Develops a typology of social procurement implementation that utilises dimensions of direct/indirect perspectives to arrive at the creation of social outcomes with acquisitions
Wirahadikusumah, Abduh, Messah, and Aulia [24]	Improvement of traditional procurement by adding sustainability principles into the processes conducted within the procurement sphere. This reflects a more pronounced focus on sustainable development practices among firms undertaking social procurement
Willar, Waney, Pangemanan, and Mait [25]	Social procurement is one aspect of sustainable procurement; meeting the needs for construction works and services, not only the project cost and capability but also social, economic, and environmental aspects
Loosemore, Denny-Smith, Barraket, Keast, Chamberlain, Muir, Powell, Higgon, and Osbourne [27]	Social procurement policies are an emerging policy instrument being used by governments around the world to leverage infrastructure and construction spending to address intractable social problems in the communities they represent
Victorian Government [4]	Social procurement is when organisations use their buying power to generate social value above and beyond the value of the goods, services, or construction being procured. In the Victorian Government context, social value means the benefits that accrue to all Victorians when the social and sustainable outcomes in this framework are achieved

Part of the broader conceptualisation that lies at the heart of social procurement involves the notion of social value creation. As Loosemore, et al. [10] state, the creation of social value remains under-conceptualised, which has led to an ongoing debate in this area.

#### 2.2. Social Procurement in Construction and Infrastructure Sectors

The construction and infrastructure sectors are seen as important facilitators of social procurement due to their size and potential money multiplier effects [28]. Loosemore, Alkilani, and Mathenge [10] posit that this is the reason why the construction industry is widely seen by governments as a focus for newly emerging social procurement policies. Furthermore, spending in these sectors is capable of being leveraged to provide employment and training opportunities for disadvantaged groups such as Indigenous people, those experiencing disabilities, migrants and refugees, women at risk, youth at risk, long-term unemployed, and ex-offenders [13,29].

#### 3. Methods

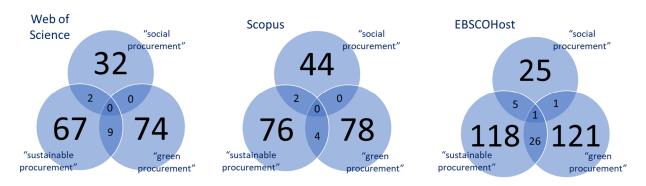
This study systematically reviewed academic publications that address the topic of social procurement. Our review process is inspired by Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) [30] and follows the four steps (described

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next) for standalone systematic literature reviews [31]. The review covers the literature between 1 January 2012 and 30 June 2022.

#### 3.1. Step 1: Planning

Planning involved understanding social procurement in the context of the construction and infrastructure sector and deciding on suitable databases to search. This required a series of database searches to assess the suitability of different databases and search keywords. For example, one determination was to establish a judicious selection of search terms. Figure 1 displays the results from three academic database searches using synonyms for "social procurement". The results suggested that the synonyms have quite dissimilar meanings in the literature. Based on results such as these, it was decided to use two search terms ("social procurement" and "sustainable procurement") in combination with two further terms (construction and infrastructure) to search three academic research databases (Scopus, EBSCOHost, Web of Science).



**Figure 1.** Example of experimental searches to understand the literature, returned from three database searches for three search terms.

# 3.2. Step 2: Search and Selection

The search and selection criteria deemed most suitable for this review were:

- Academic peer-reviewed journal articles written in English and published over the
  past 10 years (1 January 2012 to 30 June 2022) reflecting the growth that has occurred
  in social procurement research over the last decade;
- Research that presented findings relevant to barriers, enablers, strategies, and social
  value creation related to social procurement to match the focus of the research;
- Given the nascency of research on social procurement and a corresponding limitation
  on theory development, to address the research aims the authors expected to collect a
  wide range of materials from a wide range of academic literature with different quality
  rankings. Articles of sufficient quality as assessed against the minimum quality criteria
  derived from the Consolidated criteria for REporting Qualitative research (COREQ)
  checklist [32] that were sufficiently generic of suitable research reporting to be used
  to assess studies irrespective of their research methods (quantitative, qualitative, or
  mixed).

The search and selection process with results are presented in the PRISMA flow chart in Figure 2. The database searches identified 223 records. First, article screening consisted of two authors independently evaluating the suitability of each of the 103 identified articles by reading their titles, abstracts, keywords, contexts (e.g., industry), methodology, and any other clarification details in the full contents to decide on an article's inclusion or exclusion; second, resolving their selection differences through discussion with a third author. After the removal of duplicate records and checking for full article availability, 50 articles remained. One article was excluded for failing the quality test. Finally, 49 articles were selected.

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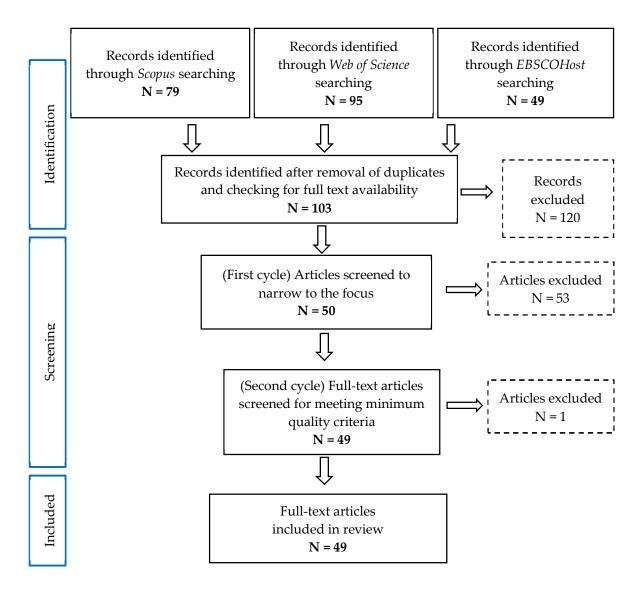


Figure 2. PRISMA flow diagram for this paper.

#### 3.3. Step 3 Extraction

Data to answer the research questions in terms of barriers, enablers, and strategies were extracted into a single document for further synthesis in Step 4.

#### 3.4. Step 4 Execution

Thematic analysis, an inductive analytic method, was selected as the method for categorising barriers, enablers, strategies, and social value creation into common themes by following Guest, et al. [33] (2012) and Saldana [34]. The thematic analysis process with an example is provided in Appendix A.

