

## Mapping the Intellectual Structure of Social Entrepreneurship Research: A Citation/Co-citation Analysis

### Abstract

In this paper, we employ bibliometric analysis to empirically analyze the research on social entrepreneurship published between 1996 and 2017. By employing methods of citation analysis, document co-citation analysis, and social network analysis, we analyze 1,296 papers containing 74,237 cited references and uncover the structure, or intellectual base, of research on social entrepreneurship. We identify nine distinct clusters of social entrepreneurship research that depict the intellectual structure of the field. The results provide an overall perspective of the social entrepreneurship field, identifying its influential works and analyzing scholarly communication between these works. The results further aid in clarifying the overall centrality features of the social entrepreneurship research network. We also examine the integration of ethics into social entrepreneurship literature. We conclude with a discussion on the structure and evolution of the social entrepreneurship field.

**Keywords:** Social entrepreneurship, Business ethics, Bibliometric analysis, Citation analysis, Co-citation analysis, Intellectual structure.

### Introduction

Social entrepreneurship, defined as solving social problems using market-based methods, has

can create both economic and social value (Christie and Honig 2006; Dees et al. 2002; Harding, 2004; Mair and Marti 2006; Rey-Marti et al. 2016). The pressing need to address the numerous global social and environmental challenges of the 21st century (Marti and Mair 2009), coupled

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4 with the growing legitimacy of market-based methods (Dart 2004), has led to the emergence of  
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6 social entrepreneurship and increasing interest in the topic by policymakers, practitioners (Wilson  
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8 and Post 2013), and academic researchers (Nicholls 2006; Weerawardena and Mort 2006).  
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11         Scholars from a variety of disciplines, such as entrepreneurship (Chell et al. 2010; Corner  
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13 and Ho 2010), sociology (Kriauciunas et al. 2011), ethics (Cornelius et al. 2008), psychology  
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15 (Chand and Misra 2009), and politics and institutions (Dey and Steyaert 2010; Hemerijck 2002),  
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17 engage in social entrepreneurship research. This is evidenced by an exponential increase in the  
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19 number of publications on social entrepreneurship in a variety of scholarly journals (Newbert  
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21 2014; Rey-Marti et al. 2016; Sassmannshausen and Volkmann 2018). At this stage in the growth  
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23 of the social entrepreneurship field, the need exists to synthesize and reflect on the existing  
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25 literature, as “it is useful to stop occasionally, take inventory for the work that has been done, and  
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27 identify new directions and challenges for the future” (Low and MacMillan 1988, p. 139). This  
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29 type of analysis is particularly crucial for an emerging field such as social entrepreneurship, as it  
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31 can help shape the future of the field, based on the foundations of previous works, and contribute  
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33 to the constructive development of the discipline.  
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41         Numerous previously conducted review studies on social entrepreneurship have  
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43 contributed significantly to our understanding of the field. However, most of these studies focus  
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45 only on clarifying the concept of social entrepreneurship by reviewing the definitions and  
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47 contrasting it with other forms of entrepreneurship (e.g. Austin et al., 2006; Bacq and Janssen,  
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49 2011; Chell, 2007; Choi and Majumdar, 2014; Dacin et al. 2010; Dacin et al. 2011; Galera and  
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51 Borzaga, 2009; Haugh 2005; Mair and Marti 2006; Peredo, 2006; Thompson 2008). Many key  
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53 questions have not yet been answered, such as how the field of social entrepreneurship research is  
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55 evolving, which themes are being studied under the banner of social entrepreneurship, which  
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4 management areas social entrepreneurship research is addressing, and which key articles have  
5 influenced the field and what is the relationship among the key articles.  
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9 In this article, we address these shortcomings and complement the existing literature by  
10 conducting a quantitative review of social entrepreneurship research. By specifically employing  
11 citation, document co-citation, and network analysis, we provide the complete “intellectual  
12 structure” or “knowledge base” (White and Griffith 1981) of the social entrepreneurship field on  
13 the basis of criteria such as subject areas and schools of thought (Calabretta et al. 2011).  
14 Researchers tend to cluster into informal networks, or “invisible colleges,” focusing on examining  
15 common questions with common frames (Culnan, 1987; Price, 1963). These invisible colleges  
16 provide a basis for the development of a discipline and can be analyzed through scientific article  
17 citations (Calabretta et al. 2011). By analyzing the invisible colleges across time periods, one can  
18 delineate the evolution of a field.  
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33 Further, existing review studies have not attempted to synthesize the integration of ethics  
34 in the domain of social entrepreneurship. Early research on social entrepreneurship presumed that  
35 “because something is socially-oriented, the motivation is likely to be ethically sound; that it is  
36 principled, morally justified and ethically legitimate” (Chell et al. 2016, p. 621). However, this  
37 position was subsequently challenged by scholars, who argued that the ethics of social enterprises  
38 (SEs) must be critically examined in the same manner as other organizations. This is crucial  
39 because social does not necessarily equate to ethical. This difference led to the publication of a  
40 special issue on the intersection between social entrepreneurship and ethics in the *Journal of*  
41 *Business Ethics* in 2016 (Chell et al. 2016). As the recent work suggests, SEs are not free from  
42 ethical issues, and various ethical challenges are involved in social entrepreneurship as well. For  
43 instance, Dey and Steyaert (2016) argue that ethics in social entrepreneurship is emergent in nature  
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4 and is shaped by social action that struggles with power, subjectivity, and freedom. On a similar  
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6 note, Andre and Pache (2016) contend that SEs face multiple ethical challenges when they attempt  
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8 to scale up their operations because in the process, they run the risk of abandoning their ethics of  
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10 care. Hence, it is useful to understand the degree to which social entrepreneurship research has  
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12 considered the ethical dimension. As such, we attempt to achieve the following four objectives in  
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14 this study:  
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- 17 1. To identify key documents that significantly contribute to the social entrepreneurship field,
- 18 2. To understand the evolution of the social entrepreneurship field by identifying the linkages  
19 among the key documents and the evolution of these linkages over time,  
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21 3. To capture the level of centralization of the social entrepreneurship field, and  
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23 4. To examine the integration of ethics into social entrepreneurship literature  
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31 These objectives, taken together, help to map the “intellectual structure” of the social  
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33 entrepreneurship field and explain the integration of ethics into the field.  
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36 To achieve the above four research objectives, we conducted a bibliometric analysis of  
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38 1,296 articles and 74,237 corresponding cited references. As part of our data analysis, we  
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40 conducted a citation analysis, a co-citation analysis, and a network analysis. With the citation  
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42 analysis, we identified 109 top-cited articles that have strongly influenced the social  
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44 entrepreneurship field. In the co-citation analysis, we identified nine distinct clusters representing  
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46 the intellectual structure of the social entrepreneurship field. Finally, our network analysis  
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48 delineates the relationship between the frequently cited documents. While few articles are highly  
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50 cited, we find, overall, a low network centrality, which indicates a relative dispersion of power in  
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52 the field. Our analysis highlights the progressive evolution of the social entrepreneurship field and  
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54 the emergence of interesting patterns among the highly influential papers in the area.  
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4 Our study contributes to the field in at least four ways. First, by presenting a complete  
5 assessment of scholarly contribution in the social entrepreneurship field and identifying linkages  
6 among classic contributions, the study contributes to the understanding of the intellectual structure  
7 of the social entrepreneurship field. Second, for an emerging field such as social entrepreneurship  
8 that is influenced by the work of authors from multiple disciplines, it is critical to periodically  
9 review its evolutionary path (Nerur et al. 2007). Third, the analysis of document co-citation  
10 patterns demonstrates the social construction of the field at a particular time. Finally, our article  
11 explores the linkages between social entrepreneurship and business ethics.  
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23 The remainder of this article is structured as follows. We begin with a discussion of existing  
24 review studies in the social entrepreneurship field and demonstrate how our work extends previous  
25 findings. We next discuss the process of bibliometric analysis, the merits of this approach, and its  
26 applicability across research areas. We subsequently discuss in detail the methodology adopted in  
27 this article before presenting and discussing the results. Finally, we highlight our key conclusions  
28 regarding the state of social entrepreneurship research, discuss the limitations of this work, and  
29 provide directions for future research.  
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### 43 **Published Review Studies in Social Entrepreneurship**

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45 In nearly two decades of research, many literature review studies have been published on SE.  
46 Table 1 presents a representative list of these studies. However, the majority of review studies  
47 focus only on clarifying the concept of social entrepreneurship by reviewing the definitions and  
48 contrasting it with other forms of entrepreneurship (e.g. Austin et al. 2006; Bacq and Janssen 2011;  
49 Chell, 2007; Choi and Majumdar 2014; Dacin et al. 2010; Dacin et al. 2011; Galera and Borzaga  
50 2009; Haugh 2005; Mair and Marti 2006; Peredo 2006; Thompson 2008). For instance, Dacin et  
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4 al. (2010) identify as many as 37 definitions of social entrepreneurship or entrepreneurs in the  
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6 literature and argue for defining social entrepreneurship based on its social mission and outcomes.  
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8 The authors further contend that researchers should explore social entrepreneurship as a unique  
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10 context rather than attempting to differentiate it from other forms of entrepreneurship. Similarly,  
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12 Mair and Marti (2006) offer a working definition of social entrepreneurship and highlight the  
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14 distinctiveness of the social entrepreneurship context. They note that social entrepreneurship could  
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16 be a “fascinating playground for different theories and literatures” (p. 37). Only a handful of review  
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18 studies have attempted to examine the social entrepreneurship field as a whole (Grandos et al.  
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20 2011; Rey-Marti et al. 2016; Sassmannshausen and Volkmann 2018; Short et al. 2009). These  
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22 studies have generally conducted basic citation and content analysis, focusing on aspects such as  
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24 the annual publication productivity of social entrepreneurship research, the academic domains that  
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26 study social entrepreneurship research, and the methodology and epistemological orientation of  
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28 papers on SE.  
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42 These previous review studies have significantly contributed to the understanding of the  
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44 social entrepreneurship discipline and have identified a number of future research directions. First,  
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46 many have highlighted the need to look beyond the definitional debate and focus on the application  
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48 and testing of theories in the context of social entrepreneurship (e.g. Bacq and Janssen 2011; Dacin  
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50 et al. 2010; Galera and Borgaza 2009; Mair and Marti 2006; Short et al. 2009). In particular, some  
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52 studies have highlighted the need to apply theories such as contingency theory, institutional theory,  
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54 and resource dependence theory when studying SE. Second, some studies have highlighted the  
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56 need to examine additional areas of social entrepreneurship, such as resource mobilization  
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4 challenges (Austin et al. 2006; Certo and Miller 2008; Doherty et al. 2014; Haugh 2005),  
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6 characteristics of social entrepreneurs (Certo and Miller 2008; Choi and Majumdar 2014; Dacin et  
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8 al. 2011), challenges regarding SE hybridity (Bacq and Janssen, 2011; Doherty et al. 2014), and  
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10 SE performance measurement (Austin et al. 2006; Choi and Majumdar 2014; Haugh 2005).  
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12 Finally, some studies have highlighted the dominance of qualitative research methodologies in  
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14 social entrepreneurship research, particularly case research methodology, and have stressed the  
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16 need for more quantitative studies (Certo and Miller 2008; Lehner and Kaniskas 2013, Short et al.  
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18 2009).

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24 By employing methods of citation, co-citation, and network analysis, our quantitative  
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26 review complements existing review studies. Sassmannshausen and Volkmann (2018) even  
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28 suggest a full-scale co-citation analysis as a future research direction. By analyzing the intellectual  
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30 linkages among the influential articles in social entrepreneurship over time, we provide a complete  
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32 intellectual map of the social entrepreneurship field. We also throw light on how the social  
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34 entrepreneurship field has evolved and how much of future research areas identified in past reviews  
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36 have been addressed.

## 37 38 39 40 41 42 **Methods**

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46 Bibliometric analyses are objective, quantitative methods used to determine the intellectual  
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48 structure of scientific fields of study (Garfield 1979). Bibliometric methods have received  
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50 increasing attention in management research areas, such as information systems (Culnan 1986),  
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52 entrepreneurship (Etemad and Lee 2003; Ratnatunga and Romano 1997; Reader and Watkins  
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54 2006; Schildt et al. 2006), family business (Casillas and Acedo 2007), strategy (Acedo et al. 2006),  
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56 business ethics (Calabretta et al. 2011; Uysal 2010), organization behavior (Culnan et al. 1990),  
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4 and human resource management (García-Lillo et al. 2017a). Bibliometric analysis is based on the  
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7 premise that citations are an effective and reliable proxy for assessing the influence of various  
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9 publications or authors on an area of research (Culnan et al. 1990; Garfield 1979; Small 1973).  
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11 Although citation behavior can be biased by factors such as the accessibility of a particular  
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13 document or negative citations, citation counts alone can provide an objective measure of the  
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15 usefulness of a publication (Culnan 1986; Garfield 1979). Moreover, recent research has  
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17 discovered that negative citations are rare (Case and Higgins 2000). Bibliometric analyses are  
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19 attractive due to their unobtrusive and objective nature (Garfield 1979). Citation counts can be  
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21 analyzed statistically, thereby bringing objectivity to the process. Moreover, since large datasets  
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23 spanning long periods are analyzed, the emerging map neatly captures the field, something that is  
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25 very difficult to capture using qualitative reviews (Casillas and Acedo 2007).  
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### 33 ***Citation analysis***

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36 Citation analysis helps to objectively identify influential articles in an area and explore the link  
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38 between citing and cited articles and the publications containing the citations (Culnan 1987;  
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40 Culnan et al. 1990; Gundolf and Filser 2013). The frequency of citation denotes the significance  
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42 of a document, and thus a frequently cited document conveys notable findings and substantial  
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44 contributions to the research discipline (Yue and Wilson 2004). Citation analysis helps to examine  
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46 growth in citations over time and discern when key articles were written and thus track their  
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48 popularity. Citation counts can also track major direction changes in a field (Pilkington and  
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50 Meredith 2009).  
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### 58 ***Document co-citation analysis***



