Article

Diving into Social Innovation: A Bibliometric Analysis

Tânia Martins, Alexandra Braga, Marisa R. Ferreira and Vítor Braga *

CIICESI, Escola Superior de Tecnologia e Gestão, Politécnico do Porto, 4610 Felgueiras, Portugal;
8160416@estg.ipp.pt (T.M.); abraga@estg.ipp.pt (A.B.); mferreira@estg.ipp.pt (M.R.F.)
* Correspondence: vbraga@estg.ipp.pt; Tel.: +351-255-314-002

Abstract: This paper aims to map and analyze the scientific production of social innovation, resulting in a contribution to the literature review and guidelines for future research. A bibliometric analysis was conducted to explore the trends on the topic. The primary objectives are (1) to identify how the literature defines the concept of social innovation and to track its evolution; (2) to measure productivity and identify key authors and scientific journals with the highest impact in the field and the association networks between their respective institutions and countries of origin; (3) to analyze and map citations, co-citations, and research topics to pinpoint the topics and dimensions related to social innovation in order to propose future research. Our paper clarifies the concept of social innovation, reports the progresses achieved within this research field, and measures the productivity on this specific topic.

Keywords: social innovation; bibliometric analysis; co-citation analysis

1. Introduction

Little research was scientifically developed about social innovation over the last fifty years. In the literature of the 1970s, there are some mentions of the concept (Taylor 1970); in the 1980s, some contributions on how social innovation influence the structure of developed economies appear (Gershuny 1982), and several years later, some mentions are made about social change and its evolution (Martin and Osberg 2007; McNichol 2005; Moulaert et al. 2007). In 2006, Muhammad Yunus and the Grameen Bank (the pioneers of microcredit) won the Nobel Peace Prize—an important booster of the topic—and, since then, there has been an increasing interest in social innovation. Later, some initiatives of the European Commission President offered a new role to social innovation. The Bureau of European Policy Advisers decided to include social innovation on the Europe 2020 strategy, signalling social innovation as means to face society's challenges. In the last decade, social innovation gained greater expressiveness and emerged as a relevant topic for academics, organizations, and policymakers (Sanzo-Perez et al. 2015). Globally, the importance of social innovation is demonstrated by the G8's recent focus on funding impact. Simultaneously, given the social challenges and budget austerity some governments face, social innovations have been incorporated as a new, redesigned strategy (Voorberg et al. 2015).

To better understand the concept of social innovation, one needs to understand its context. So, the main goal of our paper is to identify how the literature defines the concept of social innovation to identify its trajectory, and to measure the topic of productivity. More importantly, this paper delves into the recent directions adopted by the studies on social innovation, which are underlying areas within the topic that have not been exhaustively addressed. Innovation is the main factor for the creation and maintenance of competitive advantages for firms, also ensuring their continuity and sustainability (Porter 1998). Innovation allows for the identification of societal needs (Braga and Braga 2013; Rochester 2013), addresses social challenges that the world faces through innovative means (Bulut et al. 2013), and inspires new ideas that potentially improve populations' quality of life (Pol and Ville 2009). Social innovation, as a product, refers to the social value created

for a specific public whose needs are not being met by other actors, in particular, by the government and/or the market (Chalmers 2013; Young 2006). For example, co-creation/co-production can be considered a cornerstone for social innovation in the public sector, since it seems to be a condition to generate pioneering public services that meet the needs of citizens, given several community challenges, such as ageing or urban regeneration (Voorberg et al. 2015). In a context of increasing needs and shrinking public budgets, the gap between citizens' needs and expectations about the scope of social services and the actual resources, capabilities, and roles of funders, providers, and beneficiaries, has increased (Rey-Garcia et al. 2019). Thus, there are several perspectives for the concept of social innovation that can be read in different ways, as shown in Table 1.

Table 1. Social Innovation Concepts.

References	Concepts
Taylor (1970)	Improved forms of action, new ways of doing things, new social inventions.
Porter (1998)	Creation and maintenance of competitive advantages for companies, also ensuring their continuity and sustainability.
Mumford (2002)	New ideas about how people should organize interpersonal activities, or social interactions, to meet one or more common goals.
Cloutier (2003)	New response with a lasting effect pointed at a social situation considered unsatisfactory that seeks the well-being of individuals and/or communities.
Organisation for Economic Co-operation and Development (OECD)	Essential factor for the performance of companies, not only for productivity growth but also to increase the efficiency and quality of their operations, which can increase demand and profit margin.
Novy and Leubolt (2005)	Social innovation depends on satisfying basic human needs, increasing the political participation of marginalized groups, and increasing socio-political capacity and access to resources to strengthen rights that lead to the satisfaction of basic needs and enhance participation.
Moulaert and Nussbaumer (2005)	Innovation in social relations between individuals and groups of humans in communities.
Young (2006)	The result of a set of responses and effects whose needs are not being met by other actors, namely by the State and the market.
Shaw and Carter (2007) Rochester (2013)	Innovation identifies and responds to the needs of society.
Moulaert et al. (2007)	A tool for urban development focused on meeting human needs through innovation in neighborhood relations and community governance.
Mulgan et al. (2007)	Innovative activities and services that are motivated by the goal of satisfying social needs that are essentially developed and disseminated through organizations with social purposes.
Phills et al. (2008)	New solutions to respond to a social problem that are more effective, efficient, sustainable, or fair than previous solutions. The value created involves society in general rather than individuals.
Zahra et al. (2008)	It is an activity and/or process that aims to discover, define, and exploit opportunities to create, in an innovative way, "social wealth" through new or existing organizations.
Pol and Ville (2009)	New idea whose potential focuses on improving quality of life.
Murray et al. (2010)	New ideas (products, services, and models) that meet social needs and increase society's capacity to act.
Dawson and Daniel (2010)	The goal of social innovation is to improve collective wellbeing.
Bacq and Janssen (2011)	Social innovation is the result of the action of visionary individuals who can find innovative solutions to social problems in their community.
Braga and Braga (2013)	Factor for organizations to achieve their goals.
Cajaiba-Santana (2014)	What underlies the path of social innovation is not a social problem to be solved, but the social change it brings.
Jiang and Thagard (2014)	Creative products and changes that are inspired by social needs and convey value to society by meeting those needs.
Voorberg et al. (2015)	The creation of long-lasting outcomes that aim to address societal needs by shaping the relationships, positions, and rules between the involved stakeholders through an open process of participation, exchange and collaboration.

Considering the different perspectives and definitions presented in the literature, one can propose a definition of social innovation as being a process of change, social collaboration, and interaction, aiming at organizing ideas and inventions to tackle social

problems and to improve quality of life and collective wellbeing through mechanisms of community governance.

The complex, ambiguous, and insecure nature of social systems often makes it particularly difficult to identify the causes or sources of action (Marcy and Mumford 2007) that generate the implementation of new ideas or social innovations. There are different factors contributing to social innovation, namely: (1) environmental factors, such as the availability of information and relationships established with other organizations (Jaskyte and Lee 2006; Shier and Handy 2015); (2) organizational characteristics, such as centralization, professionalization, organizational dimension, and differentiation (Damanpour 1987; Jaskyte and Dressler 2005); (3) individual characteristics, such as managerial attitudes and the availability of skilled employees (Jaskyte and Dressler 2005; Shier and Handy 2016). Regarding the factors that tend to condition action, due to its insufficiency, one can point out institutional support and funds dedicated to social innovation as potential problems (Mulgan 2006) on limited public and philanthropic support. Not only are social innovations extremely complex events unfolding over ample periods of time, but it has also proven arduous to identify the nature and origins of new ideas, along with the circumstances accompanying their implementation (Mumford and Moertl 2003). So, social innovation must be a process of self-management governed by human relations, moral principles, and creative routines (Mark W. McElroy 2002). In the context of nonprofit organizations, social innovation processes can be enhanced by a decentralized organizational structure, the "scaling up" of ideas, providing training, and giving volunteers a sense of ownership (de Wit et al. 2017).

The current model of societal organization that combines aspects of the market economy with social status, despite having achieved excellent results in recent years, is inefficient in dealing with ongoing economic inequalities, new phenomena of social exclusion, and considerable levels of uncertainty and dissatisfaction that may challenge the equilibrium of the economic system. Although the role of governmental policies has been to fill certain social gaps, it is increasingly constrained by funding restrictions, an aging population, and the complexity of the social problems. To face these difficulties, there is a significant number of citizens and organizations willing to put their knowledge into practice with a direct and positive impact on people's lives. Recognizing the evolution of social innovation, innovation and entrepreneurship are fundamental to face today's uncertainty, and third sector organizations are and should be viewed as the engines of social change (de Wit et al. 2017). The literature also points to a potential relationship between several types of innovations and nonprofit organizations' performance (Jaskyte 2020; Krlev et al. 2019).