### 4. Findings

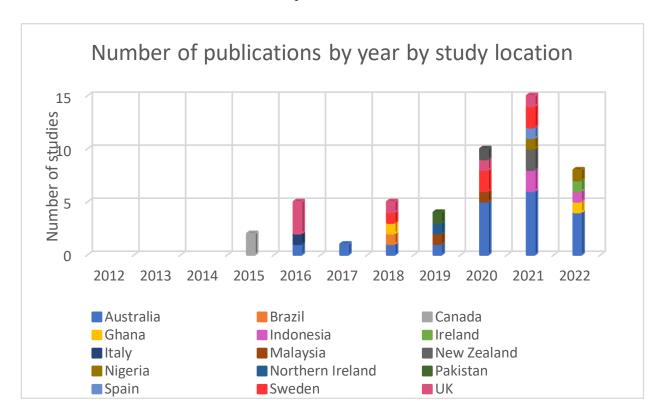
#### 4.1. Overview

This section presents an overview of the 49 articles selected (see Table A2 in Appendix B) for this systematic literature review in terms of the: (i) number of articles published by year and by country between 2012 and 2022, (ii) journal distribution, (iii) leading authors of social procurement research, and (iv) most frequently used keywords.

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### 4.1.1. Articles by Year and by Country

Figure 2 shows that no articles from 2012 to 2014 fell into our selection criteria and were thus not included. However, the number of articles that touch on our research questions started to grow between 2015 and 2019, although the growth was uneven. There has been a clear upward trend since 2020, considering that our search ended in July 2022 (shown in Figure 3). Figure 1 shows that more studies have been conducted in Australia (19) than anywhere else. The studies from Australia (19), the U.K. (6), and Sweden make up more than half of the studies published.



**Figure 3.** Social procurement publications by year and by country.

# 4.1.2. Journal Distribution

Our search found that the 49 articles included in our review were published in 25 different journals (see Appendix B). By subject areas, most articles were published in engineering (14), business, management, and accounting (12), social sciences (11), and environmental science (6), with a focus on the social aspects associated with social procurement and corporate social responsibility. The top five journals that published most of the articles selected for this review are Construction Management and Economics (7 articles), Engineering, Construction and Architectural Management (6), Sustainability (5), International Journal of Construction Management (4), and Built Environment Project and Asset Management (3).

# 4.1.3. Leading Authors

The most prolific authors in social procurement research among the 49 included articles and the country and years of publications are listed in Table 2. Only authors appearing as first authors at least twice are included in our analysis and reported in this table.

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First Authors	Studied Country	Number of Articles as First Author	Years Published
Loosemore M.	Australia, U.K., global	15	2016–2022
Troje D.	Sweden	5	2018, 2020–2021
Barraket J.	Australia, U.K.	2	2018, 2020
Denny-Smith G.	Australia	2	2017, 2021
Ershadi M.	Australia	2	2021
Ogunsanya O.A.	Nigeria	2	2021–2022
Ruparathna R.	Canada	2	2015

**Table 2.** Leading authors in social procurement research.

Professor Martin Loosemore from Australia led 15 publications in social procurement-related topics from 2016 to 2021, crossing the topics of the employment experiences and capabilities empowerment of different disadvantaged or marginalised groups, the collaboration between institutions and social enterprises to achieve social innovation and the resultant social value and social impact created, and the professional practices and roles of social procurement champions in the construction industry.

Dr. Daniella Troje from Sweden looked into social procurement in construction industries from the employment requirement through an institutional perspective, contributing to the "policy-in-practice" literature and providing advice on policy implementation.

# 4.1.4. Most Frequently Used Keywords

Mapping keywords provides a way to visualise the field of social procurement research. Figure 4 presents a cloud map of the keywords and key phrases of the included articles. The figure highlights the main keywords and phrases in a broad context of social procurement.



**Figure 4.** Cloudmap of keywords and key phrases applied in the literature.

As presented in Figure 4, sustainability, employment, collaboration, social value, social innovation, corporate social responsibility, and social enterprises were the terms most of the research focused on. Social procurement was a key phrase used, with papers covering corporate social responsibility focusing on procurement processes in the construction sector.

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From the cloud map summaries of the literature, social innovation and collaborations were of importance, along with employment. Of these, collaboration has been raised on numerous occasions in social procurement discussions.

# 4.1.5. Main Theories Applied to the Social Procurement Area

Although there is not a great deal of research on social procurement, most of the existing research focuses on problems/challenges occurring in practice and tends to be descriptive in nature as opposed to being oriented towards theoretical development [20]. Several researchers have pointed out there is a lack of conceptualisation and theoretical investigation in this area [13,35,36]. The theories applied in the social procurement literature within this systematic review are summarised in Table 3.

**Table 3.** Theories applied in social procurement research.

Theories Applied	Authors	Key Areas
Institutional Theory	Troje and Kadefors [20]	Employment requirement
Now Institutional Theory	Troje and Andersson [37]	Social procurement practices and strategic and operative levels
New Institutional Theory	Loosemore, et al. [38]	Social procurement, social value, social impact, social outcomes, Institutions Isomorphism
	Loosemore, Keast, Barraket, Denny-Smith, and Alkilani [11]	Collaboration, intermediary, project management education, risk management, social value, social procurement, social innovation
Organisational Theory	Loosemore, et al. [39,40]	Social procurement champions in the construction and engineering industry, CSR
Practice Theory	Troje and Gluch [41] Troje [42]	Employment requirements, social sustainability, social value, Sweden
Job Performance Theory	Lam [43]	Construction development, holistic sustainability, design and construction, post-contract monitoring, KPIs, performance drivers
Social Value Theory/Value Theory	Denny-Smith, et al. [44]	construction employment, COVID-19, infrastructure investment, social procurement, social value
View Theory Ewuga and Adesi [45] suppli		AEC, Republic of Ireland, strategy, sustainable procurement, suppliers' development, supply chain management
Principal-Agent Theory	Loosemore, Denny-Smith, Barraket, Keast, Chamberlain, Muir, Powell, Higgon, and Osborne [27]	Construction industry, collaboration, intermediaries, risk management, social procurement, corporate social responsibility
Social Exchange Theory  Loosemore, bridgeman, and Keast  ex-off		Collaboration, construction, ex-offenders, social procurement, social value
Socio-Technical Transition Theory	Brooks and Rich [46]	London, sustainability, construction, socio-technical transitions, consumption, procurement
Field Theory Barraket [47]		Intermediation, social procurement, field theory, social enterprise, social innovation
Ecological Modernisation Delmonico, et al. [48		Sustainable operations, sustainable public procurement, sustainable supply chain, sustainable purchasing, Latin America

# 4.1.6. Methodologies Applied

The methodologies that have been applied in the reviewed papers include: quantitative methods (through surveys) and qualitative methods (e.g., semi-structured interviews, empirical fieldwork, focus groups, and case study). More details can be found in Appendix B.