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4 A widely used method of bibliometric analyses is co-citation analysis (Acedo et al. 2006), which  
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6 aids in the exploration of the intellectual linkages between the influential articles in a discipline  
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8 and the mapping of the intellectual structure of the discipline (Calabretta et al. 2011; Culnan 1987;  
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10 White and Griffith 1981; White and McCain 1998). The co-citation method is based on the number  
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12 of times that two documents from earlier literature are cited together in a later work (Small 1973).  
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14 It assumes that the more often two documents are cited together, the closer the relationship between  
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16 them; hence, they can be considered part of same research field (Culnan 1986; Marshakova 1973;  
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18 McCain 1990; Small 1973). This relationship indicates only that the documents belong to the same  
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20 broad research area and not necessary that they agree with each other (Acedo et al. 2006).  
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26 While we use documents as the basis of our co-citation analysis,<sup>1</sup> this type of analysis can  
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28 also be based on authors. Author co-citation analysis, proposed by White and Griffith (1981),  
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30 measures how often two authors, rather than two documents, are cited together in later articles.  
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32 Here, “author” refers to the body of writing of a person, not the person himself (White and Griffith  
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34 1981). In our study, we use documents instead of authors, as our objective is to map the intellectual  
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36 structure of a research field (i.e. social entrepreneurship), and the use of authors can distort results,  
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38 as they may have contributed to more than one research area (Acedo et al. 2006). In addition,  
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40 author co-citation analysis aggregates all work done by an author as a single unit and hence misses  
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42 individual contributions made by the same author over a longer period. Also, it overlooks the  
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44 contributions of co-authors, as only the first author listed for each work is considered for analysis  
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46 (McCain 1990).  
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### 56 ***Social network analysis***

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59 <sup>1</sup> For this article, the methodology used is document co-citation analysis. Hence, all subsequent mentions of  
60 co- citation analysis in this article refer to document co-citation.  
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4 Social network analysis (SNA), rooted in graph theory, aims to examine the relational traits of  
5 social structures (Scott 1991). This method complements citation and co-citation analysis by  
6 incorporating the centrality features of the network (Pilkington and Meredith 2009; Uysal 2010).  
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8 SNA can identify the most prominent actor (documents, in our case) in a network and its  
9 relationship with other actors (Wasserman and Faust 1994). Despite being a novel and  
10 underdeveloped technique (Johnson and Oppenheim 2007), SNA has been used to understand  
11 knowledge network structures across many disciplines (Lee et al. 2008; Pilkington and Meredith  
12 2009; Uysal 2010). Network centrality determines the central position that an actor occupies in a  
13 network and indicates its influence, importance, and capacity of accessing other elements within  
14 the network (Acedo et al. 2006).  
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29 Methods of SNA predominantly use three centrality measures—degree, closeness, and  
30 betweenness (Otte and Rousseau 2002). The first measure, degree centrality, considers the number  
31 of other network actors that one particular actor is linked with. A greater number of links reflects  
32 a better position and a greater degree of autonomy (Acedo et al. 2006; Pfeffer and Salancik 1978).  
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34 The second measure, closeness centrality, measures an actor's distance from others in the network  
35 based on geodesic distances (Uysal, 2010). A high degree of closeness indicates that a network  
36 actor is related to others through few paths. The third measure, betweenness centrality, reflects the  
37 capacity of a network actor to connect with other actors in the network (Cross and Cummings  
38 2004; Debicki et al. 2009). An actor can connect parts of a network that would otherwise not be  
39 connected and thus act as a broker (Acedo et al. 2006). A high degree of betweenness centrality  
40 signifies that an actor bridges many different actors in the network. We analyzed the co-citation  
41 network and calculated centrality measures using UCINET software.  
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4 **Data Collection and Analysis**  
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6 *Selection of source documents*  
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9 Figure 1 summarizes the steps used in our data collection and analysis. Our data was acquired from  
10 the Social Sciences Citation Index, available online through the Web of Science (WoS), a database  
11 widely used in bibliometric analysis (e.g. Ferreira et al. 2014; Gracia-Lillo et al. 2017a, 2017b).  
12 This citation database covers a wide range of leading journals, including nearly 2,474 journals in  
13 over 50 disciplines. Following earlier SE scholars, we used the keywords “social entre\*” and  
14 “social venture\*” to search the WoS database. We restricted our search to journal articles published  
15 in the English language. We selected only journal articles because only these can be considered  
16 “certified knowledge,” subject to the review process (García-Lillo et al. 2017a). This aids in  
17 increasing the reliability of the results and aligns with existing practices in this type of study  
18 (Fernandez-Alles and Ramos-Rodríguez 2009; Gracia-Lillo et al. 2017a).  
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39 Our search process yielded 1,296 documents, which contained a total of 74,237 cited  
40 references, with a mean of 57.28 references per paper. These references include many types of  
41 documents, such as journal articles, books, doctoral dissertations, reports, and so forth. These  
42 1,296 papers were downloaded and imported into Bibexcel (Persson et al. 2009), a software used  
43 for analyzing bibliometric data (Gracia-Lillo et al. 2017a, 2017b; Zhao et al. 2017). In this paper,  
44 Bibexcel was used for citation and document co-citation analysis, VOSviewer for data  
45 visualization, SPSS version 21.0 for multivariate analysis, and UCINET for SNA.  
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56 The data collected from the WoS database cannot be directly analyzed due to  
57 inconsistencies related to coding in the raw data. For instance, the name of same author or journal  
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4 can be represented in multiple ways (e.g. Dacin PA or Dacin P.A.; ACAD MANAGE PERSPECT  
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6 or ACAD MANAGEMENT PERS). In a few other cases, references to multiple editions of the  
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8 same book were discovered; for example, there were references to different editions of  
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10 Bornsteirn’s 2007 books. These inconsistencies were corrected manually to increase the accuracy  
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### 18 *Building the document co-citation matrix*

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21 The next step in the data collection is to identify the documents that can be included in the analysis,  
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23 as it is not possible to include all 1,296 documents and 74,237 cited references. This difficulty is  
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25 overcome by selecting only the most influential documents based on frequency of citation. This  
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27 approach aligns with many prior studies of bibliometric analysis (McCain 1990; Pilkington and  
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29 Meredith 2009; Schildt et al. 2006). For our analysis, we considered only those documents with  
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31 30 or more citations<sup>2</sup>. This resulted in 109 documents being considered for document co-citation  
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33 and multivariate analysis. The online supplement provides a brief description of these 109  
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35 documents.  
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41 We next created a 109 x 109 cell square symmetrical matrix, with each cell containing the  
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43 co-citation count, or the number of times two documents are jointly cited in each of the 1,296  
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45 documents in our sample. The primary diagonal value in the matrix is zero, as the same paper  
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47 cannot be cited twice in an article. While various authors treat diagonal values differently, we used  
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52 <sup>2</sup> There is no methodological guide available in the literature regarding choosing the threshold point for the number  
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54 of documents to be analyzed (Eom 2009). This choice depends on the generation of a co-citation matrix that is suited  
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56 for statistical treatment or graphical illustration. The same argument is expressed in other papers on bibliometric  
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58 analysis, such as García-Lillo et al. (2017a, p. 1806) and Schildt et al. (2006, p. 401). Few papers have determined the  
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60 threshold point based on the “stress” values obtained from the multi-dimensional scaling method (e.g. Pilkington and  
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62 Meredith 2009; Ramos-Rodríguez and Ruiz-Navarro 2004). If the stress value is below a specific value, it can be  
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64 considered a good fit. Kruskal (1964) recommends interpreting stress values as follows: 0=perfect; 0.025=excellent;  
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66 0.05=good; 0.1=fair; 0.2=poor. In our case, for a threshold value of 30, we received a stress value of 0.05588, which  
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68 indicates a good fit.

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4 White and Griffith's (1981) formula, which totals the three highest co-citations for each document  
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6 and divides it by two. This generates diagonals that approximate the next highest scores in the  
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8 distribution, indicating the relative importance of a given document within a research domain  
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10 (White and Griffith 1981). This process aligns with many prior bibliometric studies (e.g. Casillas  
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12 and Acedo 2007; Culnan et al. 1990; Reader and Watkins 2006; Uysal 2010).  
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16 Next, the raw co-citation frequency data in the matrix was normalized using the Jaccard  
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18 index (Small and Greenlee 1980, p. 279), which is a measure of similarity between documents.  
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20 This index provides a ratio between the number of times two documents are cited together and the  
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22 number of times at least one of the two documents is cited. The value of the similarity measure (S)  
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24 between two citations ranges from 0 (no co-citations) to 1 (co-cited in all subsequent articles).  
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$$S = \frac{\text{Total cocitaions of documents A and B}}{\text{Total citations of A} + \text{Total citations of B} - \text{Total cocitations of A and B}}$$

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37 Normalization overcomes the difference of scale between an often-cited document and a similar  
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39 document cited less often (Gmur 2003). For example, two less frequently cited documents (e.g.  
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41 A=30 and B=40) that are nonetheless co-cited 20 times receive a higher similarity score (S=0.4)  
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43 than two documents that are highly cited (e.g. A=100 and B=120) but receive the same number of  
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45 co-citations as the less frequently cited documents (S=0.1).  
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49  
50 Next, the Jaccard index matrix was used as an input for conducting a multivariate analysis  
51  
52 using SPSS software. We specifically used the hierarchical clustering method, which is common  
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54 in document co-citation analysis (e.g. Casillas and Acedo 2007; García-Lillo et al. 2017a, 2017b;  
55  
56 Reader and Watkins 2006; Uysal 2010). Hierarchical methods provide a classification tree  
57  
58 "dendrogram" that allows us to graphically analyze the clustering procedure and interpret the  
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4 results. As recommended by authors such as Griffiths et al. (1984) and McCain (1990), Ward’s  
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6 method of clustering was used.  
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9 In the next section, we present our analysis and the results of the citation, document co-  
10  
11 citation, and network analyses. We also present the visualization of the intellectual structure of the  
12  
13 social entrepreneurship field using VOSviewer.  
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## 16 17 18 **Results and Discussion** 19

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21 Figure 2 outlines the temporal distribution of the 1,296 social entrepreneurship papers identified  
22  
23 as the starting point of our analysis. The figure clearly demonstrates that the observation period of  
24  
25 1996–2017 can be divided into two distinct phases. In the early, “emergence phase,” 1996–2005,  
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27 less than six articles were published per year. In the next phase, beginning in 2006, an exponential  
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29 increase in the number of publications occurred; this is called as the “take-off phase.” These  
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31 numbers clearly signal the growing interest in social entrepreneurship research among scholars  
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33 during this time.  
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39 Insert Figure 2 about here  
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### 42 43 44 ***Citation analysis*** 45

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47 After coding the data using Bibexcel, we used the citation counts of the articles to identify the  
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49 most influential among them. Based on the criteria specifying a minimum of 30 citations, as  
50  
51 discussed in the methodology, we created a list of 109 articles. Table 2 presents a list of those  
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53 articles most frequently cited by research papers on social entrepreneurship published during the  
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55 study period.  
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Insert Table 2 about here  
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The following observations can be made based on citation analysis:

- (1) Papers by Mair and Marti (2006) and Austin et al. (2006) are the most cited, with 292 and 244 citations, respectively. These two articles discuss the conceptualization of social entrepreneurship by defining social entrepreneurship and differentiating it from commercial entrepreneurship. These papers served as the basis upon which further research in the field developed. It is notable that both appeared in 2006, which marked the beginning of the take-off phase (Figure 2).
- (2) The works of Dees (1998a), Zahra et al. (2009), Peredo and McLean (2006), Dacin et al. (2010), Yin (1994), Nicholls (2006), Borzaga and Defourny (2004), and Dees (1998b) complete the top ten. Other than Yin (1994), these are all conceptual papers explicating the concept of social entrepreneurship. In particular, two articles by Dees (1998a, b) appearing in the top ten signifies his profound influence on the social entrepreneurship field. The presence of Yin (1994) in the top ten, with 139 citations, demonstrates that the case study methodology is the most favored in social entrepreneurship research.
- (3) The full list comprises 82 journal articles, 23 books, and four online articles. Table 3 specifies the journals in which the articles were published. Our observation of the journal list in Table 3 informs us that social entrepreneurship research has appeared in a diverse range of journals, from entrepreneurship to law (e.g. *Yale Law Journal*), public policy (e.g. *Public Administration Review*, *International Journal of Public Sector Management*), innovation (e.g. *Stanford Social Innovation Review*), sociology (e.g. *American Sociological Review*), not-for-profit (e.g. *International Journal of Nonprofit and Voluntary*

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4 *Sector, Nonprofit Management and Leadership*), and general management. This  
5 corroborates earlier claims made by scholars (e.g. Lehner and Kanikas 2012; Short et al.  
6  
7 2009) that social entrepreneurship research has drawn attention from diverse disciplines.  
8  
9 However, more than 80% of the articles have been published in general management and  
10 entrepreneurship journals, which signifies that social entrepreneurship is positioned as part  
11 of the management discipline as opposed to the not-for-profit discipline. The highest  
12 number of papers are featured in *Entrepreneurship Theory and Practice*, followed by  
13 *Academy of Management Review* and *Academy of Management Journal*, which are all core  
14 management journals with high impact factors.

- 25  
26 (4) Few papers explicitly discussing business ethics appear on the list of the highly cited papers  
27 (e.g. Santos, 2012; Zahra et al., 2009). This is surprising given that SEs face multiple  
28 ethical challenges (Zahra et al., 2009). Moreover, these papers might have been cited for  
29 reasons other than ethics. For instance, the paper by Santos (2012) is generally cited for its  
30 conceptualization of SEs in terms of value creation and value capture. Similarly, the paper  
31 by Zahra et al. (2009) is primarily cited for its categorization of social entrepreneurs. This  
32 clearly indicates that the field of social entrepreneurship is yet to integrate the component  
33 of ethics.