Creativity operates in many territories, including, for example, technological invention, artistic imagination, and social innovation (Jiang and Thagard 2014), and it is important to mention that there is a link among social innovation and creativity, which needs to be explored since, in fact, (i) social innovation seems to embody a particularly meaningful form of creativity, leading to the creation of new institutions, new industries, new policies, and new forms of social interaction (Bulut et al. 2013; Damanpour 1987; Mumford and Moertl 2003), and (ii) social innovation has received less attention in studies of creativity (Mumford and Moertl 2003).

2. Method—Procedures and Data

Considering the growth of academic interest in social innovation, and the fact that the process of social innovation remains understudied (Bulut et al. 2013; Marcy and Mumford 2007; Voorberg et al. 2015), this study seeks to provide a comprehensive review of existing studies through a systematic review of the literature in which bibliometric methods were employed, including the analysis of the most cited works, the networks of co-citations, and the understanding of the intellectual structure of literature (Ramos-Rodríguez and Ruíz-Navarro 2004). In this study, the VOSviewer software (www.vosviewer.com, accessed on 3 September 2021) was used, as proposed by Van Eck and Waltman (2010), to analyze large amounts of text. The research was based on a sample of international and national

scientific papers that are part of the Social Science Citations Index (SSCI), which contains, in addition to publications, bibliographic information on authors, affiliations, and citations.

Data collection was performed through the database indexed to ISI Web of Science. This database contains highly ranked journals, although their impact factor may vary. Nonetheless, the database includes the most cited and highly impacting journals, and therefore this remained as the strategy for the journal selection, i.e., the authors decided to include papers published in all journals ranked in Web of Science.

Initially, publications using "social innovation" in the topic were searched, resulting in 1188 papers. This search was then refined following several criteria: (a) research domain: social sciences and databases: core collection of web of science index (resulting in 527 publications); (b) types of documents: papers (reduced the results to 444 papers). The papers were selected based on the title, abstract, and keywords, which resulted in 444 scientific papers published between January 1970 and December 2017. The unit of analysis in this research focused on the publication and on the variables that correspond to authors and affiliations, journals, number of citations and references cited.

The data collected from Web of Science was analyzed with VOSviewer. This software can create maps generated from network data to construct networks of scientific articles, research centers or organizations, scientific journals, and keywords. This tool uses network-based maps and allows three types of map visualizations: the visualization of the network, the overlay visualization, and the visualization of density (Oyewola and Dada 2022).

The clustering technique used by VOSviewer is based on the association strength, i.e., the similarity between any two items *i* and *j* (terms, references, authors, journals, etc.) is calculated as, according to Van Van Eck and Waltman (2009):

$$s_{ij} = \frac{c_{ij}}{w_i w_j}$$

with C_{ij} representing the number of co-occurrences of the two items *i* and *j*, and w_i and w_j representing the total number of occurrences of both items or the total number of co-occurrences of *i* and *j*. VOSviewer uses techniques of machine learning to, based on the association terms, group items into clusters. Van Eck and Waltman (2009) provide more detailed information about the clustering techniques used by the software.

3. Results

3.1. Social Innovation Evolution

The literature on social innovation is a relatively new field of research that has boomed notably over the last decade. Such research flourished in 1970, with the first publication of Taylor, a paper on Introducing social innovation in the Journal of Applied Behavioral Science (Taylor 1970). The author considers that there are five fundamental principles for a successful social innovation intervention: (1) maximum investment, (2) cooperation, (3) equal responsibility, (4) research as a creative process, and (5) leadership.

Data, in Figure 1, show an increase in the annual number of published papers on social innovation, mainly over the last decade (representing 89.6% of all publications). It is also important to mention that more than half of the papers (245) have been published in the last three years. Since 2014, the number of publications has been equal to or greater than 40 papers per year. The largest number of publications was reached in 2017, with 97 papers published. The rise in the number of publications and research interests in the area of social innovation can be explained by a number of factors, including the attention that USA and European countries are giving to the topic, demonstrated by the generous funds for social innovation (Howaldt and Schwarz 2010). The recent financial and economic crisis refines creativity and social innovation, promoting sustainable growth, avoiding job destruction, and increasing competitiveness (Terstriep and Pelka 2016).

The 444 papers considered in our research show a citation rate of, on average, 12.05%, with a total of 5348 citations (with 108 never cited and 364 papers cited between 1 time (54 papers) and 493 times (1 paper)). Table 2 ranks the publications based on their citations.
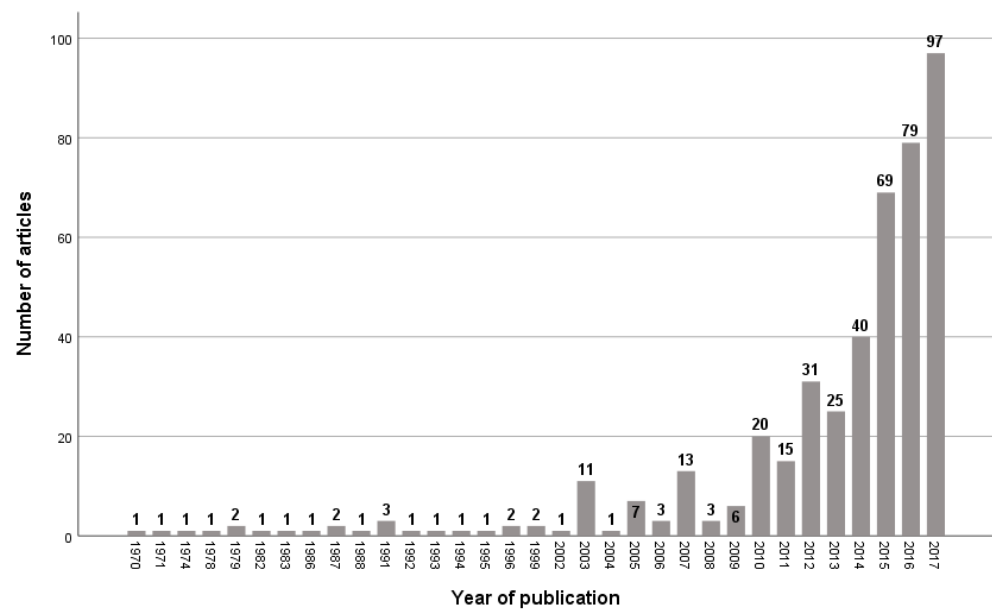
Figure 1. Number of papers by year of publication.

Table 2. Most cited papers in the field of social innovation.

	Authors, Year of Publication	Total of Citations
1	(Swyngedouw 2005)	493
2	(Boons and Lüdeke-Freund 2013)	243
3	(Dacin et al. 2011)	184
4	(Seyfang and Haxeltine 2012)	181
5	(Moulaert et al. 2005)	153
6	(Kanter 1999)	150
7	(Mumford 2002)	117
8	(González and Healey 2005)	106
9	(Westley et al. 2013)	84
10	(Moore and Westley 2011)	79
11	(Maruyama et al. 2007)	75
12	(Tsemberis et al. 2003)	75
13	(Scott et al. 2005)	68
14	(Biggs et al. 2010)	67
15	(Gerometta et al. 2005)	67
16	(Moulaert and Nussbaumer 2005)	66
17	(Neumeier 2012)	57
18	(Cajaiba-Santana 2014)	56
19	(Young 2011)	56
20	(Craig and Pepler 1998)	56
25	(Menzel et al. 2007)	51
26	(Novy and Leubolt 2005)	51
27	(Seyfang and Longhurst 2013)	49
28	(Hunter et al. 2008)	47
29	(Marcy and Mumford 2007)	43
30	(Morokvasic 2004)	43
31	(Mont et al. 2014)	42
32	(Selsky and Parker 2010)	42
33	(Linton 2009)	40
34	(Moore et al. 2014)	39
35	(Dawson and Daniel 2010)	35
36	(Feola and Nunes 2014)	33
37	(Mumford and Moertl 2003)	32
38	(Phillips et al. 2015)	31
39	(Byrne et al. 2010)	31

The most cited paper (Swyngedouw 2005) provides an overview of how political governance impacts social innovation processes. Throughout the paper, the author considers that current non-governmental innovative forms of governance allowed for fostering inclusive development processes, highlighting the emergence of actors who take on a role in politics through the creation, administration, and implementation of actions that were exclusively provided or organized by governments. These new forms of governance are empowering democracy and providing improved collective services because they generate ideas that can foster openness, inclusion, and empowerment of previously excluded or marginalized social groups. These new socially innovative governance forms are actively encouraged and supported by agencies seeking neoliberal action and are increasingly predominant in creating, developing, and implementing rules at the local level. The paper explores new forms of governance by correlating the role of governments and civil societies and reveals how institutions empower new social actors.