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### 4.2. Discussion of Themes

This study reviewed 49 papers. Three themes that emerged will be discussed in this section: (1) barriers; (2) enablers; and (3) applied strategies and recommendations for overcoming the barriers.

#### 4.2.1. Main Barriers

From the 49 reviewed papers, the main barriers are summarised in Table 4 below. The main barriers can be categorised into nine groups: (i) knowledge, learning, tools, and awareness; (ii) organisational capacity and resources; (iii) policies and leadership; (iv) competitive forces/industry/organisational structure and culture; (v) procedures and practices; (vi) cost, administration, accounting, and funding; (vii) collaboration and engagement; (viii) marketing (communications, branding, products/services strategy); and (ix) resistance to change. These are presented in Table 4 below.

**Table 4.** A sorted list of main barriers identified for distinctive areas.

Main Barriers Identified	Included Articles	Description
Knowledge, learning, tools, and awareness	(14) [13,24,37,49–57]	Inadequate information, knowledge or awareness or the inadequate means to acquire the information and knowledge or raise awareness can be a barrier to efforts to implement social procurement. For example, lack of, inadequate, or ad hoc training programs, vague definitions and diversity of interpretations of key terms or the domain, lack of tools showing how to conduct sustainable procurement, or lack of platforms to exchange information and knowledge.
Organisational capacity and resources (including human resources development)	(13) [10,12,13,25,37,42,48,50,51,54, 56–58]	Constraints or issues with organisation's practices and human or other resources that affect their capacity to implement social procurement. For example, the complexity and uncertainty of role expectations and tasks, a lack of skilled labour or suitable candidates, lack of time to address sustainability issues, iterative role changes, recruitment difficulties, or unsustainable mandates.
Policies and leadership	(10) [10,13,42,48,50,52–54,57,58]	Constraints or issues related to policies or leadership. For example, vague or mismatched policies and policy goals, insufficient policies, regulations, or incentives, lack of leadership, lack of leadership motivation or demand from leadership for social procurement, or inflexible policies or policies that could change easily.
Competitive forces/industry/organisational structure and culture	(10) [10,12,13,25,48,51,52,55,57,58]	Issues related to competition in the industry. For example, increased competition, client silos, fragmented and transitory nature of the construction sector, lack of third-party pressures, barriers to entry to social enterprises, industry culture, transparency and governance factors of the industry, organisational short-term planning, and lack of effective strategy or partnership issues.
Procedures and practices	(9) [12,13,25,37,46,50,51,54,57]	Constraints, restraints, and issues related to procedures and policies. For example, lack of systematised practices or complicated procedures, lack of objective methods, standards, and certifications to vet bidders or evaluate bids or determine ethical credentials, restraints of existing procurement procedures and practices, difficulties with reporting and measuring social impact, lack of technical guidelines for implementation, or inadequate monitoring and control.

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Table 4. Cont.

Main Barriers Identified	Included Articles	Description
Cost, administration, accounting, and funding	(9) [12,25,46,48,50,51,54,57,58]	Issues and constraints related to finances and capital and the administration of that. For example, lack of funding/capital and unwillingness to incur higher capital costs, push for lowest price, additional costs of tendering, administration, and compliance, additional unknown aspects of costs, risks, capabilities, and responsibilities, lack of financial support, poor cash flows, or underestimation of sustainability financing.
Collaboration and engagement  (6)  [12,13,37,42,49,50]  un		Issues with collaboration between stakeholders and lack of engagement with social procurement. For example, lack of motivation or interest among interns, lack of engagement between social enterprises and construction companies, uncooperative attitudes and stakeholder fatigue, lack of teamwork, or low capacity of the supply chain to deliver on social outcomes.
Marketing (communications, branding, products/services strategy)	(5) [12,13,25,48,58]	Issues and constraints related to research and development (R&D), consumers, and markets. For example, insufficient R&D, lack of demand for sustainability products, small size and narrow scope of activities, market aspects, poor communication of value add, poor communication with construction firms.
Resistance to change	(5) [10,12,13,54,58]	Issues related to resistance to change. For example, resistance from industry incumbents to changing established relationships, displacement of existing informal recruitment networks and processes and lag in adoption of sustainable business concepts and practices.

There are also some other barriers identified by a few papers, such as industrial and employment relations, human resources management [56,58], supervision and teamwork [37,50], organisational strategic planning [13,46], research and development [54], consumer factors [53], financial management [58], and organisational development [13].

Different papers have deployed varying perspectives in their research and thus contributed different insights to understanding social procurement. For example, Loosemore, Alkilani, and Hammad [58] focused on barriers affecting Australian local disadvantaged job seekers. The researchers concluded that, for example, most stakeholders perceive social procurement in a negative light, as more of a risk than an opportunity; raise numerous cautionary concerns about the risks for creating harm by ineffective implementation; display a low level of engagement and a high level of suspicion that deters the collaborative effort needed to overcome the implementation barriers; there is a low level of engagement and a high level of suspicion by key stakeholders that also deters collaborative efforts; stakeholders perceive that the way the policies are being implemented as unjust and appearing to counter effective risk management; and finally, that education is needed for all stakeholders. In contrast, Delmonico, Jabbour, Pereira, Jabbour, Renwick, and Tavares Thome [48] explore barriers experienced by public authorities in the Brazilian public sector. Their study found that organisational cultural factors and perceptions of a gap between federal and state/local authorities can present significant barriers.

### 4.2.2. Enablers for Social Procurement Initiatives

From the 49 reviewed papers, the main enablers could be categorised into eight groups. First, three ecosystem-creating factors were identified by Barraket and Loosemore [14]: organisational, commercial, and institutional. Organisational factors include champions of social value creation, breadth and accessibility of organisational networks, and organisational purpose [14]. Commercial factors include competitive advantage, altruistic

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values linked to organisational history, and founders' passions [14], while institutional factors include organisational scale and structural position in the industry and new public governance trends, as well as increasing social and governmental expectations around collaboration [14].