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### 51 ***Document co-citation analysis***

52 Document co-citation analysis helps to identify knowledge groups in social entrepreneurship  
53 research and explore the relationships between them. Through this analysis, we identified nine  
54 distinct clusters. The cluster-wise separation of documents is provided in Table 4.  
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Insert Table 4 about here  
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Cluster 1 comprises 15 documents, including one online article, three books, and 11 journal articles. In Cluster 1, we observe that most of these documents were published before 2006, in the emergence phase of the social entrepreneurship field (see Figure 2). These documents primarily discuss the emergence of the social entrepreneur and social entrepreneurship phenomena by defining and explaining them. For instance, Dees (1998a) clarifies the meaning of the term “social entrepreneurship,” which subsequently became a foundation for social entrepreneurship research. On similar lines, Alvord et al. (2004), Nicholls (2006), and Seelos and Mair (2005) discuss the conceptualization and emergence of the social entrepreneurship phenomenon. Another set of work that includes Bornstein (2007), Leadbeater (1997), Thompson (2002), and Waddock and Post (1991) explains the term “social entrepreneur” and discusses their role in facilitating societal change. Many of the initial articles in this cluster (e.g. Dees 1998a, b; Drayton, 2002) appeared in practitioner-oriented journals, such as *Harvard Business Review* and *California Management Review*, which signifies that as a field, social entrepreneurship initially emerged from practice and later moved to academia. We also observe that these initial works in the emergence phase were focused heavily on social entrepreneurship and social entrepreneur phenomena but only marginally on the SE as an organizational form. Regarding ethics, we identify few works in this cluster. In an earlier work on social entrepreneurs, Leadbeater (1997) emphasized the ethical qualities of individuals in SEs as differentiating them from individuals in other organizations. Similarly, Drayton (2002) emphasized the need for an “ethical fiber” (p. 124) in social entrepreneurs and “ethics as a core management standard” (p. 130) in social entrepreneurship.

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4 Cluster 2 comprises six documents, including one book and five journal articles. These  
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6 documents, published in the beginning of take-off phase, attempt to theoretically conceptualize the  
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8 term “social entrepreneurship.” For instance, Weerawardena and Mort (2006) delineate social  
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10 entrepreneurship as a multi-dimensional construct, with the dimensions of innovativeness,  
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12 proactiveness, and risk management operating within the constraints of environment,  
13  
14 sustainability, and social mission. Further, Austin et al. (2006) highlights the similarities and  
15  
16 differences between social and commercial entrepreneurship. The works in this cluster formed the  
17  
18 basis for the exponential growth of academic research and publication in social entrepreneurship.  
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20 This is also evidenced by all journal articles in this cluster being highly cited. Moreover, these  
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22 articles are all published in academic journals, which signifies the growing prominence of social  
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24 entrepreneurship in academia during this time. One paper in this cluster, by Zahra et al. (2009),  
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26 discusses ethics in detail. The authors identify three types of social entrepreneurs: social bricoleur,  
27  
28 social constructionist and social engineer and discuss different ethical challenges faced by each  
29  
30 type of entrepreneur. The social bricoleurs face ethical challenges in efficiently allocating the  
31  
32 social wealth as the value of a social good is difficult to quantify; social constructionists face  
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34 ethical challenges in garnering resources to achieve their vision of transforming social institutions;  
35  
36 social engineers face ethical challenges whenever the prevalent social values are not in line with  
37  
38 their values (Zahra et al., 2009). The seminal work by Austin et al. (2006), which differentiates  
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40 between social and commercial entrepreneurship, contains no discussion about ethics. We believe  
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42 that this significantly influenced future research by failing to consider ethics as a core differentiator  
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44 between social and commercial enterprises.  
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55 Cluster 3 comprises 18 documents that include two online articles, three books, and 13  
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57 journal articles. These documents primarily adopt an organizational perspective and discuss the  
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4 emergence and legitimacy of SEs as an organizational form, which differs from the focus of the  
5 documents in the earlier two clusters. Closely examining this cluster aided us in identifying two  
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7 different yet related subgroups.  
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11 The first subgroup, 3a, discusses the meaning and conceptualization of SEs across regions.  
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13 For instance, Defourny and Nyssen (2010) and Kerlin (2006) discuss the emergence and  
14 conceptualization of social entrepreneurship across North America and Europe. We further note  
15 that in this cluster, many papers include an implicit discussion of ethics. For instance, Pearce  
16 (2003) mentions that “the purpose of SEs is to contribute to the common good, to benefit society  
17 and more widely, the planet. Specific objectives will fit within this overarching sense of social  
18 purpose” (p. 34). On a similar note, Defourny and Nyssen (2010) argue in favor of the high moral  
19 ground of social entrepreneurs by stating that, irrespective of the school of thought, the aim of  
20 social entrepreneurship is to create social value. Advancing this argument even further, Alter  
21 (2007) emphasizes that socially responsible business follows sustainability strategies with the idea  
22 of “doing well by doing good”; “good,” in this case, refers to the public good based on utilitarian  
23 ethical reasoning. Referring to the language and discourse used by social entrepreneurs, Parkinson  
24 and Howorth (2008) discuss how social entrepreneurs receive moral approval in the society in  
25 which they operate. Doherty et al (2014) argue that in SEs, strategic choices are driven primarily  
26 by social and ethical, rather than economic, considerations.  
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48 The second subgroup, 3b, includes works by Dart (2004), Dey and Steyart (2010),  
49 Eikenberry and Kluvner (2004), and Nicholls (2010). These works attempt to establish or question  
50 the legitimacy of SEs. For instance, Dart (2004) adopts an institutional perspective and  
51 demonstrates that SEs gain moral legitimacy by being pro-market and business-like, which has  
52 become the dominant ideology in many nations. However, Eikenberry and Kluvner (2004) adopt  
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4 a critical approach and discuss how SEs and, in general, the marketization of the not-for-profit  
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6 sector impacts the contributions of these organizations to civil society. They argue that SEs that  
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8 attempt to blend social and economic missions may face ethical challenges in failing to deliver on  
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10 their social missions.  
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14 Cluster 4 comprises 11 journal articles, primarily published around 2010. These works  
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16 build on the initial papers and attempt to broaden the social entrepreneurship field. We can observe  
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18 two subgroups within this cluster.  
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21 The first subgroup, 4a, includes a set of works that critically review the status of the  
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23 research on social entrepreneurship by further refining the concept and providing new directions  
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25 for the field. For example, Bacq and Janssen (2011) review social entrepreneurship research and  
26  
27 identify definitional issues based on geographic and thematic criteria. They further propose a new  
28  
29 definition to guide further research. Similarly, Choi and Majumdar (2014) argue that social  
30  
31 entrepreneurship is an essentially contested concept and that a unified definition is not plausible.  
32  
33 They therefore propose a cluster concept that can aid in advancing social entrepreneurship  
34  
35 research. In this cluster, two papers, Mair et al. (2012) and Santos (2012), are from the *Journal of*  
36  
37 *Business Ethics*. Santos (2012) highlights the concepts of value creation and appropriation and  
38  
39 discusses how the conflict between the two can lead to ethical challenges for SEs. Mair et al.  
40  
41 (2012) propose a typology of social entrepreneuring models based on four forms of capital—  
42  
43 social, economic, human, and political—and discuss distinct principles that can act as anchors of  
44  
45 judgment regarding what is valuable for each model. Further, Choi and Majumdar (2014) and  
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47 Dacin et al. (2010) briefly discuss ethics in their papers. Choi and Majumdar (2014) argue that the  
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49 concept of social value creation encapsulates altruistic motives and values such as freedom,  
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4 equality, and tolerance. Dacin et al. (2010) discuss the importance of a social entrepreneur's  
5 intentions to behave ethically to contribute to the well-being of others.  
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9 The second subgroup, 4b, which consists of works by Battilana et al. (2012), Emerson  
10 (2003), Moss et al. (2011), and Nicholls (2009), extends social entrepreneurship research by  
11 examining challenges that arise from the dual nature of SEs. For instance, Battilana et al. (2012)  
12 discuss various challenges faced by SEs related to financing, legal status, customers, beneficiaries,  
13 and organizational culture in their attempt to combine aspects of not-for-profit and for-profit  
14 models. Nicholls (2009) examines the duality issue from an accounting perspective and argues that  
15 SEs practice "Blended Value Accounting" and that they report financial, social, and environmental  
16 performance. Moss et al. (2011) discuss the dual identities of SEs in terms of utilitarian and  
17 normative identities. The normative identity is more social and people oriented and can be  
18 interpreted as a case of ethical behavior.  
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33 Cluster 5 is the largest and consists of 28 documents, including one online article, two  
34 books, and 25 journal articles. We observe that papers in this cluster broadly represent the study  
35 of entrepreneurship phenomena to include social entrepreneurship, institutional entrepreneurship,  
36 general entrepreneurship, and community-led entrepreneurship. This is a heterogeneous cluster,  
37 and upon further exploration, we can identify four different subgroups in this cluster.  
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46 The first subgroup, 5a, primarily contains works that adopt an entrepreneurship approach  
47 and discuss topics such as opportunity recognition, resource mobilization, and performance  
48 measurement in social entrepreneurship. For example, papers by Corner and Ho (2010) and Zahra  
49 et al. (2008) discuss the processes of opportunity identification and exploitation and the various  
50 dimensions of social entrepreneurial opportunity. Mair and Marti (2006) examine the terms  
51 "social" and "entrepreneurship" separately and define social entrepreneurship as a process that  
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4 involves the innovative use of resources to address social problems. Lepoutre et al. (2013), to  
5  
6 advance quantitative research in social entrepreneurship, propose a methodology to measure social  
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8 entrepreneurship activity. The book by Hair et al. (1998) falls into this subgroup, as it discusses  
9  
10 quantitative methodology and is referred to by scholars measuring social entrepreneurial activities.  
11  
12 Regarding ethics, Mair and Marti (2006) indicate potential challenges in considering social  
13  
14 entrepreneurs as ethically sound. They argue that “although social entrepreneurship is often based  
15  
16 on ethical motives and moral responsibility, the motives for social entrepreneurship can also  
17  
18 include less altruistic reasons such as personal fulfillment” (p. 38). In implicitly emphasizing the  
19  
20 importance of ethics, Mort et al. (2003) argue that virtues such as integrity, love, empathy, and  
21  
22 honesty are key differentiating factors between members of social and other enterprises.  
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29 The second subgroup, 5b, comprises Baker and Nelson (2005), Sarasvathy (2001), Shane  
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31 and Venkatraman (2000), Venkataraman (1997), and Schumpeter (1934). This set of core  
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33 entrepreneurship papers discusses the development of entrepreneurship research, resource  
34  
35 mobilization, and decision-making. The presence of these papers indicates that concepts and ideas  
36  
37 from the entrepreneurship field, rather than from the not-for-profit sector, have been extended to  
38  
39 study social entrepreneurship. Since these papers primarily appear in the initial phase of  
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41 entrepreneurship research, no implicit or explicit references to business ethics exist.  
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46 The third subgroup, 5c, contains works by Emerson and Twersky (1996), Foster and  
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48 Bradach (2005), Fowler (2000), Haugh (2007), and Peredo and Chrisman (2006). This set of works  
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50 discuss SEs in relation to not-for-profit and community-based enterprises. For instance, Haugh  
51  
52 (2007) and Peredo and Chrisman (2006) theorize community-led ventures and compare them with  
53  
54 other organizations, including SEs. They note that in community-led ventures, the entire  
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56 community acts as an entrepreneur and aims to create value for the local community. Foster and  
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4 Bradach (2005) attempt to understand the challenges that a not-for-profit organization may face  
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6 when attempting to incorporate earned income generation into its business model. In an implicit  
7  
8 reference to the ethics, Peredo and Chrisman (2006) discuss the notion of the common good as  
9  
10 essential for venture creation.  
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14 The final subgroup, 5d, contains papers by Maguire et al. (2004), Mair and Marti (2009),  
15  
16 Seelos and Mair (2007), and Townsend and Hart (2008). These works adopt an institutional  
17  
18 perspective and discuss how the institutional context shapes the behavior of SEs. For instance,  
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20 Maguire et al. (2004) observe that, to facilitate institutional change, poorly resourced organizations  
21  
22 engage in various critical activities, such as occupying a subjective position that has wide  
23  
24 legitimacy, theorizing new practices, and institutionalizing these practices by connecting them to  
25  
26 stakeholder routines and values. On a similar note, Mair and Marti (2009) study the work of  
27  
28 entrepreneurial actors operating under the condition of institutional voids in developing countries  
29  
30 and highlight the various activities that entrepreneurial actors undertake to address these voids.  
31  
32 This work argues that the moral obligation to help the needy is a key dimension that drives the  
33  
34 emergence of SEs in non-munificent environments such as Bangladesh. Townsend and Hart (2008)  
35  
36 argue that founders' perceptions of an ambiguous institutional environment lead to the variance in  
37  
38 the choices of organizational forms of SEs. This paper also discusses ethical considerations at the  
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40 institutional level and argues that inherent ethical considerations may drive the formation of not-  
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42 for-profit organizations. However, when substantial benefits accrue from the activities of the  
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44 organization and its social mission coincides with an economic mission, the advantages may then  
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46 outweigh ethical considerations and result in the formation of a for-profit organization.  
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55 Cluster 6 consists of seven journal articles. We observe that papers in this cluster discuss  
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57 hybrid organizations and that SEs have been used as the context. Hybrid organizations incorporate  
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4 elements from multiple institutional logics (Battilana and Dorado, 2010), and SEs, which combine  
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6 social logic that guides social value creation and market logic that guides financial sustainability,  
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8 are the epitome of hybrid organizations. The set of papers in this cluster highlights the challenges  
9  
10 of hybrid organizations, specifically SEs, and the ways through which these challenges are  
11  
12 addressed. Battilana and Dorado (2010) for instance suggest that, when faced with challenges of  
13  
14 conflicting identities arising out of hybridity, SEs must create a common organizational identity  
15  
16 that strikes a balance between the conflicting identities. Possessing such a common identity  
17  
18 prevents the formation of subgroup identities in the organization that may lead to conflict and  
19  
20 threaten the existence of the organization. Additionally, Pache and Santos (2013) suggest that, as  
21  
22 hybrid organizations, SEs selectively couple intact elements prescribed by each of the conflicting  
23  
24 logics instead of adopting strategies of decoupling or compromise. In an indirect reference to  
25  
26 ethics, Pache and Santos argue that the “selfless commitment” (p. 983) drives volunteers to work  
27  
28 for SEs. Further, Smith et al. (2013) discuss the ethical challenges faced by social entrepreneurs  
29  
30 as they incorporate social missions in business ventures. In this incorporation, business ventures  
31  
32 embed multiple and inconsistent goals, norms, and values, which leads to an ethical dilemma for  
33  
34 their leaders. This leads to four distinct types of tensions—performing, organizing, belonging, and  
35  
36 learning—that SEs must deal with (Smith et al. 2013).  
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46 Cluster 7 consists of 19 documents, including 12 books and seven journal articles. We can  
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48 identify three subgroups within this cluster that represent seminal works in the areas of  
49  
50 management, SEs, and qualitative research. The first subgroup, 7a, includes works by Barney  
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52 (1991), Dimaggio and Powell (1983), Giddens (1984), Granovetter (1985), and Suchman (1995).  
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54 We observe that most of these works come from organizational theory, which indicates its strong  
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56 influence on social entrepreneurship research. We can specifically observe the prominent presence  
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4 of works that study the relationship between institutions and actors. This is not surprising, given  
5 that SEs represent a novel organizational form (Battilina and Lee 2014; Tracey et al. 2011) that  
6 combines the for-profit and not-for-profit models; hence, scholars are particularly interested in  
7 studying the legitimacy of SEs and how they manage institutional pressures. The second subgroup,  
8  
9 7b, includes works by Amin et al. (2003), Dees (2002), Hansmann (1980), Porter and Kramer  
10 (2011), and Prahalad (2005). These works represent key ideas related to social entrepreneurship  
11 and, in general, address how organizations can contribute to societal well-being. Porter and Kramer  
12 (2011) examine ethics as a standard and argue that “creating shared value presumes compliance  
13 with the law and ethical standards, as well as mitigating any harm caused by the business” (p. 15).  
14 The third subgroup, 7c, includes seminal works on qualitative research methodology by Glaser  
15 and Strauss (1967), Patton (1990), and Strauss and Corbin (1990), which signifies the prominence  
16 of qualitative research methodology in the social entrepreneurship field.  
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34 Cluster 8 consists of four documents, including two books and two journal articles. This  
35 cluster includes the following works: Eisenhardt and Graebner (2007), Eisenhardt (1989), Miles  
36 and Huberman (1994), and Yin (1994). These works are related to case study research and  
37 qualitative research methodology. The significant presence of works in case study research  
38 suggests that the case study is the dominant qualitative research approach used by social  
39 entrepreneurship scholars.  
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48 Cluster 9 contains only one journal article: Dorado (2006). This article discusses the  
49 difference between social entrepreneurial ventures and regular entrepreneurial ventures and  
50 stresses the need for studying them separately rather than translating findings from one to the other.  
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55 To conclude this section of cluster analysis, we display a visualization of the intellectual  
56 structure (see Figure 3) using VOSviewer, a software that can visually represent a large body of  
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4 scientific knowledge. Although VOSviewer helps us to build and visualize a scientific map from  
5 network data, it does not possess preprocessing capabilities and thus cannot create a bibliometric  
6 network. Hence, we used Bibexcel to prepare the network data to be directly used by VOSviewer.  
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11 The VOSviewer builds a bi-dimensional map in which each element, in our case each document,  
12 is represented by a label and a circle. The sizes of the labels and circles represent the importance  
13 of the element, and the distance between elements reflects the degree of similarity. We illustrate  
14 the nine clusters using dotted lines on the map.  
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27 To further clarify the intellectual development of the social entrepreneurship field, we  
28 divided the period of 2006–2017 (the take-off phase, as per Figure 2) into two: 2006–2011 and  
29 2012–2017. We exclude the period of 1996–2006 (the emergence phase) due to the smaller number  
30 of documents. For each period, 2006–2011 and 2012–2017, we conducted separate cluster analyses  
31 following the process specified in the methodology section. Figures 4 and 5 present the  
32 visualization of the intellectual structure for the two time periods, respectively. These  
33 visualizations were developed using VOS viewer and Bibexcel.<sup>3</sup> We compared the two periods  
34 and attempted to identify the similarities and differences between them.  
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53 The following observations can be made based on citation analysis:  
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60 <sup>3</sup> For space constraints, we do not discuss each of the clusters emerging in the periods of 2006–2011 and 2012–2017.  
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4 (1) Some works, such as Austin et al. (2006), Mair and Marti (2006), and Nicholls (2006),  
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6 have been influential in both time periods, which indicates their critical role in the  
7  
8 development of the discipline across time.  
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11 (2) In the first phase, 2006–2011, we found a distinct cluster of research on strategy and  
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13 resources, including articles by Barney (1991), Pfeffer and Salansik (1978), and Porter  
14  
15 (1980). However, in the second phase, 2012–2017, we cannot find such a separate cluster,  
16  
17 indicating that during this phase of development, resource and strategy received less  
18  
19 attention than other areas, such as institutional theory.  
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21  
22 (3) In the first phase, 2006–2011, a separate cluster was discovered consisting of seminal  
23  
24 works in diverse areas such as institutional isomorphism (Dimaggio & Powell, 1983),  
25  
26 legitimacy (Suchman, 1995), and network (Granovetter, 1985). However, as the field  
27  
28 progressed, scholars began citing works from only the social entrepreneurship field, as  
29  
30 evidenced by the lack of such a cluster of seminal works in the second phase, 2012–2017.  
31  
32  
33 (4) The second phase, 2012–2017, contains a cluster of works related to hybridity. This cluster  
34  
35 primarily contains works after 2010, indicating that the idea of hybridity has been quickly  
36  
37 integrated into the social entrepreneurship domain.  
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### 46 *Social network analysis*