3.2. Evolution Networks and Co-Citations

Based on 444 papers, a co-citations analysis was performed to construct the respective network (Figure 2 is grouped into seven clusters, which correspond to processes related to social innovation research, namely: cluster 1—methodological and conceptual proposals for future research in the field of social innovation; cluster 2—the concept of social innovation and impact of governance; cluster 3—strategic management and social innovation; cluster 4—social innovation and entrepreneurship; cluster 5—the role of social innovation for local development; cluster 6—social innovation and creativity; and cluster 7—transformation in ecosystem management through social innovation.)
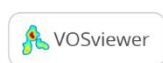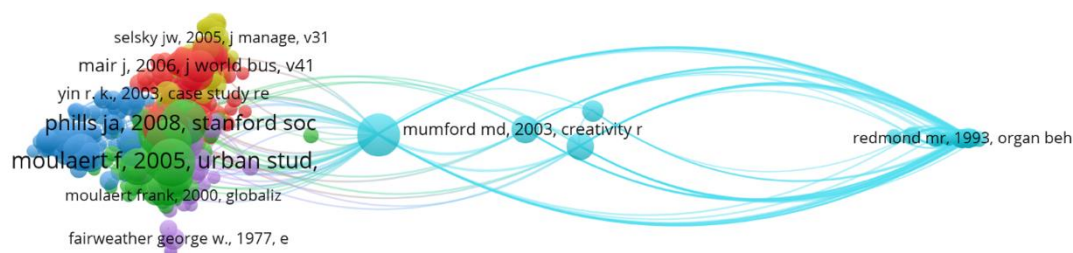
Figure 2. Co-citation network map.

4. Discussion

Cluster 1 identifies several methodological and conceptual proposals for future research in the field of social innovation. Research gaps were identified in the literature (Austin et al. 2006), namely:

1. Market—What are the effects of market forces on the creation and development of social enterprises? In mixed markets, where nonprofit and for-profit organizations operate, what are the competitive advantages, disadvantages, and interactive dynamics? Do social enterprises assume some risks at their market early stage and development? What is the process used to identify social entrepreneurship opportunities? What affects growth, competition, and collaboration between social enterprises?

2. Mission—How does an organization's mission affect their strategy? How does the mission affect resource mobilization? How can powerful mission statements be created?

3. Capital—What are the main drivers of philanthropic capital markets? How efficient are these markets? What determines their structure? How does a social entrepreneur determine the ideal mix of sources of finance? What are the effects and effectiveness of the risk analysis performed for social entrepreneurship? What new financial instruments could be created to overcome some of the current shortcomings in philanthropic capital markets?

4. People—What are the motivations of social entrepreneurs and how do they compare with commercial entrepreneurs? What role do non-monetary incentives play in mobilizing people involved in social entrepreneurship? Can firms be effectively used in social enterprises, and vice versa, and to what extent can non-monetary incentive systems in social enterprises be used in firms? What are the most effective forms for a social entrepreneur to mobilize and manage volunteers?

5. Performance—How can social value creation be measured? How can entrepreneurs better communicate with different stakeholders? How can performance measures be integrated into management systems?

6. Context—How do contextual forces shape the creation of opportunities for social entrepreneurship? How do contextual differences in countries or communities change these forces? What are the contextual forces that stimulate social innovation and entrepreneurship?

The study of social innovation involves several domains, including entrepreneurship and nonprofit social innovation (Dacin et al. 2011). The impact that profitability and commercial success has on innovation processes and the definition of the social enterprise's mission represents the first step in the process of developing entrepreneurial opportunities (Dawson and Daniel 2010), and, at the same time, it is essential to understand how the variety of financing sources can affect the financial sustainability of social innovation projects (Anderson and Dees 2006).

The concept of social entrepreneurship is introduced with an important connection to social innovation, and a study of the relationship between the recognition of opportunities and the organizational form of both topics can be an important way forward for future research, as well as to relate sustainability, environment, and social innovation (Mair 2006).

Cluster 2 includes the concept of social innovation and the impact of different governance forms. Social innovation is a new social practice created from collective action, both intentional and goal oriented, aiming for social change by reconfiguring how social goals are achieved (Cajaiba-Santana 2014). Therefore, social innovation is socially constructed, as individuals collectively engage into actions and reflect upon their outcome. In the innovation process, it is important to understand how social systems influence behavior and how they can be affected when attempts are made to understand the difficulties of promoting social change by governments, the market, or private initiatives (Cajaiba-Santana 2014). This author also considers the existence of structures capable of promoting social innovation, enabling agents to act and think reflexively in the development and implementation of new ideas to promote social change considering, also, that agents should develop a DIY-based creativity mindset and collaboration as a form of mobilizing resources and other actors.

Another dimension included in this cluster is governance (Moulaert 2014; Moulaert et al. 2007), which is expected to contribute to the transformation of social relations and power structures, both in community groups and external actors, with the purpose of transforming governance styles into more inclusive and democratic social practices, thus creating multidimensional political participation systems. The development of strategies and processes of social innovation that favor exchange and political initiatives positively impact both urban and social policies and the production and maintenance of socially innovative dynamics for development (Moulaert 2014). However, this analysis also demonstrates that the innovative actions of the local community are often lost in top-down type policies. Thus, in order to enable innovative and socially effective initiatives, sensitivity to local proposals and civil society is required, and it is important to understand alliances and agreements between governments and the market (Moulaert et al. 2007).

Nowadays, there are many attempts to measure the social value generated by non-governmental organizations, social enterprises, social entrepreneurship, or social programs (Mulgan 2010). According to the author, value emerges from the interaction between supply and demand, reflecting what people or organizations are willing to pay. In addition, current social value indicators imply accountability to stakeholders, management of internal operations, and assessment of social impact, which may reduce the magnitude of the generated value. Finding indicators to measure social value is difficult since it lacks an adequate and legal framework, as well as persistent and rapid regulation in the social field; there is a diversity of opinions about expected results; ethics, morals, and individuals' priorities vary, and the durability of the social value generated is unpredictable (Mulgan 2010).

The great ideas of innovation appear because there is a group of motivated, proactive, and persuasive people who insist on making changes and assuming the risks that may arise (Mulgan 2006; Mulgan et al. 2007). Therefore, the starting point for innovation is the awareness of existing needs that are not being met, associated with an idea of how to respond to such needs. It is through contact with reality that ideas evolve and improve. Under such a perspective, innovative ideas often need to find support to be able to persuade potential sponsors, including investment reviews, impact assessments, and more developed instruments to measure success, such as social return on investment or combined value (Mulgan et al. 2007).

Social innovation is not exclusive of the non-profit sector; it can be operated by politics and governments, by the market, by social movements, by the education sector, as well as by social enterprises (Mulgan et al. 2007; Phills et al. 2008). Currently, social innovation seems to play a decisive role in social progress—it contributes to economic development and to the evolution of several areas, such as health, education, new technologies, and business, although when compared to business innovation, little has been researched on the process (Mulgan et al. 2007).

Unlike social entrepreneurship and social enterprise, social innovation transcends sectors, levels of analysis, and methods for discovering processes that produce lasting impact (Phills et al. 2008). Many innovations create benefits for society, especially through increased employment, productivity, and economic growth, and many involve the creation of new business models able to meet the needs of poor people in a more efficient, effective and, if not unprofitable, at least in a sustainable way (Phills et al. 2008).

Innovation is an experimental process and as such, openness to failure/risk is refined (Seyfang and Smith 2007). Funding constraints inhibit experimentation and punish failure by withdrawing resources, so the challenge is to develop supporting mechanisms that allow grassroots initiatives to revise and continue in the light of past difficulties and to disseminate lessons learned (Seyfang and Smith 2007). While continued funding for failure may be difficult to justify, it is unreasonable to cut funding for initiatives that are willing to adapt to activities, overcome problems, and are willing to continue experimentation.