Second, drivers of growth were categorised into six groups [13]: construction industry culture change, new social legislation and regulation, changing social expectations, potential impact of construction on society and environment, political trends, and changing public procurement priorities [13].

Third, social actors involved tended to vary, with project manager involvement not being necessary when the actors were aligned since this is where strategy and construction procurement primarily takes place [59].

A fourth enabler was the regulatory environment, which significantly influences sustainable procurement. This occurs via an adequate implementation of legislation such as the Infrastructure Concession Regulatory Act, 2005, adherence to the provisions of the Fiscal Responsibility Act, 2007, and government policies relating to public procurement as the key indicator [60].

In addition, organisational orientation, the fifth enabler, has a significant association with sustainable procurement, but only two variables have a strong association: the attitude of close competitors, and understanding that competitive advantage is enhanced through sustainability credentials [60].

Another (sixth) enabler, procurement method selection, has a significant influence on sustainable procurement, however the strength of the relationship is moderate when specific variables are considered, indicating that a one-size-fits-all approach will not be effective [60].

In terms of adoption of newer methodologies (seventh enabler), the adoption of the gateway process, competitive dialogue, cost-led procurement methods, and the two-stage open book model have a strong relationship with sustainable procurement, while e-procurement has a weak relationship [60]. Construction industry development directly influences sustainable procurement significantly [60].

Finally, stakeholder commitment, which refers to common shared beliefs in the organisations' goals and values for green procurement [61], was seen as the eighth enabler for social procurement. This is linked to project stakeholder technical competencies, which refers to project stakeholders having sufficient technical competencies to deliver on a green project [61]. Stakeholder ability to understand the bigger picture of green construction is also a factor and this can be bolstered by awareness creation and education in green practices before and during the project [61]. Knowledge sharing between the project stakeholders refer to the exchange of green practices throughout the organisations involved through, for example, training, meetings and benchmarking [61].

Two coercive factors (regulatory imperatives and client pressures), three mimetic factors (mimicking of competitors, cross-sector networks and alliances and supplier assessment programs) and no normative factors were found to explain social procurement, although alignment with the enterprise culture also appears to be central to social procurement policy implementation [38].

While procurement experts agree that understanding of sustainable procurement fundamentals, policies and strategies (e.g., leadership and roles and authorities), procurement organisation (e.g., procedures and systems), and sustainable procurement processes (procurement planning) affect the successful implementation of sustainable procurement of construction work, it is only sustainable procurement policies and strategies, and procurement organisations that have a statistically significant effect [62].

#### 4.2.3. Implemented or Perceived Strategies to Enhance Social Procurement Practices

This study identified key strategies capable of being categorised into a series of themes, organised by stakeholder categories: policymakers; buyers; suppliers; collaborations and engagement; and general. For policymakers, the main themes are policies and legislation,

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monitoring, and auditing. The next stakeholder group, buyers, have themes comprising awareness, knowledge, learning, tools, and training; leadership; procedures and practices; and improving procurement method selection. For suppliers, key factors are knowledge and awareness and organisational capacity and resources. In the category of collaborations and engagement, there are themes of teamwork: helping local disadvantaged job seekers, integration and management, and sustainable infrastructure. General factors of importance to most stakeholders are cost and administration, measurements, and support for the change. Examples of key strategies are presented in Table 5.

There are also strategies to foster enablers. Bohari, Skitmore, Xia, Teo, and Khalil [61] recommended that all stakeholders have a sufficient level of knowledge of green practices so as to foster organisational capacity and resources. The policies, legislation, and leadership enablers can be fostered by: being cultivated as early as the beginning of the project; building commitment, which starts with creating awareness and nurturing a common understanding and interest between the stakeholders; developing a green orientation strategy, to be made available to all stakeholders, and articulated to other stakeholders involved, both internal and external, as early as possible; and effective communication, which is essential.

**Table 5.** Implemented or perceived strategies to enhance social procurement practices.

Stakeholders	Themes Identified	Example Strategies
Policymakers	Policies and legislation	<ul> <li>Sustain and support green policy tools by specific actions at national and local levels—Testa et al. Testa, Grappio, Gusmerotti, Iraldo, and Frey [55]</li> <li>Develop a complete national framework of sustainable procurement implementation—Wirahadikusumah, Abduh, Messah, and Aulia [24]</li> <li>Address in detail the micro tensions between the implementation of policy and practice. Before implementing social procurement policies, consider aligning the sector prerequisites, the local labour market conditions, and the prerequisites of the people the social policy is targeting—Troje [42]</li> <li>Improve leadership barriers through legislation and updated policies. Consider a non-voluntary policy on green procurement—Ruparathna and Hewage [54]</li> <li>Resolve policy conflicts and perverse incentives that undermine collaboration. Further, ensure that the risks and opportunities of social procurement are clear and shared and that policies reflect and acknowledge the sector's constraints and challenges. Finally, ensure that the parties responsible for implementation have the incentives, knowledge, resources, and time to collaborate—Loosemore, Denny-Smith, Barraket, Keast, Chamberlain, Muir, Powell, Higgon, and Osborne [27]</li> <li>Provide a new construction procurement act with sustainability clauses that mandate not only design compliance but stipulates a statutory procurement requirement for contractors and suppliers—Ogunsanya, Aigbavboa, and Thwala [60]</li> </ul>
	Monitoring	<ul> <li>Integrate environmental and social criteria into the supplier selection process. Monitor supplier environmental and social performance—Renukappa, Akintoye, Egbu, and Suresh [53]</li> <li>Address information asymmetries and perverse incentives by government policymakers to monitor and measure the implementation—Loosemore, Denny-Smith, Barraket, Keast, Chamberlain, Muir, Powell, Higgon, and Osborne [27]</li> <li>Establish construction industry development boards—Ogunsanya, Aigbavboa, and Thwala [60]</li> </ul>
	Auditing	- Improve the sustainability auditing process—Ershadi, Jefferies, Davis, and Mojtahedi [50]

Table 5. Cont.