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48 We used SNA to examine the centrality of the documents in the co-citation network. This augments  
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50 the cluster analysis and furthers our understanding of the intellectual structure of social  
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52 entrepreneurship research. The normalized co-citation data was used to conduct the network  
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54 analysis. The nodes in the network represent documents, and the edges represent linkages in which  
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56 the distance between two nodes signifies the strength of the co-citation linkage.  
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4 The results of our network analysis demonstrate that the overall degree centralization of  
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6 the network is 7.9%, the overall closeness centralization is 13.96%, and the overall betweenness  
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8 centralization is 0.03%. The overall network centrality percentages signify the degree of variance  
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10 in our co-citation network as a percentage of that of a perfect star network possessing the highest  
11  
12 possible centrality (Hanneman and Riddle 2005). The low value of overall network degree  
13  
14 centralization (7.9%) indicates that individual documents do not wield a strong influence. The  
15  
16 overall closeness centralization is relatively higher, but the value is still less (13.96%), which  
17  
18 indicates a lower level of centralization in the entire network. Similarly, the very low value (0.03%)  
19  
20 of overall betweenness centralization again indicates that no disproportionate amount of  
21  
22 centralization exists in the network. This is understandable considering that 92.23% of the direct  
23  
24 links between documents have occurred without the aid of intermediaries. The lower values for all  
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26 three centralization measures also signifies the emerging nature of the social entrepreneurship  
27  
28 field, where individual documents with strong influences have yet to emerge.  
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36 Tables 5, 6, and 7 list the documents with the five highest centralization scores. Nine  
37  
38 documents share the top spot in all three centralization measures: degree, closeness, and  
39  
40 betweenness. They share the highest degree centralization measure of 108 direct links with other  
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42 documents in the network, the highest closeness centrality value of 100, and the highest  
43  
44 betweenness centrality value of 5.693. Although these nine documents share the top spot, this does  
45  
46 not imply that they occupy the dominant position in the network, as the overall centralization  
47  
48 measures are low, as discussed above. Moreover, the top five positions of degree centralization are  
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50 shared by 38 documents, which indicates the dispersion of power in the network.  
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57 Insert Table 5, 6 and 7 about here  
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4 The practice of SNA also helps identify which actors are central or peripheral in a network  
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6 (Scott, 1991). The UCINET SNA software uses genetic algorithms to partition the network into  
7  
8 core and peripheral groups (Acedo et al. 2006; Borgatti et al. 2002). In the network examined here,  
9  
10 the core includes 37 documents<sup>4</sup>. The majority of these core articles are central social  
11  
12 entrepreneurship works. The core list of documents includes Eisenhardt (1989) and Yin (1994),  
13  
14 which signals the predominant use of case study methodology in social entrepreneurship research.  
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## 21 **Conclusion**

22  
23 The findings of this paper contribute to the development of the social entrepreneurship field in the  
24  
25 following ways: (1) identifying key scholarly contributions in the field and the linkages among  
26  
27 them, (2) tracing the evolution of the field over time, (3) analyzing the social entrepreneurship  
28  
29 field, and (4) exploring the role of ethics in social entrepreneurship research. In this section, we  
30  
31 consider each of these contributions.  
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### 38 ***Key scholarly contributions to the social entrepreneurship field***

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40 Our citation analysis reveals that some works, such as those by Mair and Marti (2006), Austin et  
41  
42 al. (2006), and Dees (1998a), are highly cited, which supports the findings of earlier bibliometric  
43  
44 studies that employed only the citation analysis (e.g. Rey-Marti et al. 2016; Sassmannshausen and  
45  
46 Volkmann 2018). However, we cannot conclude that these documents are in fact highly influential  
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53 <sup>4</sup> List of core documents identified through social network analysis: Alvord et al. (2004), Austin et al. (2006), Bacq  
54 and Janssen (2011), Battilana and Dorado (2010), Bornstein (2007), Chell (2007), Corner and Ho (2010), Dacin et al.  
55 (2010), Dacin et al. (2011), Dart (2004), Dees (1998a), Dees (1998b), Di Domenico et al. (2010), Dorado (2006),  
56 Drayton (2002), Eisenhardt (1989), Haugh (2007), Leadbeater (1997), Mair and Marti (2006), Mair and Marti (2009),  
57 Martin and Osberg (2007), Nicholls (2006), Nicholls (2010), Peredo and McLean (2006), Santos (2012), Seelos and  
58 Mair (2005), Shane and Venkatraman(2000), Sharir and Lerner (2006), Shaw and Carter (2007), Short et al. (2009),  
59 Thompson (2002), Thompson et al. (2000), Townsend and Hart (2008), Tracey et al. (2011), Weerawardena and Mort  
60 (2006), Yin (1994), Zahra et al. (2009).  
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4 in shaping the social entrepreneurship area, as our SNA reveals that no set of documents enjoys a  
5  
6 disproportionate amount of dominance. This is evidenced by the low level of network centrality  
7  
8 and the high number of documents being identified as core documents in our analysis. Our study  
9  
10 thus provides scientific evidence for the claim of other scholars that the field of social  
11  
12 entrepreneurship is still emerging (Rey-Marti et al. 2016). Further, no dominance of particular  
13  
14 journals exists, and social entrepreneurship research is dispersed across diverse journals. However,  
15  
16 we can specifically observe the dominance of management and entrepreneurship journals, which  
17  
18 signifies the growing prominence of social entrepreneurship in the management discipline as  
19  
20 opposed to in the not-for-profit discipline.  
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### 28 ***Evolution of the social entrepreneurship field***