Cluster 3 provides information on the importance of strategic management in social innovation. The great wave of industrialization and urbanization in the 19th century allowed for an increase in social entrepreneurship and innovation: mutual self-help, microcredit, cooperatives, unions, reading clubs, and philanthropic business leaders (Mulgan 2006). Nowadays, studies on the models of competition for projects and social innovation actions help to make markets work more efficiently, identifying relationships and opportunities (Westley et al. 2013). The strategy of social innovation programs can include creating benefits or reducing costs for society and can determine the development and assertion of the innovation process (Phills et al. 2008).

In this field, new knowledge is needed to deal with new forms of innovation (Rosted 2010) and this knowledge must include understanding the value that is being generated by multidisciplinary innovation teams. Some literature identifies the lack of studies that show the social impact generated by social innovation organizations (Margolis and Walsh 2011). There is no coherent system to explain the wide diversity of social innovation strategies, so it is essential to invest in scientific research and policies that contribute to the creation

of several basic innovations and to design a variety of sustainable practices (Seyfang and Haxeltine 2012).

Cluster 4 reveals the relationship between social innovation and entrepreneurship regarding research. Research on innovation and social entrepreneurship falls far short of its practice (Johnson 2003). In the innovation process, it is essential to understand how the context influences behavior and how it can affect social systems (Cajaiba-Santana 2014), as well as to identify which are the contextual forces that can be exploited (Austin et al. 2006).

According to Austin et al. (2006), the emergence of social entrepreneurship results from several factors: (1) Market failure: social innovation initiatives arise when there is a failure in the social market, i.e., when the forces of the market do not satisfy a social need; (2) Mission: the fundamental objective of social entrepreneurship is to create value for the public good while commercial entrepreneurship aims to create profit for private purposes and benefits society by generating goods, services, and jobs, which can cause transformative social impacts; (3) Resource mobilization: the fact that non-profit organizations do not redistribute the surpluses generated limits managers regarding the rewards that can be generated from human resources compared to the business sector; (4) Performance measurement: measuring the performance of the social entrepreneur becomes more difficult in businesses since it has more tangible and quantifiable measures of performance.

Recognizing the whole social innovation process, it can be said that innovation and entrepreneurship are fundamental to make sense of today's uncertainty, and third sector organizations are, and should be, seen as the drivers of social change (de Wit et al. 2017) in which social entrepreneurship assumes the main objective of creating social value at the expense of personal and shareholder wealth (Mair and Marti 2006).

Cluster 5 includes papers related to the role of social innovation in local development. Creating communication and distribution networks between government, business, and civil society can be a strategy to profit from knowledge and practices in favor of social innovation processes, adding quality to an extremely demanding scenario in the era of globalization (Howaldt and Schwarz 2010).

Taking examples of dynamization of innovative community development initiatives in different European cities (Moulaert et al. 2005), one assists to the emergence of networks that have gained institutional capacity and became fund managers at different levels, created jobs, and promoted the concept of community-based economic regeneration, as well as the development of integrated areas, combining resources to improve conditions and reintegrate them into the economy through personalized training and individual counseling. The same authors point out that the most popular, spontaneous, and creative initiatives are usually the most innovative; the more radical movements can, generally, have a longer life, a wider spatial impact, or provide greater social benefits, but, in contrast, the more popular or even utopian movements are more prone to bureaucratization and the original loss of the principle of social innovation. Thus, local development strategies must seek to satisfy needs through innovation in neighborhood relations and wider communities, so innovation in governance relations also means innovation in a representative democracy.

It is important to mention that social innovation is, often, a reaction against social exclusion and, only in exceptional cases, it is an improvement of a situation of inclusion or harmony among social groups (Moulaert et al. 2005; Moulaert and Nussbaumer 2005). These authors refer to the existence of two factors that may limit social innovation initiatives. The first one is the question of time-based management between the political system, the social economy, and civil society movements, which can disrupt the reproduction of socially innovative initiatives, and the second refers to the constraints on the development of human, organizational, and financial resources. On the other hand, one can mention elements that may promote social innovation, such as human capital that can be used to govern, coordinate, cooperate, create, and improve the social cohesion of local and regional communities and the culture, because different ethnic groups and cultures must develop a common language and a communication system, seeking a new balance between the logics of their existence (Moulaert and Nussbaumer 2005).

When one considers communities as an intermediary of territorial development and its agents and their organizations are involved, the institutional environment in which a community network develops must be democratic and act as a catalyst for cooperation and interaction with other networks, providing coordination among networks (Moulaert and Nussbaumer 2005). Alongside these contributions, business innovations also tend to have positive effects, not only for innovators, but for the community as a whole (Pol and Ville 2009).

Considering Cluster 6, it seems that, in recent years, social innovation has gained a broader and more persistent dimension associated with creativity. In this cluster, most papers use the case study methodology and present a relationship between creativity and social innovation. These papers recognize that agents that promote social innovation must develop mindsets that aim to develop creativity, DIY, and collaboration as a path to activate and organize resources (Cajaiba-Santana 2014). Social innovation and the emergence and implementation of new ideas about social relations and social organizations require an active analysis of the causes that operate in a social system (Marcy and Mumford 2007). Investigating creative strategies, recognizing the work performed, and exercising creativity are factors that will, certainly, boost innovation and provide a multidimensional and appealing response to the community.

Cluster 7 focuses on a single paper that demonstrates how transformation in the management ecosystem restricts the social innovation processes. The paper of Biggs et al. (2010) — Navigating the back loop: fostering social innovation and transformation in ecosystem management—shows examples and factors that may help to promote social transformation and the emergence of new ecosystems. The authors were able to verify that social innovation is a non-linear process, and it is always defined in relation to a specific context and time, though it may not be possible to replicate the same strategies within different contexts (Biggs et al. 2010).

Main Sources of Citations

The 444 papers included in the sample were published in 235 academic journals (with 5348 citations) and, as it can be seen in Table 3, 26 journals were cited at least 52 times.

Table 3. Main sources of citations in the field of social innovation.

Total	Total of Papers	Total of Citations	Average Citations per Year
Urban Studies	8	894	66.8
Creativity Research Journal	12	374	30.79
Journal of Cleaner Production	5	300	53.23
Ecology and Society	13	294	45.93
Organization Science	1	184	23
Environment and Planning C-Government and Policy	2	182	26.19
American Journal of Community Psychology	10	181	11.74
Harvard Business Review	2	151	7.9
Journal of Business Ethics	7	147	17.84
European Urban and Regional Studies	6	126	14.21
International Journal of Technology Management	7	106	11.99
Technovation	4	98	10.34
Technological Forecasting and Social Change	8	84	17.45
Futures	7	83	12.91
Energy Policy	3	82	7.65
Global Environmental Change-Human and Policy Dimensions	2	82	14.77
Sociologia Ruralis	3	62	9.81
Public Management Review	2	58	14.35
Canadian Psychology-Psychologie Canadienne	1	56	4.67
Proceedings of the National Academy of Sciences of the United States of America	1	56	7
Technology Analysis and Strategic Management	3	56	10
Environmental Politics	1	54	6
Journal of Business Research	8	54	11.5
Regional Studies	3	54	6.46
Business and Society	1	53	5.89
Entrepreneurship and Regional Development	1	52	5.78

The publications with the highest number of citations are Urban Studies (894 citations), the Creativity Research Journal (374 citations), the Journal of Cleaner Production

(300 citations), and Ecology and Society (294 citations). Some of these works are also those with the greatest impact, such as Urban Studies (66.28), followed by the Journal of Cleaner Production (53.23), Ecology and Society (45.93), and the Creativity Research Journal (30.79).