Stakeholders	Themes Identified	Example Strategies
	Awareness, knowledge, learning, tools, training	<ul> <li>Improve stakeholders' awareness of sustainability values and principles—Ershadi, Jefferies, Davis, and Mojtahedi [50]</li> <li>Implement best practices through training and workshops in more tendering organisations and those with potential future suppliers—Testa, Grappio, Gusmerotti, Iraldo, and Frey [55]</li> <li>Undertake training needs assessment in sustainability areas and plan effective training programs—Ershadi, Jefferies, Davis, and Mojtahedi [50]</li> </ul>
	Leadership	<ul> <li>University procurement management needs to commit to sustainability and strongly encourage mid-level management to achieve sustainable goals—Zaidi, Mirza, Hou, and Ashraf [57]</li> <li>At the corporate level, develop a sustainable procurement management (SPM) plan. Assign accountability to all levels of the organisation. Obtain senior management buy-in on the implementation plan—Ershadi, Jefferies, Davis, and Mojtahedi [50]</li> </ul>
Buyers (Tier 1/2, etc.)	Procedures and practices	<ul> <li>Use tender templates to standardise the legal/normative part of tenders and the preparation of green tenders. Detail both the legal issues and general green technical specifications or contract performance clauses—Testa, Grappio, Gusmerotti, Iraldo, and Frey [55]</li> <li>Provide more resources such as frameworks, tools, and databases so as to standardise the practices. Reinforce the practices with education, training, awareness programs, and research—Ruparathna and Hewage [54]</li> <li>Maintain SPM metrics so the procurement team can track targets—Ershadi, Jefferies, Davis, and Mojtahedi [50]</li> <li>Build maintenance mechanisms and formalise practices and routines. Plan for intangible knowledge retention, areas for knowledge exchange, and opportunities for continuous feedback—Troje and Andersson [37]</li> </ul>
	Improving procurement method selection	- At the project level, ensure the right method is used. Choose the right and most appropriate procurement strategy. Adopt a gateway process, competitive dialogue, cost-led procurement method, the two-stage open book model, and e-procurement—Ogunsanya, Aigbavboa, and Thwala [60]

 Table 5. Cont.

Stakeholders	Themes Identified	Example Strategies
Suppliers (SMEs), social	Knowledge and awareness	- Implement best practices through training and workshops with potential future suppliers—Testa, Grappio, Gusmerotti, Iraldo, and Frey [55]
enterprises, social benefit suppliers	Organisational capacity and resources	- Introduce organisational arrangement for career development, staff training, cost savings, and renewable energy—Wirahadikusumah, Abduh, Messah, and Aulia [24]
	Teamwork	- Encourage stakeholders to engage in sustainable procurement. Establish team rules for all parties involved in the SPM implementation process. Encourage all parties to adhere to teamwork values—Ershadi, Jefferies, Davis, and Mojtahedi [50]
	Helping local disadvantaged job seekers	- Improve education in social procurement by addressing skills gaps and imparting transferable project skills and competencies. Involve intermediaries in facilitating collaboration and creating shared value. Address conflicting policy agendas. Improve education support at a lower level through work readiness. Increase government support for policy implementation. Develop policies that address supply and demand constraints—Loosemore, Keast, Barraket, Denny-Smith, and Alkilani [11]
Collaborations and engagement	Integration and Management	- Employ a project management office (a centralised oversight structure) that: 1. Supports executives in making strategic partnership decisions that enable the achievement of business targets without compromising sustainability values, including undertaking a cost–benefit analysis of investments in sustainability and an analysis of the total cost of ownership. 2. Ensures the incorporation of sustainability requirements by adopting a collaborative (intra- and inter-organisational) implementation approach. 3. Supports the procurement team to evaluate and screen suppliers against sustainability criteria. 4. Systematises sustainability compliance and maintains the integration of sustainability controls from design through to delivery. 5. Undertakes post-delivery reviews to confirm that all sustainability tasks have been accomplished and SPM objectives have been met—Ershadi, et al. [63]
	Sustainable infrastructure	- Improve and strengthen cooperation among those with high-level and middle-level qualifications and their subcontractors/suppliers as well as civil society to create a sustainable infrastructure—Willar, Waney, Pangemanan, and Mait [25]

Table 5. Cont.

Stakeholders	Themes Identified	Example Strategies
	Awareness and Education	<ul> <li>Establish criteria in the selection of services at the procurement phase of providers that emphasise green construction. Enhance their awareness, knowledge, and skills in the planning, implementation, and supervision phases of infrastructure projects. Ensure transfer of knowledge about sustainable principles among all project participants that are supported by well-trained and competent contractors regarding environmental, social, and economic viewpoints—Willar, Waney, Pangemanan, and Mait [25]</li> <li>Strengthen institutional training, aligned with sustainability target-setting for public expenditures. Coordinate efforts among Federal, State and local (county) public institutions—Delmonico, Jabbour, Pereira, Jabbour, Renwick, and Tavares Thome [48]</li> </ul>
General	Cost and administration	- Agree on a common language between project investors/owners about SPM benefits based on a tangible cost–benefit analysis—Ershadi, Jefferies, Davis, and Mojtahedi [50]
	Measurements	- Adapt organisational performance targets to measure social value. Re-evaluate the organisation's financial modelling to accommodate costs on social value, viewing it as essentially a non-profit-making activity. Adopt a more person-centric approach to the design and implementation of solutions and a more holistic approach to the measurement of impacts and outcomes. Understand the project context and ensure bespoke solutions rather than use a standardised tool measured against project management metrics and targets—Murphy, and Eadie [51]
	Support on the change	- Appoint more than one social value champion to implement social procurement who each plays a multitude of roles at different organisational levels and across different organisational functions—Loosemore, Keast, and Barraket [39]

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#### 4.3. Validity of the Study

To safeguard the validity of the findings and conclusions of this systematic literature review, this study took several measures to reduce the risk of bias. This research focused particularly on sources of bias, selection bias, performance bias, and reporting bias. The assessment was largely based on the Cochrane bias risk assessment framework [64]. Table 6 outlines the process and measures of the bias risk assessment for the study.