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30 The results of our study indicate two fundamental findings regarding the evolution of the social  
31  
32 entrepreneurship field: the field has grown significantly over last decade, although it is yet to reach  
33  
34 its full maturity, and the field has evolved from conceptualizations of the concept to incorporate  
35  
36 multiple organizational aspects, such as organizational mission, hybridity, resources, legitimacy,  
37  
38 and ethics.  
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44       Regarding the growth of the field in the last decade, since 2006, social entrepreneurship  
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46 research has increasingly gained scholarly attention, as evidenced by the increase in the number  
47  
48 of publications (Philips et al. 2015). This is reflected in the identification of the take-up phase in  
49  
50 our analysis. Although research began to grow rapidly, Clusters 4 and 5c demonstrate that even  
51  
52 later in the development of the field, between 2009–2011, scholars were still grappling with  
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54 definitional issues, and social entrepreneurship was often cited and discussed along with other  
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56 concepts, such as institutional entrepreneurship and community-based enterprises. Many of the  
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4 past review papers that attempted to provide definitional clarity belonged to these clusters (e.g.  
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6 Bacq and Janssen 2011; Dacin et al. 2010). Such confusion in the conceptualization of the field is  
7  
8 evidenced by some scholars claiming the field to be in its pre-paradigmatic stage (Nicholls 2010)  
9  
10 while others argue that social entrepreneurship is an essentially contested concept (Choi and  
11  
12 Majumdar 2014). Such a lack of consensus regarding the understanding of social entrepreneurship  
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14 hinders the progress of research in the field.  
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21           Regarding the evolution of the social entrepreneurship field, before 2006, its works focused  
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23 solely on the emergence of social entrepreneurship and social entrepreneurs. In this phase of  
24  
25 emergence, scholars attempted to explain the phenomenon of social entrepreneurship and the key  
26  
27 role the social entrepreneur played within it (Alvord et al. 2004, Leadbeater 1997; Nicholls 2006;  
28  
29 Seelos and Mair 2005). In the early stage of the development of the social entrepreneurship field,  
30  
31 the focus was completely on social entrepreneurs, their characteristics as visionary leaders, and  
32  
33 their noble intentions of social value creation (Dees 2001; Emerson 1999; Letts et al. 2003). These  
34  
35 social entrepreneurs were considered heroes bringing systemic impacts to the lives of many people  
36  
37 by addressing social problems (Thake and Zadek 1997; Waddock and Post 1991). The social  
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39 mission of an organization was considered the outcome of the social entrepreneur's desire to create  
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41 social value.  
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48           In the initial years, around 2006, the focus was on developing a theoretical  
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50 conceptualization of the social entrepreneurship phenomenon (Austin et al. 2006; Weerawardena  
51  
52 and Mort 2006; Zahra et al. 2009). This set of works attempted to conceptualize social  
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54 entrepreneurship by identifying how it differs from commercial entrepreneurship. This particular  
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56 group of works is highly cited and has formed the basis for further scholarly research on social  
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4 entrepreneurship. Along with these works, other scholars also conceptualized social  
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6 entrepreneurship in relation to not-for-profit and community enterprises (Foster and Bradach 2005;  
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8 Fowler 2000, Haugh 2007, Peredo and Chrisman 2006). This is not surprising, since the initial  
9  
10 view toward social entrepreneurship highlighted the not-for-profit aspects of the organization.  
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12 Around this time, yet another set of scholars discussed the meaning and conceptualization of SEs  
13  
14 in terms of their historical roots and emergence, characteristics, future prospects, contributions to  
15  
16 society, and legal status (Borzaga and Defourny 2004; Pearce 2003). This group of scholars also  
17  
18 attempted to discuss models, typologies, and forms of SEs (Alter 2007; Teasdale 2012; Yunus et  
19  
20 al. 2010). This set of works on SEs served as a foundation for the subsequent rapid growth in the  
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22 research, which pertained to multiple organizational aspects of SE.  
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29         Scholars subsequently focused on entrepreneurship aspects and examined topics such as  
30  
31 the opportunity recognition, resource mobilization, and performance measurement of social  
32  
33 entrepreneurship (Certo and Miller 2008, Corner and Ho 2010; Tracey and Jarvis 2007, Tracey  
34  
35 and Philips 2007, Zahra et al. 2008). This marked a shift of focus from idealistic conceptualizations  
36  
37 to the pragmatic aspects of SEs. Another area of work that marked the post-2006 era of social  
38  
39 entrepreneurship research was the growing focus on the critical review of the status of research on  
40  
41 social entrepreneurship, which further refined the concept and provided new directions for the field  
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43 (Bacq and Janssen 2011; Choi and Majumdar 2014; Dacin et al. 2010; Dacin et al. 2011; Mair et  
44  
45 al. 2012; Miller et al. 2012). Another set of research that proliferated during this time was based  
46  
47 on studying SEs from the institutional perspective. These works attempted to understand how the  
48  
49 institutional context shapes the behavior of SEs and what role they can play as institutional  
50  
51 entrepreneurs to influence the contexts in which they operate (Mair and Marti 2009; Seelos and  
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53 Mair 2007; Townsend and Hart 2008).  
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4           Around 2010, the concept of hybridity started gaining strength in the social  
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6 entrepreneurship field as scholars began considering SEs as hybrid organizations (Pache and  
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8 Santos 2013; Smith et al. 2013). The concept of hybridity started with the dual focus of the  
9  
10 organization on social value creation and financial sustainability (Battilana et al. 2012, Moss et al.  
11  
12 2011, Nicholls 2009). The introduction of the concept of hybridity in social entrepreneurship  
13  
14 marked a significant change in the research focus of the field, as it prompted scholars to examine  
15  
16 different issues that SEs face as hybrid organizations, such as resource management, legitimacy,  
17  
18 identity conflicts, and multiple institutional logic conflicts, and how they deal with such issues  
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20 (Battiliana and Dorado 2010; Battilana et al. 2012; Liu and Ko 2012; Pache and Santos 2013;  
21  
22 Smith et al. 2013). The proliferation of the hybridity concept in the social entrepreneurship field,  
23  
24 with a focus on financial sustainability in addition to social value creation, led scholars to question  
25  
26 the notion of assuming that anything social is by default ethical (Chell et al. 2016). This influenced  
27  
28 scholars to examine the ethics of social entrepreneurship through a more critical lens. Figure 6  
29  
30 summarizes the above-discussed evolution of social entrepreneurship field. The ‘After 2017’  
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32 timescale in Figure 6 captures the directions for future research.  
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Insert Figure 6 about here  
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### ***Structure of the social entrepreneurship field***

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49       Our analysis uncovers unique insights into the structure of the social entrepreneurship field. Social  
50  
51 entrepreneurship research predominantly discusses the management areas of entrepreneurship  
52  
53 (Cluster 5b) and organization theory (Cluster 7). A group of seminal articles on entrepreneurship  
54  
55 (Cluster 5b), by Baker and Nelson (2005), Sarasvathy (2001), Schumpeter (1934), Shane and  
56  
57 Venkatraman (2000), and Venkataraman (1997), form the basis of social entrepreneurship research  
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4 by adopting an entrepreneurship perspective. From organization theory, it appears that social  
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6 entrepreneurship scholars have predominantly borrowed institutional concepts such as legitimacy.  
7  
8 This is evidenced by Subcluster 7a primarily consisting of seminal works related to institutions,  
9  
10 by Dimaggio and Powell (1983), Giddens (1984), Granovetter (1985), Meyer and Rowen (1977),  
11  
12 and North (1990), and Subcluster 5d representing articles that study social entrepreneurship from  
13  
14 an institutional perspective. When we examine this finding in relation to past review studies, we  
15  
16 discover that, while institutional theory has been adopted to study SE, other theories noted in past  
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18 review studies, such as contingency and resource dependence, are not prominently applied.  
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23  
24 With respect to methodology, qualitative research, specifically the case-based method,  
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26 appears to dominate the empirical research on social entrepreneurship. This is evident from  
27  
28 Clusters 7c and 8, which contain some of the seminal works on qualitative and case-based research  
29  
30 methodology by Glaser and Strauss (1967), Eisenhardt (1989), and Yin (1994). Our finding  
31  
32 supports earlier qualitative reviews (e.g. Hoogendoorn and Pennings 2010; Short et al. 2009) that  
33  
34 highlighted the dominance of case-based research in SE. This demonstrates that the need for  
35  
36 quantitative studies highlighted in many past review studies is yet to be addressed by the scholars.  
37  
38 Since SEs are increasingly considered exemplars of hybrid organizations, a separate group of work  
39  
40 (Cluster 6) that studies SEs as hybrid organizations has emerged since 2010. We can thus observe  
41  
42 that the scholars have adopted some of the future research areas identified in past review papers,  
43  
44 specifically resource mobilization, performance measurement, and hybridity challenges. While we  
45  
46 can identify a separate cluster for research on organizational aspects such as hybridity challenges,  
47  
48 the other research areas, such as performance measurement and resource mobilization, are  
49  
50 combined into a single cluster that signifies relatively less research on these areas.  
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4 An analysis of clusters at two different time periods, 2006–2011 and 2012–2017, reveals  
5  
6 the change in the intellectual structure of the social entrepreneurship field. The first phase, 2006–  
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8 2012, focused on the development of the field and hence contains clusters related to seminal works  
9  
10 from multiple disciplines (e.g. Dimaggio and Powell 1983; Suchman 1995). However, the second  
11  
12 stage focused more on the hybridity of SEs (Battilana and Lee 214). This analysis acknowledges  
13  
14 the importance of reviewing the evolutionary path of an emerging field such as social  
15  
16 entrepreneurship over time, as it is influenced by the work of authors from multiple disciplines  
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18 (Nerur et al. 2007).  
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### 26 ***Ethics and social entrepreneurship***

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28 Our analysis suggests that ethics is yet to be considered an important aspect in social  
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30 entrepreneurship research. In all the three periods of analysis, 2006-2011, 2012-2017 and 1996-  
31  
32 2017, no separate cluster on ethics emerged signifying that there are not many papers discussing  
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34 ethics in a substantial manner. However, we could see that ethics has been part of the discussion,  
35  
36 albeit in a limited way, from the beginning of social entrepreneurship research. Many works have  
37  
38 noted the ethical nature of social entrepreneurs as a differentiating factor between social and  
39  
40 commercial entrepreneurship (e.g., Dacin et al. 2010; Doherty et al. 2014; Drayton 2002;  
41  
42 Leadbeater 1997). Studies have also argued that social value encapsulates altruistic motives and  
43  
44 values such as freedom, equality, and tolerance (Alter 2007; Choi and Majumdar 2014; Defourny  
45  
46 and Nyssen 2010; Pearce 2003). This seems to be the dominant discourse on ethics in social  
47  
48 entrepreneurship research - SEs are ethical because they create social value for society. Few studies  
49  
50 have had a detailed discussion on ethics particularly highlighting the ethical challenges that social  
51  
52 entrepreneurs face as they combine social and business missions (Santos 2012; Smith et al. 2013;  
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4 Zahra et al. 2009). For instance, Smith et al. (2013) note that SEs face difficulty in evaluating the  
5  
6 success of a social mission which are qualitative, ambiguous and long-term oriented. They caution  
7  
8 that a preference to quantifiable, clear, and short-term oriented metrics may lead business goals to  
9  
10 become dominant. Similarly, Zahra et al. (2009) note that the egoism of social entrepreneurs may  
11  
12 lead some of them to believe that anything they do to achieve their mission is ethically justified.  
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14 As noted in the results & discussion section, even these few studies are being cited for reasons  
15  
16 other than ethics. Overall, our analysis points to the need for more focused research on ethics in  
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18 social entrepreneurship.  
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### 26 **Directions for future research**

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28 Our review recommends future research directions for the methodology used and for the field of  
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30 social entrepreneurship reviewed. Regarding methodology, three clear future research directions  
31  
32 are recommended. First, it would be informative to conduct alternative analyses that complement  
33  
34 our study to further understand the field. For example, a document co-citation analysis or a  
35  
36 combination of a bibliometric study with content or topic analysis would not only allow for a better  
37  
38 tracing of the intellectual structure of the field but also help to develop a set of directions for future  
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40 research. Second, we compiled articles based on a keyword search. Future research could conduct  
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42 analyses using articles from a specific journal or a list of journals to understand the field of social  
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44 entrepreneurship. One final possible avenue for future research is to conduct co-citation analysis  
45  
46 again after a few years. Our analysis from 2012–2017 suggests a separate cluster for hybridity,  
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48 indicating that the idea of hybridity has been quickly integrated into the social entrepreneurship  
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50 field. On a similar note, a future co-citation analysis may provide a separate cluster of ethics  
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52 papers, perhaps as the result of the publication of the special issue in the *Journal of Business Ethics*  
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4 (Chell et al. 2016) on the relationship between social entrepreneurship and ethics and subsequent  
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7 papers.

8  
9 Three future research directions related to the field of social entrepreneurship are  
10 recommended. First, our analysis of the linkages between social entrepreneurship and business  
11 ethics suggests that in the earlier stage of the development of the social entrepreneurship field,  
12 ethics was never explicitly questioned. By virtue of their social mission of serving others, SEs  
13 were considered ethical by default. However, with the increased focus on the financial  
14 sustainability of SEs that led to the hybrid organization form (Battilana and Lee 2014), scholars  
15 identified the need to critically evaluate SEs from a business ethics perspective. This led to a set  
16 of works examining the ethical challenges faced by social entrepreneurs and SEs (Zahra et al.  
17 2009). However, there has been a very limited focus on understanding how social entrepreneurs  
18 and SEs can overcome the ethical challenges they face. The study by Andre and Pache (2016) is  
19 exceptional in this regard, which suggests that, while facing ethical challenges during the scale-up  
20 of their operations, social entrepreneurs, as caring individuals, can attempt to incorporate their  
21 personal care ethics into organizational care. This can assist entrepreneurs in building a caring  
22 organization and enable the protection of the ethics of care. Clearly, additional, similar work must  
23 be conducted in this direction to understand how SEs can overcome ethical challenges.

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46 The second avenue of future research pertains to the lack of research in social  
47 entrepreneurship from a resource-based perspectives, as evidenced by the lack of a cluster on  
48 resources. This is surprising, given that resources are as vital for SEs as for their commercial  
49 counterparts (Meyskens et al. 2010; Di Domenico et al. 2010). Moreover, owing to their unique  
50 operating condition of market failure and typical organizational characteristics of hybridity, SEs  
51 face greater challenges in mobilizing resources (Defourny and Nyssens 2010; Meyskens et al.  
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4 2010; Pache and Santos 2012). Future research must thus consider resource theories, such as the  
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6 resource-based view (Barney 1991) and resource dependency theory (Pfeffer and Salansik 1978),  
7  
8 in analyzing SEs.  
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11           The third area of future research relates to the comparison of hybrid SEs with pure not-for-  
12  
13 profit organization in terms of the ethical challenges faced and how these are overcome. This is  
14  
15 particularly crucial because the inclination toward hybrid organizational structures is increasing in  
16  
17 the domain of social entrepreneurship. Finally, our work describes the social construction of the  
18  
19 field at this point in time. It would be interesting to repeat this analysis in the future to evaluate  
20  
21 how the field has evolved.  
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## 28 **Limitations**

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31 Despite the objectivity of the methodology applied, the present work faces some limitations, which  
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33 result from using citation counts for analysis. The study is limited in terms of the references that  
34  
35 are included in the articles, since multiple reasons may exist regarding why authors reference a  
36  
37 work in their paper. Authors often cite important works in an area, but in some instances, they also  
38  
39 cite an article for the prestige of the journal it is published in. This is supported by academic work  
40  
41 that has received more credit and reputation tending to receive even more credit and reputation  
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43 and hence more citations in future scholarly works, a phenomenon called the Matthew effect in  
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45 science (García-Lillo et al. 2017a).  
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50           One important limitation of co-citation analysis is the difficulty of ascertaining reasons for  
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52 documents being cited (Gracia-Lillo et al. 2017a). In addition to articles being cited to support an  
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54 argument, they can also be cited for factors such as methodology, quality, author, prestige of the  
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56 journal, and so on. Hence, in some cases, co-citation analysis may not truly reflect the influence  
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4 of an article. Another limitation of co-citation analysis is related to the maturity of a research field.  
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6 Generally, a research project requires a certain amount of time to accumulate influence in a  
7  
8 particular area (Gracia-Lillo et al. 2017a).  
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11           Also, citations may suffer from cronyism, a practice where researchers cite their friends  
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13 and colleges more often (Cole and Cole 1973). Moreover, for different journals, editorial policies  
14  
15 regarding references differ; some expect more references and others fewer, which impacts the  
16  
17 choice of references in an article. Another limitation relates to articles requiring time to be cited.  
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19 Thus, articles published near the end of our study period would have been cited less often  
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21 compared to articles published earlier, which might have resulted in the underrepresentation of  
22  
23 recent influential works.  
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28 Finally, as bibliometric analysis assumes the accumulations of knowledge, where one paper builds  
29  
30 upon another, it is a less suitable tool for new topics in social sciences. Bibliometric analysis may  
31  
32 also be constrained in providing inferences on topics that are developed based on societal  
33  
34 influences or the interests of individual scholars. Therefore, the spread and fragmentation of the  
35  
36 topics observed in bibliometric analysis must be considered with this caveat of stand-alone  
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38 development (i.e. parallel development without possessing common references) of the same topics.  
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43           In summary, the results of our study uncover the intellectual structure of the social  
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45 entrepreneurship field by reviewing the most influential works and highlighting linkages among  
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47 these works. This helps to uncover the “invisible colleges” (White and Griffith 1981) within social  
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49 entrepreneurship research and visualize the relationship between different pockets of intellectual  
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51 activities. Such an understanding aids in discovering the theoretical, conceptual, and empirical  
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53 classics that have contributed to the growth of the social entrepreneurship field and thereby  
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contributes to the theoretical advancement of the field. Our analysis also meaningfully complements other previous qualitative and quantitative reviews in the field.