Figure 3 refers to publications with the highest number of co-citations (at least 60) and Table 4 shows the 3 resulting clusters. Cluster 1 includes publications related to the environment and urban areas, Cluster 2 refers to publications in the area of management and entrepreneurship, and Cluster 3 includes publications focusing on research methodologies.
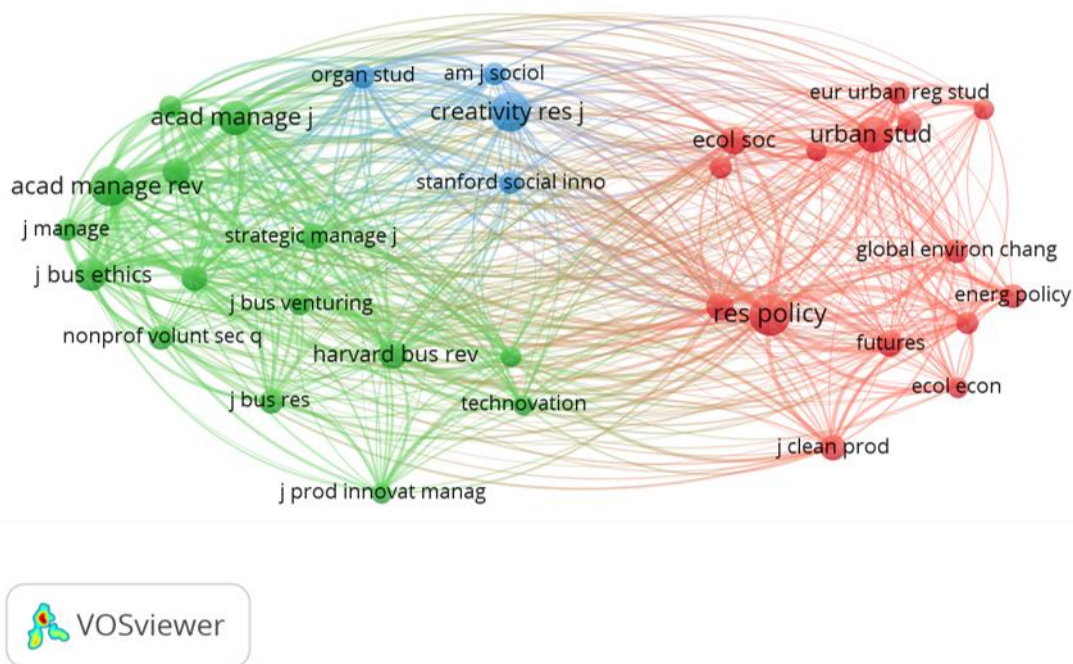

Figure 3. Co-citation network map in the 444 papers and its clusters.

Table 4. Clusters resulting from the most cited sources.

Cluster 1—Environment and Urban Area	Cluster 2—Management and Entrepreneurship	Cluster 3—Research Methodologies
Research Policy (238 citations) Urban Studies (190 citations) Technological Forecasting and Social Change (110 citations)	Academy of Management Review (225 citations) Academy of Management Learning and Education (172 citations)	Creativity Research Journal (223 citations) Organization Studies (85 citations)
Ecology and Society (110 citations) Futures (94 citations) Journal of Cleaner Production (92 citations) Energy Policy (90 citations) Internacional Handbook on Social Innovation: Colective Action (88 citations) Global Environmental Change-Human and Policy Dimensions (81 citations) Technology Analysis and Strategic Management (75 citations) European Urban and Regional Studies (71 citations) American Journal of Community Psychology (71 citations) International Journal of Urban and Regional Research (63 citations) Ecological Economics (62 citations) Sociologia Ruralis (61 citations)	Journal of Business Ethics (147 citations) Harvard Business Review (123 citations) Organization Science (111 citations) Entrepreneurship Theory and Practice (101 citations) Technology Analysis and Strategic Management (97 citations) Nonprofit and Voluntary Sector Quarterly (89 citations) Journal of Business Research (83 citations) Administration in Social Work (73 citations) Jornal of Business Venturing (68 citations) Jornal of Management (69 citations) Techonovation (66 citations) Journal of Product Innovation Management (63 citations) Long Range Planning (61 citations)	Stanford Social Innovation Review (77 citations) American Journal of Sociology (72 citations)

Regarding authorship, the results show that 996 authors are responsible for all papers included in the sample. Table 5 shows the 40 most cited authors, as well as the number of citations per author and the number of papers published by the authors. As it can be observed, 7 of these authors were cited more than 200 times and the most cited authors are Swyngedouw (648 times), Westley (281 times), and Gonzalez (259 times), Moulaert (255 times), Boons, Luedeke-Freund and Seyfang (243 times), and Mumford (217 times).

Swyngedouw is a professor of geography at the University of Manchester, and he is the author of several scientific articles related, mainly, to economic and political analysis, globalization, regional development, finance, and urbanization. The author with the largest number of papers published is Mumford (8 papers), followed by Moulaert (5 papers), Tjornbo, Moore and Westley (4 papers), and Swyngedouw, Seyfang, Mumford, and Olsson (3 papers).

Table 5. Main authors cited in the field of social innovation.

Author	Total of Papers	Total of Citations	Author	Total of Papers	Total of Citations
Swyngedouw, E.	3	648	Schultz, L.	1	84
Westley, F.	4	281	Bodin, O.	1	84
Gonzalez, S	2	259	Crona, B.	1	84
Moulaert, F.	5	255	Branzei, O.	2	79
Boons, F.	1	243	Le Ber, M.	2	79
Luedeke-Freund, F.	1	243	Lida, T.	1	75
Seyfang, G.	3	243	Shern, D.	1	75
Mumford, M.	3	217	Maruyama, Y.	1	75
Tracey, P.	2	186	Nishikido, M.	1	75
Dacin, M.	1	184	Tsemberis, S.	1	75
Dacin, P.	1	184	Moran, L.	1	75
Haxeltine, A.	1	181	Shinn, M.	1	75
Mumford, M.	8	177	Asmussen, S.	1	75
Martinelli, F	1	153	Lonergan, D.	1	68
Kanter, R.	1	150	Scott, G.	1	68
Healey, P	2	135	Carpenter, S.	1	67
Tjornbo, O.	4	133	Hausermann, H.	1	67
Moore, M.	4	128	Gerometta, J.	1	67
Olsson, P.	3	125	Biggs, R.	1	67
Folke, C.	1	84	Longo, G.	1	67

After analyzing the 444 papers, Figure 4 presents the authors with the highest number of co-citations (30 or more); Moulaert is the most co-cited author, with a total of 214 citations. Most of Moulaert's research work focuses on the study of urban development and the institutional dynamics of social innovation and social exclusion.
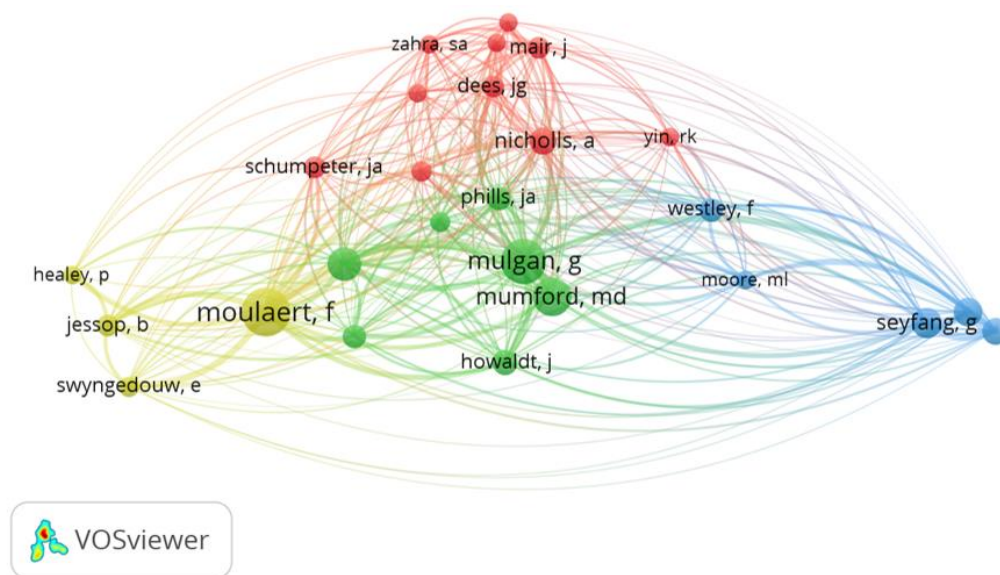
Figure 4. Co-citation network authors map in the 444 papers and its clusters.

Table 6 presents the clusters of the most co-cited authors. Cluster 1 includes authors who are more related to strategic management and entrepreneurship research; in cluster 2, the authors relate to research in the area of social innovation; cluster 3 refers to authors who are more focused on globalization and sustainability, and cluster 4 includes authors studying architecture and urbanism.