<b>Table 6.</b> Risk bias	accecement and	measiires t	or th	o literatiiro	remiest
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Bias	Measure	Purpose
Sources of bias	Used a comprehensive search strategy: multiple databases, relevant keywords, and controlled vocabulary	To capture a wide range of relevant literature
Selection bias	Applied consistently our clearly defined criteria for inclusion and exclusion to the literature reviewed	To minimise selection bias
Performance bias	Critically reviewing participants' responses and acknowledging the bias in this paper	To alert readers to take caution in considering research findings
Reporting bias	Used (PRISMA) technique to report methods and findings of our study Clearly stated the limitations of our literature review, including potential biases, and discussed how these limitations might affect the interpretation of the results and their implications	To ensure the transparency of our reporting  To respond positively to the potential biases of the studies reviewed

#### 5. Conclusions

Of the 49 included articles, 27 identified barriers in their research, and 18 identified enablers. Papers identifying both barriers and enablers totalled eight. Three articles [20,44,65] did not investigate barriers or enablers but included information about the social value created.

There are two tendencies in the research: one is to focus on employment as a specific delivered social value outcome, while the other is to look at a broad category of outcomes from social procurement (without focusing on any specific outcome). Focusing on employment as the social benefit means the results reported (e.g., barriers) are applicable to this type of social procurement, and this often gives the impression that creating employment is all that counts when discussing social procurement.

The current research has some limitations. For instance, in some of the studies reviewed in this research, it was observed that rather than obtain the views of a particular stakeholder group under study, researchers asked someone else to comment. This is particularly evident in the case of disadvantaged groups that are difficult to study directly; hence, it is much easier to ask employment providers to comment. There are additional examples of this, for example, surveying public universities and then purporting that the results represent the views of "the public sector". Researchers may well be correct in assuming that employment providers have a suitable overview of the problems faced by disadvantaged groups, and it should be noted that all the papers studied have been transparent about their methodology. Nonetheless, there are sensitive issues to be considered, including biases. These observations should be taken into account by those undertaking future research.

The high concentration of authors of the 49 articles seems to indicate that there are only a handful of researchers who are interested in social procurement within the construction industry. This concentration is another limitation of the current research.

Notwithstanding the limitations, a number of implications and areas for further exploration can be deduced from this study. Specifically, the role of social procurement in contributing to the creation of social value is an under-theorised concept, and more research into frameworks for measuring social outcomes is needed [66]. The conduct of future research into social value creation could help to articulate a social value chain by expanding on the building value chain, as presented by Groote and Lefever [67]. Investigations are needed to measure the real-world impacts of social procurement policy, including

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initiatives connected to construction projects, and to measure the gains delivered from social procurement [11,46,54,68]. There is scope for additional research to further investigate the issues associated with the integration of social procurement into different business models and different sizes of businesses [53].

All reviewed papers suggest that social procurement as a field of practice will evolve and expand, which will have significant implications. For instance, there could be greater workplace diversity in construction, more engagement of employees and work groups with communities, increased awareness and knowledge of the social value created by companies or specific projects and of what this means for people, companies and specific groups (e.g., [41,69]), and measurements showing increasing and different forms of social value created [44]. Moreover, more people may champion social value creation, and the value chains of companies that have adopted social procurement could be longer. This shows the potential influence of using social procurement on the wider policy area [20].

There is clear potential for future research to investigate changes in areas such as these and to develop theories elucidating how the evolution or expansion has occurred, the changes experienced by supply or value chain actors, affecting relationships, and the role of different policies and company cultures in the process of change (e.g., [44,45,70]). New barriers and enablers may appear and will need to be identified. The theoretical lenses used by the range of studies could be utilised to identify more details of practices.

Research on champions of social procurement or those in social procurement roles, to map the types of roles and developments in roles and practices, the effectiveness for social procurement of the influence they exert and understanding which of their roles are most appropriate in different situations, is recommended (e.g., [20,40,58]). More detailed mapping of the relationships between procurement managers and other decision makers is also needed [46].

Further research is required on the intermediaries that facilitate social procurement, their capabilities, and resource requirements (e.g., [69]). Additionally, research could investigate cases where successful implementation has occurred without the involvement of intermediaries.

It is also recommended that studies be conducted to assess the effectiveness of various procurement strategies, such as public–private partnerships, in actualising social policies into practice. A more comprehensive understanding of procurement's role in social value creation is necessary [42].

With respect to social procurement practices, the following recommendations arise from the current study. Specifically, the implementation of social procurement demands the establishment of new relationships, roles, knowledge, and skills, which poses risks of failure and increased complexity for the actors involved. This underscores the importance of intrapreneurship and creativity, as they are vital for developing new areas and roles that can account for a broader range of social value outcomes in the procurement process [29,46,66].

A common recommendation in the included articles is to use the results of their research to help different stakeholders to develop or improve their tools and practices and to act as driving forces to advance social procurement. This recommendation has been made, for example, in the context of construction subcontractors and indirectly related social enterprises, to address stigmas about ex-offenders as employees [18]; and in connection with Valencian public entities, to develop handbooks [71].

There have been calls for the development of training and educational courses for all stakeholders about the need to shift to sustainable procurement practices (e.g., [39,49,72]) and for the development of the skills and competencies needed to implement social procurement [11,29]. This is a clear need.

If the papers studied had incorporated a particular theoretical perspective or constructed typologies and models, these lenses or models could be utilised as normative standards or guideposts to steer institutions, businesses, and procurement personnel towards effective implementation of social procurement or realisation of social outcomes

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(e.g., [37,49]). However, they did not. Therefore, future studies should actively seek to apply a lens of theory to the analysis they undertake.

The efforts by governments and others to enhance the social well-being of disadvantaged groups, and address equity considerations, can be enhanced if the systems that surround the implementation of social procurement can be made more effective. This has a negative aspect—the reduction in barriers—and a positive aspect—the promotion of enablers. Social procurement is a promising new arena for the creation of social value.

**Author Contributions:** Conceptualisation, C.X.L.; Methodology, C.X.L., B.B., R.N., D.G. and F.Z.; Abstract analysis, C.X.L., R.N. and B.B.; Figuration, B.B. and C.X.L.; Writing—original draft, C.X.L. and B.B.; Writing—review and editing, C.X.L., R.N., D.G., F.Z. and P.Z. All authors have read and agreed to the published version of the manuscript.

**Funding:** This study was funded by the Victorian Higher Education Strategic Investment Fund (2021–2022).

Institutional Review Board Statement: Not applicable.

**Informed Consent Statement:** Not applicable. **Data Availability Statement:** Not applicable.

**Acknowledgments:** The authors are grateful to the guest editors and the anonymous reviewers for their useful suggestions, which have improved the quality of the manuscript.