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4 **Compliance with Ethical Standards:**  
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6 We, the authors of the paper ‘Mapping the Intellectual Structure of Social Entrepreneurship  
7 Research: A Citation/Co-citation Analysis,’ declare the following:  
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9

- 10  
11 a. Conflict of Interest: We have no conflict of interest.  
12  
13 b. Ethical approval: This article does not contain any studies with human participants or animals  
14 performed by any of the authors.  
15  
16 c. Informed consent: There were no human participants involved in this study and hence informed  
17 consent is not needed.  
18  
19 d. Funding: We have not received any funding from any source for conducting this study.  
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28 **References**  
29

- 30 Acedo, F. J., Barroso, C., & Galan, J. L. (2006). The resource- based theory: dissemination and  
31 main trends. *Strategic Management Journal*, 27(7), 621-636.  
32  
33 Alter, K. (2007). Social enterprise typology. *Virtue Ventures LLC*, 12, 1-124.  
34  
35 Alvord, S. H., Brown, L. D., & Letts, C. W. (2004). Social entrepreneurship and societal  
36 transformation: An exploratory study. *The journal of applied behavioral science*, 40(3),  
37 260-282.  
38  
39 Amin, A., Cameron, A., & Hudson, R. (2003). *Placing the social economy*. Routledge.  
40  
41 André, K., & Pache, A. C. (2016). From caring entrepreneur to caring enterprise: Addressing the  
42 ethical challenges of scaling up social enterprises. *Journal of Business Ethics*, 133(4), 659-  
43 675.  
44  
45 Austin, J., Stevenson, H., & Wei- Skillern, J. (2006). Social and commercial entrepreneurship:  
46 same, different, or both? *Entrepreneurship theory and practice*, 30(1), 1-22.  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Bacq, S., & Janssen, F. (2011). The multiple faces of social entrepreneurship: A review of  
5  
6 definitional issues based on geographical and thematic criteria. *Entrepreneurship &*  
7  
8 *Regional Development*, 23(5-6), 373-403.  
9  
10  
11 Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource construction  
12  
13 through entrepreneurial bricolage. *Administrative science quarterly*, 50(3), 329-366.  
14  
15  
16 Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*,  
17  
18 17(1), 99-120.  
19  
20  
21 Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organizations: The case of  
22  
23 commercial microfinance organizations. *Academy of management Journal*, 53(6), 1419-  
24  
25 1440.  
26  
27  
28 Battilana, J., & Lee, M. (2014). Advancing research on hybrid organizing—Insights from the study  
29  
30 of social enterprises. *Academy of Management Annals*, 8(1), 397-441.  
31  
32  
33 Battilana, J., Lee, M., Walker, J., & Dorsey, C. (2012). In search of the hybrid ideal. *Stanford*  
34  
35 *Social Innovation Review*, 10(3), 50-55.  
36  
37  
38 Borgatti, S. P. (2002). NetDraw: Graph visualization software. *Harvard: Analytic Technologies*.  
39  
40  
41 Borgatti, S. P., Everett, M. G., & Freeman, L. C. (2002). Ucinet for Windows: Software for social  
42  
43 network analysis.  
44  
45  
46 Bornstein, D. (2007). How to change the world: Social entrepreneurs and the power of new ideas.  
47  
48 Oxford University Press.  
49  
50  
51 Borzaga, C., & Defourny, J. (Eds.). (2004). The emergence of social enterprise (Vol. 4).  
52  
53 Psychology Press.  
54  
55  
56 Bull, M., & Ridley-Duff, R. (2018). Towards an appreciation of ethics in social enterprise business  
57  
58 models. *Journal of Business Ethics*, 1-16.  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Calabretta, G., Durisin, B., & Ogliengo, M. (2011). Uncovering the intellectual structure of  
5  
6 research in business ethics: a journey through the history, the classics, and the pillars of  
7  
8 Journal of Business Ethics. *Journal of Business Ethics*, 104(4), 499-524.  
9  
10  
11 Casillas, J., & Acedo, F. (2007). Evolution of the intellectual structure of family business literature:  
12  
13 A bibliometric study of FBR. *Family Business Review*, 20(2), 141-162.  
14  
15  
16 Certo, S. T., & Miller, T. (2008). Social entrepreneurship: Key issues and concepts. *Business*  
17  
18 *horizons*, 51(4), 267-271.  
19  
20  
21 Chand, V. S., & Misra, S. (2009). Teachers as educational-social entrepreneurs: The innovation-  
22  
23 social entrepreneurship spiral. *The Journal of entrepreneurship*, 18(2), 219-228.  
24  
25  
26 Chell, E. (2007). Social enterprise and entrepreneurship: towards a convergent theory of the  
27  
28 entrepreneurial process. *International small business journal*, 25(1), 5-26.  
29  
30  
31 Chell, E., Nicolopoulou, K., & Karataş-Özkan, M. (2010). Social entrepreneurship and enterprise:  
32  
33 International and innovation perspectives.  
34  
35  
36 Chell, E., Spence, L. J., Perrini, F., & Harris, J. D. (2016). Social entrepreneurship and business  
37  
38 ethics: Does social equal ethical?. *Journal of business ethics*, 133(4), 619-625.  
39  
40  
41 Chen, T. T., & Hsieh, L. C. (2007, July). On visualization of cocitation networks. In *Information*  
42  
43 *Visualization, 2007. IV'07. 11th International Conference* (pp. 470-475). IEEE.  
44  
45  
46 Choi, N., & Majumdar, S. (2014). Social entrepreneurship as an essentially contested concept:  
47  
48 Opening a new avenue for systematic future research. *Journal of Business Venturing*,  
49  
50 29(3), 363-376.  
51  
52  
53 Chowdhury, I., & Santos, F. (2010). Scaling social innovations: the case of Gram Vikas.  
54  
55 In *Scaling Social Impact* (pp. 147-166). Palgrave Macmillan, New York.  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Christie, M. J., & Honig, B. (2006). Social entrepreneurship: New research findings. *Journal of*  
5  
6 *World Business*, 41(1), 1-5.  
7  
8  
9 Cole, J. R., & Cole, S. (1974). Social stratification in science. *American Journal of*  
10  
11 *Physics*, 42(10), 923-924.  
12  
13  
14 Cornelius, N., Todres, M., Janjuha-Jivraj, S., Woods, A., & Wallace, J. (2008). Corporate social  
15  
16 responsibility and the social enterprise. *Journal of Business Ethics*, 81(2), 355-370.  
17  
18  
19 Corner, P. D., & Ho, M. (2010). How opportunities develop in social entrepreneurship.  
20  
21 *Entrepreneurship theory and practice*, 34(4), 635-659.  
22  
23  
24 Cross, R., & Cummings, J. N. (2004). Tie and network correlates of individual performance in  
25  
26 knowledge-intensive work. *Academy of management journal*, 47(6), 928-937.  
27  
28  
29 Cukier, W., Rodrigues, S., Trenholm, S., & Wise, S. (2009). Social entrepreneurship: a content  
30  
31 analysis. In *United States Association for Small Business and Entrepreneurship.*  
32  
33 *Conference Proceedings* (p. 776). United States Association for Small Business and  
34  
35 Entrepreneurship.  
36  
37  
38 Culnan, M. J. (1986). The intellectual development of management information systems, 1972–  
39  
40 1982: A co-citation analysis. *Management science*, 32(2), 156-172.  
41  
42  
43 Culnan, M. J. (1987). Mapping the intellectual structure of MIS, 1980-1985: a co-citation  
44  
45 analysis. *Mis Quarterly*, 341-353.  
46  
47  
48 Culnan, M. J., O'Reilly, C. A., & Chatman, J. A. (1990). Intellectual structure of research in  
49  
50 organizational behavior, 1972-1984: a cocitation analysis. *Journal of the American Society*  
51  
52 *for Information Science*, 41(6), 453.  
53  
54  
55 Dacin, M. T., Dacin, P. A., & Tracey, P. (2011). Social entrepreneurship: A critique and future  
56  
57 directions. *Organization Science*, 22(5), 1203-1213.  
58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Dacin, P. A., Dacin, M. T., & Matear, M. (2010). Social entrepreneurship: why we don't need a  
5  
6 new theory and how we move forward from here. *The academy of management*  
7  
8 *perspectives*, 24(3), 37-57.  
9  
10  
11 Dart, R. (2004). The legitimacy of social enterprise. *Nonprofit management and leadership*, 14(4),  
12  
13 411-424.  
14  
15  
16 Debicki, B. J., Matherne III, C. F., Kellermanns, F. W., & Chrisman, J. J. (2009). Family  
17  
18 business research in the new millennium: An overview of the who, the where, the what,  
19  
20 and the why. *Family Business Review*, 22(2), 151-166.  
21  
22  
23  
24 Dees G. (1998a), The Meaning of 'Social Entrepreneurship', Kauffman Centre for Entrepreneurial  
25  
26 Leadership (online) [http://www.caseatduke.org/ documents/dees\\_sedef.pdf](http://www.caseatduke.org/documents/dees_sedef.pdf)  
27  
28  
29 Dees, J. G. (1998b). Enterprising nonprofits. *Harvard business review*, 76, 54-69.  
30  
31 Dees, J. G. (2007). Taking social entrepreneurship seriously. *Society*, 44(3), 24-31.  
32  
33  
34 Dees, J. G., Emerson, J., & Economy, P. (2002). Enterprising nonprofits: A toolkit for social  
35  
36 entrepreneurs (Vol. 186). John Wiley & Sons.  
37  
38  
39 Defourny, J., & Nyssens, M. (2008). Social enterprise in Europe: recent trends and developments.  
40  
41 *Social enterprise journal*, 4(3), 202-228.  
42  
43  
44 Defourny, J., & Nyssens, M. (2010). Conceptions of social enterprise and social entrepreneurship  
45  
46 in Europe and the United States: Convergences and divergences. *Journal of social*  
47  
48 *entrepreneurship*, 1(1), 32-53.  
49  
50  
51 Dey, P., & Steyaert, C. (2010). The politics of narrating social entrepreneurship. *Journal of*  
52  
53 *enterprising communities: people and places in the global economy*, 4(1), 85-108.  
54  
55  
56 Dey, P., & Steyaert, C. (2016). Rethinking the space of ethics in social entrepreneurship: Power,  
57  
58 subjectivity, and practices of freedom. *Journal of Business Ethics*, 133(4), 627-641.  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Di Domenico, M., Haugh, H., & Tracey, P. (2010). Social bricolage: Theorizing social value  
5  
6 creation in social enterprises. *Entrepreneurship theory and practice*, 34(4), 681-703.  
7  
8  
9 DiMaggio, P., & Powell, W. W. (1983). The iron cage revisited: Collective rationality and  
10  
11 institutional isomorphism in organizational fields. *American Sociological Review*, 48(2),  
12  
13 147-160.  
14  
15  
16 Doherty, B., Haugh, H., & Lyon, F. (2014). Social enterprises as hybrid organizations: A review  
17  
18 and research agenda. *International Journal of Management Reviews*, 16(4), 417-436.  
19  
20  
21 Dorado, S. (2006). Social entrepreneurial ventures: different values so different process of  
22  
23 creation, no? *Journal of developmental entrepreneurship*, 11(04), 319-343.  
24  
25  
26 Drayton, W. (2002). The citizen sector: Becoming as entrepreneurial and competitive as business.  
27  
28 *California management review*, 44(3), 120-132.  
29  
30  
31 Eikenberry, A. M., & Kluver, J. D. (2004). The marketization of the nonprofit sector: civil society  
32  
33 at risk?. *Public administration review*, 64(2), 132-140.  
34  
35  
36 Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management*  
37  
38 *review*, 14(4), 532-550.  
39  
40  
41 Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and  
42  
43 challenges. *Academy of management journal*, 50(1), 25-32.  
44  
45  
46 Emerson, J. (2003). The blended value proposition: Integrating social and financial returns.  
47  
48 *California management review*, 45(4), 35-51.  
49  
50  
51 Emerson, J., & Twersky, F. (Eds.). (1996). *New social entrepreneurs: The success, challenge and*  
52  
53 *lessons of non-profit enterprise creation. The Homeless Economic Fund, the Roberts*  
54  
55 *Foundation.*  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Eom, S. (2009). An introduction to bibliometrics and informetrics. In *Author Cocitation Analysis:*  
5  
6 *Quantitative Methods for Mapping the Intellectual Structure of an Academic*  
7  
8 *Discipline* (pp. 1-35). IGI Global.
- 9  
10  
11 Etemad, H., & Lee, Y. (2003). The knowledge network of international entrepreneurship: Theory  
12  
13 and evidence. *Small Business Economics*, 20(1), 5-23.
- 14  
15  
16 Fernandez- Alles, M., & Ramos- Rodríguez, A. (2009). Intellectual structure of human resources  
17  
18 management research: A bibliometric analysis of the journal Human Resource  
19  
20 Management, 1985–2005. *Journal of the Association for Information Science and*  
21  
22 *Technology*, 60(1), 161-175.
- 23  
24  
25  
26 Ferreira, M. P., Santos, J. C., de Almeida, M. I. R., & Reis, N. R. (2014). Mergers & acquisitions  
27  
28 research: A bibliometric study of top strategy and international business journals, 1980–  
29  
30 2010. *Journal of Business Research*, 67(12), 2550-2558.
- 31  
32  
33 Foster, W., & Bradach, J. (2005). Should nonprofits seek profits. *Harvard business review*, 83(2),  
34  
35 92-100.
- 36  
37  
38 Fowler, A. (2000). NGOs as a moment in history: beyond aid to social entrepreneurship or civic  
39  
40 innovation?. *Third world quarterly*, 21(4), 637-654.
- 41  
42  
43 Freeman R. (1984). *Strategic Management: A stakeholder approach*. Boston: Pitman, 46.
- 44  
45  
46 Galera, G., & Borzaga, C. (2009). Social enterprise: An international overview of its conceptual  
47  
48 evolution and legal implementation. *Social enterprise journal*, 5(3), 210-228.
- 49  
50  
51 García-Lillo, F., Úbeda-García, M., & Marco-Lajara, B. (2017a). The intellectual structure of  
52  
53 human resource management research: A bibliometric study of the *International Journal of*  
54  
55 *Human Resource Management*, 2000–2012. *The International Journal of Human Resource*  
56  
57 *Management*, 28(13), 1786-1815.
- 58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Garfield, E. (1979). Is citation analysis a legitimate evaluation tool?. *Scientometrics*, 1(4), 359-  
5  
6 375.  
7  
8  
9 Giddens, A. (1984). The constitution of society: Outline of the theory of structuration. Berkeley: U  
10  
11 of California P.  
12  
13  
14 Glaser, B., & Strauss, A. (1967). Discovering grounded theory. Chicago, IL.  
15  
16  
17 Gmür, M. (2003). Co-citation analysis and the search for invisible colleges: A methodological  
18  
19 evaluation. *Scientometrics*, 57(1), 27-57.  
20  
21  
22 Granados, M. L., Hlupic, V., Coakes, E., & Mohamed, S. (2011). Social enterprise and social  
23  
24 entrepreneurship research and theory: A bibliometric analysis from 1991 to 2010. *Social*  
25  
26 *Enterprise Journal*, 7(3), 198-218.  
27  
28  
29 Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness.  
30  
31 *American journal of sociology*, 91(3), 481-510.  
32  
33  
34 Griffiths, A., Robinson, L. A., & Willett, P. (1984). Hierarchic agglomerative clustering methods  
35  
36 for automatic document classification. *Journal of Documentation*, 40, 175–205.  
37  
38  
39 Gundolf, K., & Filser, M. (2013). Management research and religion: A citation analysis. *Journal*  
40  
41 *of Business Ethics*, 112(1), 177-185.  
42  
43  
44 Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). Multivariate data  
45  
46 analysis (Vol. 5, No. 3, pp. 207-219). Upper Saddle River, NJ: Prentice hall.  
47  
48  
49 Hanneman, R. A., & Riddle, M. (2005). Introduction to social network methods.  
50  
51  
52 Hansmann, H. B. (1980). The role of nonprofit enterprise. *The Yale law journal*, 89(5), 835-901.  
53  
54  
55 Harding, R. (2004). Social enterprise: the new economic engine?. *Business Strategy Review*, 15(4),  
56  
57 39-43.  
58  
59  
60  
61  
62  
63  
64  
65