To increase the understanding of the subjects explored by the publications on social innovation, a lexical analysis of the keywords that are more frequently found in the biblio-

graphic database was performed. Considering the title and abstracts of the papers in the sample, a word cloud was constructed (Figure 5 and Table 7). The result shows six clusters of words. Cluster 1 is related to governance and sustainability, cluster 2 refers to knowledge through experience, cluster 3 mentions collaboration networks, cluster 4 includes issues related to social responsibility, cluster 5 indicates a future perspective in the field of social innovation, and cluster 6 sets out key factors of the innovation process.

Table 6. Clusters of the most co-cited authors.

Cluster 1—Strategic Management and Entrepreneurship	Cluster 2—Social Innovation	Cluster 3—Globalization and Sustainability	Cluster 4—Architecture and Urbanism
Austin, J. (30 Citations) Bourdieu, P. (32 Citations) Dees, J. (44 Citations) Eisenhardt, K. (32 Citations) Mair, J. (48 Citations) Nicholls, A. (64 Citations) Porter, M. (41 Citations) Schumpeter, J. (42 Citations) Yin, R. (31 Citations) Zahra, S. (31 Citations)	European Commission (103 Citations) Howaldt, J. (57 Citations) Mulgan, G. (183 Citations) Munford, M. (141 Citations) OECD (52 Citations) Phills, A. (49 Citations) Pol, E. (36 Citations)	Geels, F. (72 Citations) Moore, M. (31 Citations) Seyfang, G. (88 Citations) Smith, A. (66 Citations) Westley, F. (52 Citations)	Healey, P. (30 Citations) Jessop, B. (42 Citations) Moulaert, F. (214 Citations) Swyngedouw, E. (36 Citations)

Figure 5. Word network map.

The authors believe the social innovation concept, through its fast-developing interest (Mihci 2019; Adro and Fernandes 2020), has been converted into a catalyst for the academic community analyses looking for new perspectives and/or struggling with barriers or impasses in reaching clarifications and results. Based on the bibliometric study presented here, there is evidence that research on social innovation is extremely relevant, with increasing interest and publication. However, the number of papers and researchers, compared to other areas of study, is still relatively small.

In the literature review section, based on the contributions from the existent academic contributions, the authors proposed a definition of social innovation as a process of change, social collaboration, and interaction aiming at organizing ideas and inventions to tackle social problems and to improve quality of life and collective wellbeing through mechanisms of community governance. However, the word count presented in Table 7 adds concepts that were not present, or that were weakly present, in the research. This remains as one

of the novelties of our paper. In line with such a comparison, later research has added several concepts, such as politics, structure, state, corporate social responsibility, technology, institutional entrepreneurship, and resilience. Our analysis suggests that these are the directions that the latest research has been taking.

Table 7. Word count.

Cluster 1—Governance and Sustainability		Cluster 2—Knowledge through Experience		Cluster 3—Collaboration Network	
Words	**Word Number**	**Words**	**Word Number**	**Words**	**Word Number**
Governance	41	Entrepreneurship	38	Collaboration	12
Innovation	61	Structure	19	Participation	12
Management	28	Knowledge	17	Politics	14
Politics	38	Performance	24	Social change	12
Sustainability	21	Perspective	24	State	12
		Social innovation	233	Transformation	19
Cluster 4—Social Responsibility		**Cluster 5—Future Perspective**		**Cluster 6—Key Factors**	
Words	**Word Number**	**Words**	**Word Number**	**Words**	**Word Number**
Enterprise	12	Challenges	12	Community	16
Model	14	Economy	11	Complexity	9
Organizations	25	Science	9	Dynamics	9
Social entrepreneurship	33	Technology	11	Institutional entrepreneurship	8
Corporate social responsibility	9			Resilience	13
Responsibility	9				
Social enterprise	10				

5. Conclusions, Limitations and Future Research

It is understood that social innovation is often presented as a normative tool used to solve social problems through the creation of new services or new products (Kinder 2010; Klein et al. 2010; Mulgan et al. 2007; Mumford 2002). It is a research area of great potential. However, the lack of a sustained and systematic analysis is delaying the practice of social innovation (Mulgan 2006). It is also important to mention that researchers from different fields do not feel fulfilled by the conceptualization or identification efforts of the concept social innovation (Mihci 2019).

Thus, conditions must be created for investment in this research area, as it may significantly impact the dynamics of communities, organizations, governments, and the economy. As an example, one can mention the necessity of performing an in-depth qualitative analysis to understand the conditions necessary for the creation of innovative processes (Seyfang and Smith 2007), and, at the same time, understanding how players build the social innovation inherent network is fundamental (Bataglin and Kruglianskas 2022) and may offer a source for discussion of measurement and scalability of social innovation.

Based on the sample of this study, more than half of the papers published between 1970 and 2017 (245 papers) were published over the last three years (from 2015 to 2017) and, at present, have an average rate of citation of 12.05%. The papers were published in 235 academic journals, namely the Innovation—The European Journal of Social Science Research, the Ecology and Society and the Creativity Research Journal—one of the journals with highest number of papers published. This paper's sample includes 996 authors, with Mumford being the author with the most publications and Swyngedouw being the most cited author. Our word cloud associated with the topic includes social innovation, innovation, governance, policy, entrepreneurship, and social entrepreneurship.

In terms of limitations, bibliometric studies provide one kind of insight into the reach and effect of published works, however, given research and the scholarly publishing process, they are not necessarily accurate and thorough; another limitation is related with the database—only one database (Web ISI of Science) was used to search for scientific articles, using exclusively papers published in journals within the category of social innovation.

Recognizing the factors that are associated with the emergence of social innovation, future studies should focus on understanding the influence of context, market, governance, and performance on the process of social innovation. It is equally important to understand the common financial management of social innovation initiatives and to rethink other

management models that can support and sustain the actions. Also, since new areas are emerging (e.g., social entrepreneurship) (Farinha et al. 2020), reinforcing the intersection of several areas with social innovation, another future path is to identify and analyze possible similarities and distinctions with nearby topics.

Author Contributions: Conceptualization, T.M. and A.B.; methodology, T.M., A.B. and V.B.; software, T.M.; validation, A.B., M.R.F. and V.B.; formal analysis, T.M. and A.B.; investigation, T.M.; resources, A.B., M.R.F. and V.B.; writing—original draft preparation, M.R.F.; writing—review and editing, V.B.; visualization, A.B., M.R.F. and V.B.; supervision, A.B. All authors have read and agreed to the published version of the manuscript.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

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

References

Adro, Francisco, and Cristina I. Fernandes. 2020. Social innovation: A systematic literature review and future agenda research. *International Review on Public and Nonprofit Marketing* 17: 23–40. [CrossRef]

Anderson, Beth Battle, and J. Gregory Dees. 2006. Rhetoric, reality, and research: Building a solid foundation for the practice of social entrepreneurship. In *Social Entrepreneurship: New Paradigms of sustainable Social Change*. Edited by A. Nicholls. Oxford: Oxford University Press.

Austin, James, Howard Stevenson, and Jane Wei–Skillern. 2006. Social and Commercial Entrepreneurship: Same, Different, or Both? *Entrepreneurship Theory and Practice* 30: 1–22. [CrossRef]

Bacq, Sophie, and Frank Janssen. 2011. The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria. *Entrepreneurship & Regional Development* 23: 373–403. Available online: http://nowybiznes.edu.pl/s/p/artykuly/92/928/Social%20Ent%20Review%202011.pdf (accessed on 3 September 2021).

Bataglin, Jaiarys Capa, and Isak Kruglianskas. 2022. Social Innovation: Field Analysis and Gaps for Future Research. *Sustainability* 14: 1153. [CrossRef]

Biggs, Reinette, Frances R. Westley, and Stephen R. Carpenter. 2010. Navigating the back loop: Fostering social innovation and transformation in ecosystem management. *Ecology and Society* 15: 28. [CrossRef]

Boons, Frank, and Florian Lüdeke-Freund. 2013. Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *Journal of Cleaner Production* 45: 9–19. [CrossRef]

Braga, Alexandra, and Vitor Braga. 2013. Factors Influencing Innovation Decision Making in Portuguese Firms. *International Journal of Innovation and Learning* 14: 329–49. [CrossRef]

Bulut, Cagri, Hakan Eren, and Duygu Seckin Halac. 2013. Which One Triggers the Other? Technological or Social Innovation. *Creativity Research Journal* 25: 436–45. [CrossRef]

Byrne, Cristina L., Amanda S. Shipman, and Michael D. Mumford. 2010. The Effects of Forecasting on Creative Problem-Solving: An Experimental Study. *Creativity Research Journal* 22: 119–138. [CrossRef]

Cajaiba-Santana, Giovany. 2014. Social innovation: Moving the field forward. A conceptual framework. *Technological Forecasting and Social Change* 82: 42–51. [CrossRef]

Chalmers, Dominic. 2013. Social innovation: An exploration of the barriers faced by innovating organizations in the social economy. *Local Economy* 28: 17–34. [CrossRef]

Cloutier, J. 2003. Qu'est-ce que l'innovation sociale? Les Cahiers du CRISES Collection Études Théoriques. Available online: https://crises.uqam.ca/upload/files/publications/etudes-theoriques/CRISES_ET0314.pdf (accessed on 3 September 2021).