**Conflicts of Interest:** The authors declare no conflict of interest.

# Appendix A

Appendix A.1. Thematic Analysis Process with Example

Separate data on barriers and enablers were extracted from the included papers and saved as a Microsoft Word document. To categorise the barriers and enablers into common themes, the list of barriers and enablers was examined, and common themes were recorded according to which of the items (barriers or enablers) could be consolidated. The themes were strongly derived from the data and not made to fit into pre-existing theory. Table A1 presents an example to illustrate the process together with the following discussion. The first iteration of analysis involves immersion in the data by reading and rereading the descriptions of each barrier and generating descriptors or themes. From Table A1, in the first iteration, initial themes were assigned to barriers based on phrases in the included paper of what the barrier meant. Where such descriptions were missing, the meanings were interpreted from the contents of the paper overall or the name of the barrier. During the first iteration, the codes closely captured the meaning of each barrier. For example, the difference between the first two and third barriers in the table reflected the difference between lacking clear role descriptions (an HRM-related barrier) and the ad hoc way in which the role developed (a human resources development-related barrier). As more barriers were examined, so more codes were created. In the second iteration, codes were consolidated around common themes. For instance, since the role of unions is connected to the industrial relations function, which was the precursor function to employment relations, and since these two functions evolved into the contemporary organisational human relations management (HRM) function, the two codes were consolidated into the "Industrial and Employment Relations and Human Resources Management-related barriers". This was still taken to be sufficiently distinct from the role development code to warrant separate codes. It is nonetheless possible that other analysts would develop different codes and themes based on the extracted data.

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**Table A1.** Example of thematic categorisation of barriers.

Iteration	Barrier Title and Some Relevant Descriptions of the Barrier	Initial Code	Iteration	Final Theme
1	Complexity and uncertainty in terms of role expectations and tasks [56] "has given rise to a new role", "this is not a well-defined professional role yet", "the role often was self-created and iteratively developed to align with both immediate and habitual needs", "the expectations on them had an in-built ambiguity", "they had to navigate between conflicting formal and informal roles and responsibilities", "the ERPs were detached from HR functions in the organization" [56]	Human resources management-related barrier	2	Industrial and employment relations and human resources management-related barriers
1	Unclear role boundaries and responsibilities, "a hybrid role with unclear boundaries and responsibilities were formed", "existence of both formal and informal roles suggests that the ERPs, despite the freedom to define their own role, do not yet have exclusive control and power of their work" [56]	Human resources management-related barrier	2	Industrial and employment relations and human resources management-related barriers
1	Iterative role development, "the work tasks of professionals are also in a continuous and iterative process that is simultaneously affected by the professionals themselves and/or formed through proxies such as various educational programs", "the roles and their included practices and tasks were developed in an iterative and ad hoc process shaped by emergent concerns, demands and incidents, like 'the refugee crisis'" [56]	Human resources development-related barrier	2	Human resources development-related barrier
1	Union opposition, "numerous new risks", "they do not believe that our people can do the job", "union opposition to social enterprises" [11]	Industrial relations-related barrier	2	Industrial and employment relations and human resources management-related barriers

Data categories by which the individual data items were synthesised, emerged mainly during the extraction process in an intuitive way and was assisted by the fact that high-level categories were already determined for this review (i.e., barriers, enablers, strategies, and social values created for specific stakeholders). This meant fewer groups of individual data items needed to be synthesised for the results reporting purposes.

# Appendix B

The following Table A2 presents key information about the included papers in the systematic review process.

**Table A2.** Key information about the included papers.

Included Paper	Methodological Approach	Location	Data Collection and Analysis Methods	Sample Size	Theoretical Framework(s)/Key Literature	# Citations (Scopus)
Agbesi, Fugar, and Adjei-Kumi [70]	Quantitative variance	Ghana	Questionnaire survey, structural equation modelling	123	Sustainable procurement, diffusion of innovation theory, technology–organisation– environment framework	8
Agyekum et al. [49]	Quantitative	Ghana	Questionnaire survey, statistical analysis, semi-structured interviews	104	Sustainable public procurement	1
Allen [73]	Case study	New Zealand	Develops unique conceptual framework for analysis	1	Procurement policy, social procurement	4
Barraket [47]	Case method, longitudinal (2 waves)	Australia	Focus group, semi-structured interviews, narrative and thematic analysis	2 focus groups, 14 interviews	"New social procurement", field theory, intermediation, social innovation	19
Barraket and Loosemore [14]	Qualitative case study	Australia, U.K.	In-depth semi-structured interview, thematic analysis	3	Cross-sector collaboration, social enterprise	33
Bohari et al. [61]	Quantitative variance	Malaysia	Questionnaire survey, structural equation modelling	100	Stakeholder value and green procurement	27
Brooks and Rich [46]	Socio-technical transitions study	U.K.	Empirical fieldwork, questionnaires, interviews, document analysis, code mapping	70 questionnaires, 9 interviews	Socio-technical transition theory	28
Delmonico et al. [48]	Quantitative variance	Brazil	Survey questionnaire, statistical analysis	54	Sustainable operations management, industrial sustainability, sustainable public procurement	74
Denny-Smith and Loosemore [15]	Indigenous research, constructivism	Australia	Electronic questionnaire survey	33	Indigenous enterprises	11
Denny-Smith et al. [44]	Qualitative descriptive	Australia	Opinion survey, thematic analysis	107	Social procurement, employer of choice	18
Ershadi et al. [63]	Qualitative descriptive	Australia	Opinion survey, thematic analysis, expert consensus,	20	Project and sustainable procurement management	3

Table A2. Cont.