- 1  
2  
3  
4 Haugh, H. (2005). A research agenda for social entrepreneurship. *Social enterprise journal*, 1(1),  
5  
6 1-12.  
7  
8  
9 Haugh, H. (2007). Community- led social venture creation. *Entrepreneurship theory and practice*,  
10  
11 31(2), 161-182.  
12  
13  
14 Hemerijck, A. (2002). The self-transformation of the European social model (s). *Internationale*  
15  
16 *Politik und Gesellschaft*, (4), 39-67.  
17  
18  
19 Hoogendoorn, B., & Pennings, H. P. G. (2010). *What do we know about social entrepreneurship:*  
20  
21 *an analysis of empirical research* (No. ERS-2009-044-ORG). ERIM Report Series  
22  
23 Research in Management.  
24  
25  
26 Jay, J. (2013). Navigating paradox as a mechanism of change and innovation in hybrid  
27  
28 organizations. *Academy of Management Journal*, 56(1), 137-159.  
29  
30  
31 Johnson, B., & Oppenheim, C. (2007). How socially connected are citers to those that they  
32  
33 cite?. *Journal of Documentation*, 63(5), 609-637.  
34  
35  
36 Kerlin, J. A. (2006). Social enterprise in the United States and Europe: Understanding and learning  
37  
38 from the differences. *Voluntas: International Journal of Voluntary and Nonprofit*  
39  
40 *Organizations*, 17(3), 246.  
41  
42  
43 Kerlin, J. A. (2010). A comparative analysis of the global emergence of social enterprise.  
44  
45 *VOLUNTAS: international journal of voluntary and nonprofit organizations*, 21(2), 162-  
46  
47 179.  
48  
49  
50 Kriauciunas, A., Parmigiani, A., & Rivera- Santos, M. (2011). Leaving our comfort zone:  
51  
52 Integrating established practices with unique adaptations to conduct survey- based strategy  
53  
54 research in nontraditional contexts. *Strategic Management Journal*, 32(9), 994-1010.  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Kruskal, J. B. (1964). Multidimensional scaling by optimizing goodness of fit to a nonmetric  
5  
6 hypothesis. *Psychometrika*, 29(1), 1-27.  
7  
8  
9 Leadbeater, C. (1997). The rise of the social entrepreneur (No. 25). Demos.  
10  
11 Lee, Y. D., McLee, Y., & Chen, C. F. P. (2008). Contemporary Policing Studies: Domain, Theme  
12  
13 and Relationships. *Journal of Information Technology and Society*, 2, 43-52.  
14  
15  
16 Lehner, O. M., & Kansikas, J. (2012). Opportunity Recognition in Social Entrepreneurship A  
17  
18 Thematic Meta-Analysis. *Journal of Entrepreneurship*, 21(1), 25-58.  
19  
20  
21 Lehner, O. M., & Kansikas, J. (2013). Pre-paradigmatic Status of Social Entrepreneurship  
22  
23 Research: A Systematic Literature Review. *Journal of Social Entrepreneurship*, 4(2), 198-  
24  
25 219.  
26  
27  
28 Lepoutre, J., Justo, R., Terjesen, S., & Bosma, N. (2013). Designing a global standardized  
29  
30 methodology for measuring social entrepreneurship activity: the Global Entrepreneurship  
31  
32 Monitor social entrepreneurship study. *Small Business Economics*, 40(3), 693-714.  
33  
34  
35 Longenecker, J. G., McKinney, J. A., & Moore, C. W. (1988). Egoism and independence:  
36  
37 Entrepreneurial ethics. *Organizational Dynamics*, 16(3), 64-72.  
38  
39  
40 Low, M. B., & MacMillan, I. C. (1988). Entrepreneurship: Past research and future  
41  
42 challenges. *Journal of management*, 14(2), 139-161.  
43  
44  
45 Maguire, S., Hardy, C., & Lawrence, T. B. (2004). Institutional entrepreneurship in emerging  
46  
47 fields: HIV/AIDS treatment advocacy in Canada. *Academy of management journal*, 47(5),  
48  
49 657-679.  
50  
51  
52 Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction,  
53  
54 and delight. *Journal of world business*, 41(1), 36-44.  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Mair, J., & Marti, I. (2009). Entrepreneurship in and around institutional voids: A case study from  
5  
6 Bangladesh. *Journal of business venturing*, 24(5), 419-435.  
7  
8  
9 Mair, J., Battilana, J., & Cardenas, J. (2012). Organizing for society: A typology of social  
10  
11 entrepreneuring models. *Journal of business ethics*, 111(3), 353-373.  
12  
13  
14 Mair, J., Robinson, J., & Hockerts, K. (Eds.). (2006). Social entrepreneurship (p. 3). New York:  
15  
16 Palgrave Macmillan.  
17  
18  
19 Marshakova, I. V. (1973). Document coupling system based on references taken from Science  
20  
21 Citation Index. *Russia, Nauchno-Tekhnicheskaya Informatsiya, Ser, 2*.  
22  
23  
24 Martin, R. L., & Osberg, S. (2007). Social entrepreneurship: The case for definition (Vol. 5, No.  
25  
26 2, pp. 28-39). Stanford: Stanford social innovation review.  
27  
28  
29 Mason, C., & Doherty, B. (2016). A fair trade-off? Paradoxes in the governance of fair-trade social  
30  
31 enterprises. *Journal of Business Ethics*, 136(3), 451-469.  
32  
33  
34 McCain, K. W. (1990). Mapping authors in intellectual space: A technical overview. *Journal of*  
35  
36 *the American society for information science*, 41(6), 433.  
37  
38  
39 Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and  
40  
41 ceremony. *American journal of sociology*, 83(2), 340-363.  
42  
43  
44 Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook.  
45  
46 Sage.  
47  
48  
49 Miller, T. L., Grimes, M. G., McMullen, J. S., & Vogus, T. J. (2012). Venturing for others with  
50  
51 heart and head: How compassion encourages social entrepreneurship. *Academy of*  
52  
53 *management review*, 37(4), 616-640.  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Mort, G., Weerawardena, J., & Carnegie, K. (2003). Social entrepreneurship: Towards  
5  
6 conceptualisation. *International journal of nonprofit and voluntary sector marketing*, 8(1),  
7  
8 76-88.  
9  
10  
11 Moss, T. W., Short, J. C., Payne, G. T., & Lumpkin, G. T. (2011). Dual identities in social ventures:  
12  
13 An exploratory study. *Entrepreneurship theory and practice*, 35(4), 805-830.  
14  
15  
16 Nerur, S. P., Rasheed, A. A., & Natarajan, V. (2008). The intellectual structure of the strategic  
17  
18 management field: An author co-citation analysis. *Strategic Management Journal*, 29(3),  
19  
20 319-336.  
21  
22  
23 Newbert, S. L. (2014). Building Theory in Social Entrepreneurship. *Journal of Social*  
24  
25 *Entrepreneurship*, 5(3), 239-242.  
26  
27  
28 Nicholls, A. (2009). ‘We do good things, don’t we?’: ‘Blended Value Accounting’ in social  
29  
30 entrepreneurship. *Accounting, Organizations and society*, 34(6), 755-769.  
31  
32  
33 Nicholls, A. (2010). The legitimacy of social entrepreneurship: reflexive isomorphism in a pre-  
34  
35 paradigmatic field. *Entrepreneurship theory and practice*, 34(4), 611-633.  
36  
37  
38 Nicholls, A. (Ed.) (2006), *Social Entrepreneurship. New Models of Sustainable Social Change*,  
39  
40 Oxford University Press, Oxford.  
41  
42  
43 North DC (1990) *Institutions, institutional change, and economic performance*. Cambridge  
44  
45 University Press, New York  
46  
47  
48 Nyssens, M. (Ed.). (2006). *Social enterprise. At the crossroads of market, public policies and civil*  
49  
50 *society*. London: Routledge.  
51  
52  
53 Otte, E., & Rousseau, R. (2002). Social network analysis: a powerful strategy, also for the  
54  
55 information sciences. *Journal of information Science*, 28(6), 441-453.  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Pache, A. C., & Santos, F. (2010). When worlds collide: The internal dynamics of organizational  
5  
6 responses to conflicting institutional demands. *Academy of management review*, 35(3),  
7  
8 455-476.  
9  
10  
11 Pache, A. C., & Santos, F. (2013). Inside the hybrid organization: Selective coupling as a response  
12  
13 to competing institutional logics. *Academy of Management Journal*, 56(4), 972-1001.  
14  
15  
16 Parkinson, C., & Howorth, C. (2008). The language of social entrepreneurs. *Entrepreneurship and*  
17  
18 *regional development*, 20(3), 285-309.  
19  
20  
21 Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, inc.  
22  
23  
24 Pearce, J. (2003). *Social Enterprise in Anytown*. London: Calouste Golbenkian Foundation.  
25  
26 Peredo, A. M., & Chrisman, J. J. (2006). Toward a theory of community-based enterprise.  
27  
28 *Academy of management Review*, 31(2), 309-328.  
29  
30  
31 Peredo, A. M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept.  
32  
33 *Journal of world business*, 41(1), 56-65.  
34  
35  
36 Persson, O., R. Danell, J. Wiborg Schneider. 2009. How to use Bibexcel for various types of  
37  
38 bibliometric analysis. In *Celebrating scholarly communication studies: A Festschrift for*  
39  
40 *Olle Persson at his 60th Birthday*, ed. F. Åström, R. Danell, B. Larsen, J. Schneider, p 9–  
41  
42 24. Leuven, Belgium: International Society for Scientometrics and Informetrics.  
43  
44  
45  
46  
47  
48 Pfeffer, J., & Salancik, G. R. (1978). The external control of organisations. *New York*, 175.  
49  
50  
51 Pilkington, A., & Meredith, J. (2009). The evolution of the intellectual structure of operations  
52  
53 management—1980–2006: A citation/co-citation analysis. *Journal of Operations*  
54  
55 *Management*, 27(3), 185-202.  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Porter M., Kramer M. R. (2011). Creating shared value: How to reinvent capitalism—and unleash  
5  
6 a wave of innovation and growth. *Harvard Business Review*, 89(1-2), 62-77  
7  
8  
9 Prahalad, C. K. (2005). *Fortune at the bottom of the pyramid: Eradicating poverty through profits.*  
10  
11 Upper Saddle River, NJ: Wharton School Publishing.  
12  
13  
14 Price, D.J. deS. (1963). *Little science, big science.* New York: Columbia University Press.  
15  
16  
17 Putnam, R.D., 2000. *Bowling alone: the collapse and revival of American community.* New York:  
18  
19 Simon & Schuster.  
20  
21 Ramos- Rodríguez, A. R., & Ruíz- Navarro, J. (2004). Changes in the intellectual structure of  
22  
23 strategic management research: A bibliometric study of the *Strategic Management Journal*,  
24  
25 1980–2000. *Strategic Management Journal*, 25(10), 981-1004.  
26  
27  
28 Ratnatunga, J., & Romano, C. (1997). A “citation classics” analysis of articles in contemporary  
29  
30 small enterprise research. *Journal of Business Venturing*, 12(3), 197-212.  
31  
32  
33 Reader, D., & Watkins, D. (2006). The Social and Collaborative Nature of Entrepreneurship  
34  
35 Scholarship: A Co- Citation and Perceptual Analysis. *Entrepreneurship theory and*  
36  
37 *practice*, 30(3), 417-441.  
38  
39  
40 Rey-Martí, A., Ribeiro-Soriano, D., & Palacios-Marqués, D. (2016). A bibliometric analysis of  
41  
42 social entrepreneurship. *Journal of Business Research*, 69(5), 1651-1655.  
43  
44  
45 Ridley-Duff, R. and Bull, M. (2011), *Understanding Social Enterprise, Theory & Practice*, Sage  
46  
47 Publications, London.  
48  
49  
50 Santos, F. M. (2012). A positive theory of social entrepreneurship. *Journal of business*  
51  
52 *ethics*, 111(3), 335-351.  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Sarasvathy, S. D. (2001). Causation and effectuation: Toward a theoretical shift from economic  
5  
6 inevitability to entrepreneurial contingency. *Academy of management Review*, 26(2), 243-  
7  
8 263.  
9  
10  
11 Sassmannshausen, S. P., & Volkmann, C. (2018). The Scientometrics of Social Entrepreneurship  
12  
13 and Its Establishment as an Academic Field. *Journal of Small Business Management*.  
14  
15  
16 Schildt, H. A., Zahra, S. A., & Sillanpää, A. (2006). Scholarly communities in entrepreneurship  
17  
18 research: a co- citation analysis. *Entrepreneurship Theory and Practice*, 30(3), 399-415.  
19  
20  
21 Schumpeter, J. A. (1934). *The theory of economic development*. Cambridge, MA: Harvard.  
22  
23  
24 Schumpeter, J. A. (1942). *Socialism, capitalism and democracy*. Harper and Brothers.  
25  
26 Scott, J. W. (1991). The evidence of experience. *Critical inquiry*, 17(4), 773-797.  
27  
28  
29 Seelos, C., & Mair, J. (2005). Social entrepreneurship: Creating new business models to serve the  
30  
31 poor. *Business horizons*, 48(3), 241-246.  
32  
33  
34 Seelos, C., & Mair, J. (2007). Profitable business models and market creation in the context of  
35  
36 deep poverty: A strategic view. *The academy of management perspectives*, 21(4), 49-63.  
37  
38  
39 Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research.  
40  
41 *Academy of management review*, 25(1), 217-226.  
42  
43  
44 Sharir, M., & Lerner, M. (2006). Gauging the success of social ventures initiated by individual  
45  
46 social entrepreneurs. *Journal of world business*, 41(1), 6-20.  
47  
48  
49 Shaw, E., & Carter, S. (2007). Social entrepreneurship: Theoretical antecedents and empirical  
50  
51 analysis of entrepreneurial processes and outcomes. *Journal of small business and*  
52  
53 *enterprise development*, 14(3), 418-434.  
54  
55  
56 Short, J. C., Moss, T. W., & Lumpkin, G. T. (2009). Research in social entrepreneurship: Past  
57  
58 contributions and future opportunities. *Strategic entrepreneurship journal*, 3(2), 161-194.  
59  
60  
61  
62  
63  
64  
65