Craig, Wendy M., and Debra J. Pepler. 1998. Observations of bullying and victimization in the school yard. *Canadian Journal of School Psychology* 13: 41–59. [CrossRef]

Dacin, M. Tina, Peter A. Dacin, and Paul Tracey. 2011. Social Entrepreneurship: A Critique and Future Directions. *Organization Science* 22: 1203–13. [CrossRef]

Damanpour, Fariborz. 1987. The Adoption of Technological, Administrative, and Ancillary Innovations: Impact of Organizational Factors. *Journal of Management* 13: 675–88. [CrossRef]

Dawson, Patrick, and Lisa Daniel. 2010. Understanding social innovation: A provisional framework. *International Journal of Technology Management* 51: 9–21. [CrossRef]

de Wit, Arjen, Wouter Mensink, Torbjörn Einarsson, and René Bekkers. 2017. Beyond Service Production: Volunteering for Social Innovation. *Nonprofit and Voluntary Sector Quarterly* 48: 1–20. [CrossRef]

Farinha, Luís, João Renato Sebastião, Carlos Sampaio, and João Lopes. 2020. Social innovation and social entrepreneurship: Discovering origins, exploring current and future trends. *International Review on Public and Nonprofit Marketing* 17: 77–96. [CrossRef]

Feola, Giuseppe, and Richard Nunes. 2014. Success and failure of grassroots innovations for addressing climate change: The case of the Transition Movement. *Global Environmental Change* 24: 232–50. [CrossRef]

Gerometta, Julia, Hartmut Haussermann, and Giulia Longo. 2005. Social Innovation and Civil Society in Urban Governance: Strategies for an Inclusive City. *Urban Studies* 42: 2007–21. [CrossRef]

Gershuny, Jonathan I. 1982. Social innovation: Change in the mode of provision of services. *Futures* 14: 496–516. [CrossRef]

González, Sara, and Patsy Healey. 2005. A sociological institutionalist approach to the study of innovation in governance capacity. *Urban Studies* 42: 2055–69. [CrossRef]

Howaldt, Jürgen, and Michael Schwarz. 2010. *Social Innovation: Concepts, Research Fields and International Trends*. Berlin: IMA/ZLW.

Hunter, Samuel T., Katrina E. Bedell-Avers, Chase M. Hunsicker, Michael D. Mumford, and Gina S. Ligon. 2008. Applying multiple knowledge structures in creative thought: Effects on idea generation and problem-solving. *Creativity Research Journal* 20: 137–54. [CrossRef]

Jaskyte, Kristina. 2020. Technological and Organizational Innovations and Financial Performance: Evidence from Nonprofit Human Service Organizations. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations* 31: 142–52. [CrossRef]

Jaskyte, Kristina, and Minhong Lee. 2006. Interorganizational Relationships. *Administration in Social Work* 30: 43–54. [CrossRef]

Jaskyte, Kristina, and William W. Dressler. 2005. Organizational Culture and Innovation in Nonprofit Human Service Organizational Culture and Innovation in Nonprofit Human Service Organizations. *Administration in Social Work* 29: 23–41. [CrossRef]

Jiang, Mingming, and Paul Thagard. 2014. Creative Cognition in Social Innovation. *Creativity Research Journal* 26: 375–88. [CrossRef]

Johnson, Sherrill. 2003. Literature Review of Social Entrepreneurship. *New Academy Review* 2: 1–16.

Kanter, Rosabeth Moss. 1999. From spare change to real change—The social sector as beta site for business innovation. *Harvard Business Review* 77: 122–32.

Kinder, Tony. 2010. Social innovation in services: Technologically assisted new care models for people with dementia and their usability. *International Journal of Technology Management* 51: 106–20. [CrossRef]

Klein, Juan-Luis, Diane-Gabrielle Tremblay, and Denis R. Bussières. 2010. Social economy-based local initiatives and social innovation: A Montreal case study. *International Journal of Technology Management* 51: 121–38. [CrossRef]

Krlev, Gorgi, Helmut K. Anheier, and Georg Mildenberger. 2019. Social Innovation—What Is It and Who Makes It? In *Social Innovation—Comparative Perspectives*. Edited by Helmut Anheier, Gorgi Krlev and Georg Mildenberger. New York: Routledge, pp. 3–36.

Linton, Jonathan D. 2009. De-Babelizing the Language of Innovation. *Technovation* 29: 729–37. [CrossRef]

Mair, Johanna. 2006. *Social Entrepreneurship*. Edited by Johanna Mair Jeffrey Robinson and Kai Hockerts. New York: Palgrave Macmillan.

Mair, Johanna, and Ignasi Marti. 2006. Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business* 41: 36–44. [CrossRef]

Marcy, Richard T., and Michael D. Mumford. 2007. Social innovation: Enhancing creative performance through causal analysis. *Creativity Research Journal* 19: 123–40. [CrossRef]

Margolis, Joshua. D., and James. R. Walsh. 2011. Misery Loves Rethinking Companies: Social Initiatives. *Administrative Science Quarterly* 48: 268–305. [CrossRef]

Martin, Roger L., and Sally Osberg. 2007. Social Entrepreneurship: The Case for Definition. *Stanford Social Innovation Review* 5: 29–39.

Maruyama, Yasush, Makoto Nishikido, and Tetsunari Iida. 2007. The rise of community wind power in Japan: Enhanced acceptance through social innovation. *Energy Policy* 35: 2761–769. [CrossRef]

Mark W. McElroy. 2002. Social innovation capital. *Journal of Intellectual Capital* 3: 30–39. [CrossRef]

McNichol, Theresa. 2005. Creative marketing strategies in small museums: Up close and innovative. *International Journal of Nonprofit and Voluntary Sector Marketing* 10: 239–47. [CrossRef]

Menzel, Hanns C., Iiris Aaltio, and Jan M. Ulijn. 2007. On the way to creativity: Engineers as intrapreneurs in organizations. *Technovation* 27: 732–43. [CrossRef]

Mihci, Hakan. 2019. Social innovation: A conceptual survey and implications for development studies. *Innovation and Development* 9: 105–23. [CrossRef]

Mont, Oksana, Aleksi Neuvonen, and Satu Lähteenoja. 2014. Sustainable lifestyles 2050: Stakeholder visions, emerging practices and future research. *Journal of Cleaner Production* 63: 24–32. [CrossRef]

Moore, Michele-Lee, and Frances Westley. 2011. Surmountable Chasms: Networks and Social Innovation for Resilient Systems. *Ecology and Society* 16: 5. Available online: http://www.ecologyandsociety.org/vol16/iss1/art5/ (accessed on 3 September 2021). [CrossRef]

Moore, Michele-Lee, Ola Tjornbo, Elin Enfors, Corrie Knapp, Jennifer Hodbod, Jacopo A. Baggio, Albert Norström, Per Olsson, and Duan Biggs. 2014. Studying the complexity of change: Toward an analytical framework for understanding deliberate social-ecological transformations. *Ecology and Society* 19: 1–10. [CrossRef]

Morokvasic, Mirjana. 2004. Settled in Mobility: Engendering Post-wall Migration in Europe. *Feminist Review* 77: 7–25. [CrossRef]

Moulaert, Frank. 2014. Ciudades, barrios y gobernanza multiescalar en la Europa urbana. *EURE—Revista Latino-Americana de Estudios Urbano Regionales* 40: 5–24. [CrossRef]

Moulaert, Frank, and Jacques Nussbaumer. 2005. The Social Region: Beyond the Territorial Dynamics of the Learning Economy. *European Urban and Regional Studies* 12: 45–64. [CrossRef]

Moulaert, Frank, Flavia Martinelli, Erik Swyngedouw, and Sara Gonzalez. 2005. Towards Alternative Model(s) of Local Innovation. *Urban Studies* 42: 1969–90. [CrossRef]

Moulaert, Frank, Flavia Martinelli, Sara González, and Erik Swyngedouw. 2007. Introduction: Social Innovation and Governance in European Cities: Urban Development Between Path Dependency and Radical Innovation. *European Urban and Regional Studies* 14: 195–209. [CrossRef]

Mulgan, Geoff. 2006. The Process of Social Innovation. *Innovations: Technology, Governance, Globalization* 1: 145–62. [CrossRef]

Mulgan, Geoff. 2010. Measuring Social Value. *Stanford Social Innovation Review* 8: 38–43.