Included Paper	Methodological Approach	Location	Data Collection and Analysis Methods	Sample Size	Theoretical Framework(s)/Key Literature	# Citations (Scopus)
Ershadi et al. [50]	Qualitative descriptive case study	Australia	Interviews, thematic analysis Delphi validation	1 case study, 6 interviews	Sustainable procurement management	3
Ewuga and Adesi [45]	Quantitative analytical	Ireland	Online survey, descriptive statistical analysis, interviews	62	Sustainable supply chain management, suppliers' development, resource-based view	0
Fuentes-Bargues, et al. [71]	Qualitative descriptive	Spain	Content analysis	967 tenders	Social procurement	1
Hurt-Suwan and Mahler [66]	Qualitative experimental	New Zealand	Questionnaire, thematic analysis	8	Social procurement. precarious employment	2
Lam [28]	Qualitative	U.K.	Questionnaire survey, regression analysis	60	Holistic sustainability	2
Loosemore [13]	Qualitative descriptive	U.K.	Interviews, narrative analysis	12	Social procurement, social enterprise	93
Loosemore, Alkilani, and Mathenge [10]	Quantitative	Australia	Online survey, descriptive and inferential statistical analysis	70	Social procurement	20
Loosemore, Alkilani, and Hammad [16]	Qualitative descriptive	Australia	Online survey, descriptive and inferential statistical analysis	79	Employment-seeking experiences of refugees and migrants	5
Loosemore, Alkilani, and Hammad [58]	Qualitative descriptive	Australia	Online survey, nonparametric statistics	25	Refugee job-seeking experiences	1
Loosemore, Alkilani, and Murphy [38]	Social constructivist and interpretivist epistemology	Australia	Semi-structured interviews and thematic analysis	16	New institutional theory	7
Loosemore, Bridgeman, and Keast [17]	Social constructivist and interpretivist epistemology, case study	Global	Multi-method (semi-structured interviews, text, and artefact analysis, observation)	11	Cross-sector collaboration	9
Loosemore, Bridgeman, Russell, and Zaid Alkilani [19]	Social constructivist and interpretivist epistemology, case study	U.K.	Semi-structured interviews and thematic and documentary analysis	1 case study/10 interviews	Homelessness, capability approach	1

Table A2. Cont.

Included Paper	Methodological Approach	Location	Data Collection and Analysis Methods	Sample Size	Theoretical Framework(s)/Key Literature	# Citations (Scopus)
Loosemore, Daniele, and Lim [18]	Qualitative descriptive	Australia	Online survey, nonparametric statistics	94	Ex-offenders	2
Loosemore, Denny-Smith, Barraket, Keast, Chamberlain, Muir, Powell, Higgon, and Osborne [27]	Social constructivist and interpretivist epistemology, case study	Australia	Focus groups, thematic analysis	1 case study, 5 focus groups	Cross-sector collaboration, social procurement	6
Loosemore, Higgon, and Osborne [29]	Social constructivist and interpretivist epistemology, case study	Australia	Semi-structured interviews, observation, document analysis, thematic analysis	1 case study, 73 interviews	New public governance, cross-sector collaboration	2
Loosemore, Keast, and Barraket [39]	Qualitative descriptive	Australia	Semi-structured interviews	15	Social procurement	1
Loosemore, Keast, and Barraket [40]	Social constructivist and interpretivist epistemology	Australia	Semi-structured interviews, thematic analysis	15	Champions and organisational theory	0
Loosemore, Keast, Barraket, Denny-Smith, and Alkilani [11]	Social constructivist and interpretivist epistemology, case study	Australia	Focus groups, thematic analysis	1 case study, 5 focus groups, 35 stakeholder groups	Social procurement, cross-sector collaboration	0
Loosemore, Osborne, and Higgon [69]	Case study	Australia	Semi-structured interviews, daily diaries, observation, assessments, survey	34	Facilities management	2
Loosemore and Reid [12]	Qualitative descriptive	Australia	Interviews, narrative analysis	8	Social procurement	13
Messah, Wirahadikusumah, and Abduh [62]	Quantitative variance	Indonesia	Questionnaire survey, multivariate analysis	49	Sustainable procurement	1
Murphy and Eadie [51]	Quantitative descriptive	Northern Ireland	Survey	50	Service innovation, social innovation, socially responsible procurement	19
Ogunsanya, Aigbavboa, and Thwala [60]	Quantitative variance	Nigeria	Questionnaire survey, structural equation modelling	317	Sustainable procurement	0

Table A2. Cont.

Included Paper	Methodological Approach	Location	Data Collection and Analysis Methods	Sample Size	Theoretical Framework(s)/Key Literature	# Citations (Scopus)
Ogunsanya, Aigbavboa, Thwala, and Edwards [52]	Quantitative variance	Nigeria	Questionnaire survey, factor analysis	320	Sustainable procurement	22
Renukappa, et al. [53]	Mixed methods	U.K.	Questionnaire survey	53 questionnaires, 17 interviews	Sustainable procurement	17
Ruparathna and Hewage [54]	Mixed methods	Canada	Questionnaire survey, semi-structured interviews, content analysis	30 questionnaires, 9 interviews	Sustainable construction procurement	26
Ruparathna and Hewage [68]	Mixed methods	Canada	Questionnaire survey, document review, semi-structured interviews	9 interviews, 30 questionnaires	Sustainable procurement	99
Staples and Dalrymple [59]	Qualitative case study	Australia	Semi-structured interviews	5 case studies, 20 interviews	Public sector procurement	2
Testa, Grappio, Gusmerotti, Iraldo, and Frey [55]	Qualitative descriptive	Italy	Content analysis	164 tenders	Green public procurement	55
Troje [42]	Qualitative descriptive	Sweden	Semi-structured interviews, thematic analysis	28	Social procurement policies	1
Troje and Andersson [37]	Qualitative descriptive	Sweden	Semi-structured interviews, thematic analysis	46	Social procurement. Institutional work	9
Troje and Gluch [41]	Qualitative descriptive case studies	Sweden	Interviews, thematic analysis	3 cases, 23 interviews	Social procurement, practice theory	7
Troje and Gluch [56]	Qualitative descriptive	Sweden	Interviews, thematic analysis	21	Professional identity, role, and work practices	26
Troje and Kadefors [20]	Mixed methods	Sweden	Case study, interviews	3	Social procurement	16
Waris, Panigrahi, Mengal, Soomro, Mirjat, Ullah, Azlan, and Khan [65]	Qualitative case study	Malaysia	Multicriteria decision making, questionnaire survey	1 case study, 10 questionnaires	Sustainable procurement	43

Table A2. Cont.

Included Paper	Methodological Approach	Location	Data Collection and Analysis Methods	Sample Size	Theoretical Framework(s)/Key Literature	# Citations (Scopus)
Willar, et al. [25]	Quantitative descriptive	Indonesia	Questionnaire survey, statistical analysis	158	Sustainable construction	17
Wirahadikusumah, et al. [24]	Mixed methods	Indonesia	Questionnaires, interviews	20	Sustainability	5
Zaidi, Mirza, Hou, and Ashraf [57]	Quantitative intuitive modelling	Pakistan	Questionnaire survey, interpretive structural modelling	43	Sustainable public procurement	37

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