Mulgan, Geoff, Simon Tucker, Rushanara Ali, and Ben Sanders. 2007. *Social Innovation: What It Is, Why It Matters, How It Can Be Accelerated*. London: The Young Foundation.

Mumford, Michael D. 2002. Social Innovation: Ten Cases from Benjamin Franklin. *Creativity Research Journal* 14: 253–66. [CrossRef]

Mumford, Michael D., and Peter Moertl. 2003. Cases of Social Innovation: Lessons from Two Innovations in the 20th Century. *Creativity Research Journal* 15: 261–66.

Murray, Robin, Julie Caulier-Grice, and Geoff Mulgan. 2010. *The Open Book of Social Innovation*. London: NESTA/The Young Foundation, Available online: https://youngfoundation.org/wp-content/uploads/2012/10/The-Open-Book-of-Social-Innovationg.pdf (accessed on 3 September 2021).

Neumeier, Stefan. 2012. Why do social innovations in rural development matter and should they be considered more seriously in rural development research? Proposal for a stronger focus on social innovations in rural development research. *European Society for Rural Sociology* 52: 48–69. [CrossRef]

Novy, Andreas, and Bernhard Leubolt. 2005. Participatory Budgeting in Porto Alegre: Social Innovation and the Dialectical Relationship of State and Civil Society. *Urban Studies* 42: 2023–36. [CrossRef]

Oyewola, David Opeoluwa, and Emmanuel Gbenga Dada. 2022. Exploring machine learning: A scientometrics approach using bibliometrix and VOSviewer. *SN Applied Sciences* 4: 143. [CrossRef]

Terstriep, Judith, and Bastian Pelka. 2016. Mapping Social Innovation Maps—The State of Research Practice across Europe. *European Public & Social Innovation Review* 1: 3–16.

Phillips, Wendy, Hazel Lee, Abby Ghobadian, Nicholas O'regan, and Peter James. 2015. Social Innovation and Social Entrepreneurship: A Systematic Review. *Group & Organization Management* 40: 428–61. [CrossRef]

Phills, James A., Kriss Deiglmeier, and Dale T. Miller. 2008. Rediscovering Social Innovation. *Stanford Social Innovation Review* 6: 34–43.

Pol, Eduardo, and Simon Ville. 2009. Social innovation: Buzz word or enduring term? *The Journal of Socio-Economics* 38: 878–85. [CrossRef]

Porter, Michael E. 1998. *The Competitive Advantage of Nations*. New York: MacMillan Press.

Ramos-Rodríguez, Antonio-Rafael, and José Ruíz-Navarro. 2004. Changes in the intellectual structure of strategic management research: A bibliometric study of the Strategic Management Journal 1980–2000. *Strategic Management Journal* 25: 981–1004. [CrossRef]

Rey-Garcia, Marta, Ana Felgueiras, Annette Bauer, Torbjörn Einarsson, and Giulia Cancellieri. 2019. Social Innovation for Filling the Resource–Needs Gap in Social Services: New Governance Arrangements. In *Social Innovation—Comparative Perspectives*. Edited by Helmut Anheier, Gorgi Krlev and Georg Mildenberger. New York: Routledge, pp. 104–29.

Rochester, Colin. 2013. *Rediscovering Voluntary Action—The Beat of a Different Drum*. Hampshire: Palgrave Macmillan.

Rosted, Jørgen. 2010. A New Nature of Innovation. Available online: http://www.oecd.org/sti/inno/43730198.pdf (accessed on 3 September 2021).

Sanzo-Perez, María José, Luis Ignacio Álvarez-González, and Marta Rey-García. 2015. How to encourage social innovations: A resource-based approach. *The Service Industries Journal* 35: 430–47. [CrossRef]

Scott, Ginamarie M., Devin C. Lonergan, and Michael D. Mumford. 2005. Contractual combination: Alternative knowledge structures, alternative heuristics. *Creativity Research Journal* 17: 21–36. [CrossRef]

Selsky, John W., and Barbara Parker. 2010. Platforms for Cross-Sector Social Partnerships: Prospective Sensemaking Devices for Social Benefit. *Journal of Business Ethics* 94: 21–37. [CrossRef]

Seyfang, Gill, and Adrian Smith. 2007. Grassroots innovations for sustainable development: Towards a new research and policy agenda. *Environmental Politics* 16: 584–603. [CrossRef]

Seyfang, Gill, and Alex Haxeltine. 2012. Growing Grassroots Innovations: Exploring the Role of Community-Based Initiatives in Governing Sustainable Energy Transitions. *Environment and Planning C: Government and Policy* 30: 381–400. [CrossRef]

Seyfang, Gill, and Noel Longhurst. 2013. Growing green money? Mapping community currencies for sustainable development. *Ecological Economics* 86: 65–77.

Shaw, Eleanor, and Sara Carter. 2007. Social entrepreneurship: Theoretical antecedents and empirical analysis of entrepreneurial processes and outcomes. *Journal of Small Business and Enterprise Development* 14: 418–34. [CrossRef]

Shier, Micheal L., and Femida Handy. 2015. From Advocacy to Social Innovation: A Typology of Social Change Efforts by Nonprofits. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations* 26: 2581–603. [CrossRef]

Shier, Micheal L., and Femida Handy. 2016. Executive Leadership and Social Innovation in Direct-Service Nonprofits: Shaping the Organizational Culture to Create Social Change. *Journal of Progressive Human Services* 27: 111–30. [CrossRef]

Swyngedouw, Erik. 2005. Governance Innovation and the Citizen: The Janus Face of Governance-beyond-the-State. *Urban Studies* 42: 1991–2006. [CrossRef]

Taylor, James B. 1970. Introducing Social Innovation. *The Journal of Applied Behavioral Science* 6: 69–77. [CrossRef]

Tsemberis, Sam J., Linda Moran, Marybeth Shinn, Sara M. Asmussen, and David L. Shern. 2003. Consumer preference programs for individuals who are homeless and have psychiatric disabilities: A drop-in center and a supported housing program. *American Journal of Community Psychology* 32: 305–17. [CrossRef] [PubMed]

Van Eck, Nees Jan, and Ludo Waltman. 2009. How to normalize cooccurrence data? An analysis of some well-known similarity measures. *Journal of the American Society for Information Science and Technology* 60: 1635–51.

Van Eck, Nees, and Ludo Waltman. 2010. Software Survey: VOSviewer, a Computer Program for Bibliometric Mapping. *Scientometrics* 84: 523–38. [CrossRef] [PubMed]

Voorberg, William H., Viktor JJM Bekkers, and Lars G. Tummers. 2015. A Systematic Review of Co-Creation and Co-Production. *Public Management Review* 17: 1333–57. [CrossRef]

Westley, Frances R., Ola Tjornbo, Lisen Schultz, Per Olsson, Carl Folke, Beatrice Crona, and Örjan Bodin. 2013. A theory of transformative agency in linked social-ecological systems. *Ecology and Society* 18: 27. [CrossRef]

Young, H. Peyton. 2011. The dynamics of social innovation. *Proceedings of the National Academy of Sciences* 108: 21285–91. [CrossRef]

Young, Rowena. 2006. For what it is worth: Social value and the future of social entrepreneurship. In *Social Entrepreneurship—New Models of Sustainable Social Change*. Edited by Alex Nicholls. Oxford: Oxford University Press.

Zahra, Shaker A., Hans N. Rawhouser, Nachiket Bhawe, Donald O. Neubaum, and James C. Hayton. 2008. Globalization of Social Entrepreneurship Opportunities. *Strategic Entrepreneurship Journal* 2: 117–31. [CrossRef]