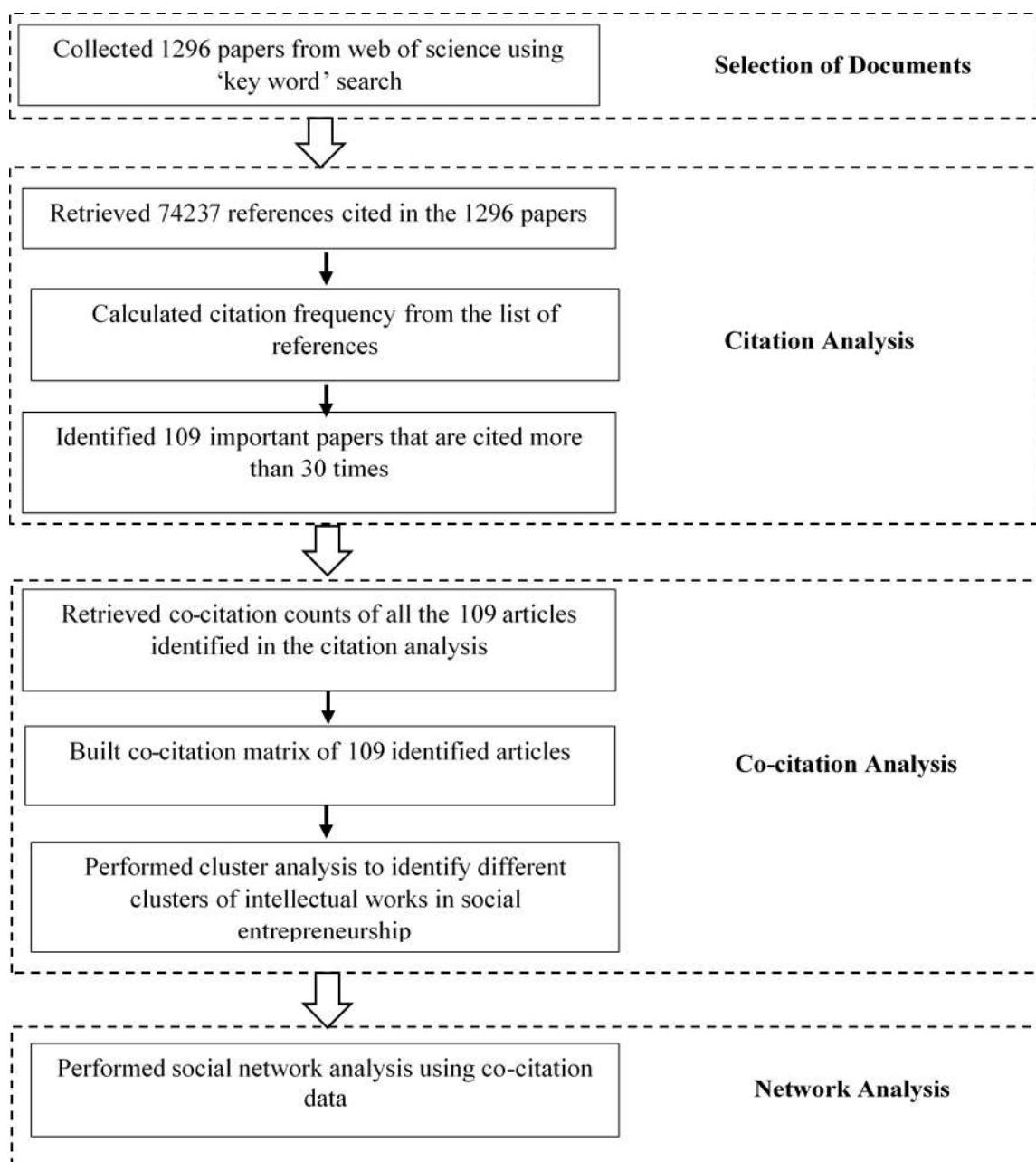
- 1  
2  
3  
4 Small, H. (1973). Co- citation in the scientific literature: A new measure of the relationship  
5  
6 between two documents. *Journal of the Association for Information Science and*  
7  
8 *Technology*, 24(4), 265-269.  
9  
10  
11 Small, H., & Greenlee, E. (1980). Citation context analysis of a co-citation cluster: Recombinant-  
12  
13 DNA. *Scientometrics*, 2(4), 277-301.  
14  
15  
16 Smith, W. K., Gonin, M., & Besharov, M. L. (2013). Managing social-business tensions: A review  
17  
18 and research agenda for social enterprise. *Business Ethics Quarterly*, 23(3), 407-442.  
19  
20  
21 Spear, R. (2006). Social entrepreneurship: a different model?. *International journal of social*  
22  
23 *economics*, 33(5/6), 399-410.  
24  
25  
26 Strauss, A. and Corbin, J. (1990), *Basic Qualitative Research: Grounded Theory Procedures and*  
27  
28 *Techniques*, Sage Publications  
29  
30  
31 Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy*  
32  
33 *of management review*, 20(3), 571-610.  
34  
35  
36 Teasdale, S. (2012). What's in a name? Making sense of social enterprise discourses. *Public policy*  
37  
38 *and administration*, 27(2), 99-119.  
39  
40  
41 Thompson, J. L. (2002). The world of the social entrepreneur. *International journal of public sector*  
42  
43 *management*, 15(5), 412-431.  
44  
45  
46 Thompson, J. L. (2008). Social enterprise and social entrepreneurship: where have we reached?:  
47  
48 A summary of issues and discussion points. *Social Enterprise Journal*, 4(2), 149-161.  
49  
50  
51 Thompson, J., Alvy, G., & Lees, A. (2000). Social entrepreneurship—a new look at the people and  
52  
53 the potential. *Management decision*, 38(5), 328-338.  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65



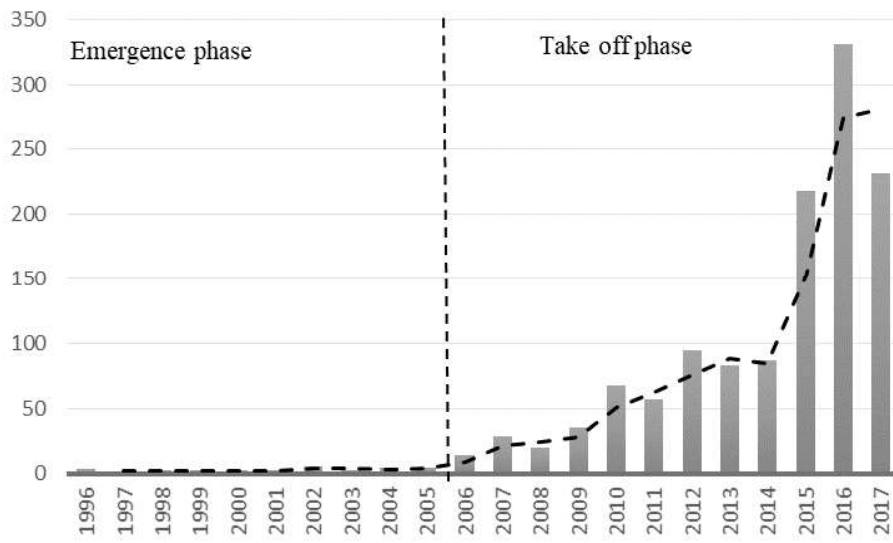
- 1  
2  
3  
4 Townsend, D. M., & Hart, T. A. (2008). Perceived institutional ambiguity and the choice of  
5  
6 organizational form in social entrepreneurial ventures. *Entrepreneurship Theory and*  
7  
8 *Practice*, 32(4), 685-700.  
9  
10  
11 Tracey, P., & Jarvis, O. (2007). Toward a theory of social venture franchising. *Entrepreneurship*  
12  
13 *theory and practice*, 31(5), 667-685.  
14  
15  
16 Tracey, P., & Phillips, N. (2007). The distinctive challenge of educating social entrepreneurs: A  
17  
18 postscript and rejoinder to the special issue on entrepreneurship education. *Academy of*  
19  
20 *Management Learning & Education*, 6(2), 264-271.  
21  
22  
23 Tracey, P., Phillips, N., & Jarvis, O. (2011). Bridging institutional entrepreneurship and the  
24  
25 creation of new organizational forms: A multilevel model. *Organization science*, 22(1), 60-  
26  
27 80.  
28  
29  
30  
31 Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-  
32  
33 informed management knowledge by means of systematic review. *British journal of*  
34  
35 *management*, 14(3), 207-222.  
36  
37  
38 Uysal, Ö. Ö. (2010). Business ethics research with an accounting focus: A bibliometric analysis  
39  
40 from 1988 to 2007. *Journal of Business Ethics*, 93(1), 137-160.  
41  
42  
43 Venkataraman, S. (1997). The distinctive domain of entrepreneurship research. *Advances in*  
44  
45 *entrepreneurship, firm emergence and growth*, 3(1), 119-138.  
46  
47  
48 Vogel, R., & Güttel, W. H. (2013). The dynamic capability view in strategic management: A  
49  
50 bibliometric review. *International Journal of Management Reviews*, 15(4), 426-446.  
51  
52  
53 Waddock, S. A., & Post, J. E. (1991). Social entrepreneurs and catalytic change. *Public*  
54  
55 *administration review*, 393-401.  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65

- 1  
2  
3  
4 Wang, N., Liang, H., Jia, Y., Ge, S., Xue, Y., & Wang, Z. (2016). Cloud computing research in  
5  
6 the IS discipline: A citation/co-citation analysis. *Decision Support Systems*, 86, 35-47.  
7  
8  
9 Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications* (Vol. 8).  
10  
11 Cambridge university press.  
12  
13  
14 Weerawardena, J., & Mort, G. S. (2006). Investigating social entrepreneurship: A  
15  
16 multidimensional model. *Journal of world business*, 41(1), 21-35.  
17  
18  
19 Wellman, B., E. Koku and J. Hunsinger: 2006, 'Networked Scholarship', in J. Weiss et al. (eds.),  
20  
21 The International Handbook of Visual Learning Environments (Springer, The  
22  
23 Netherlands), pp. 1429–1447.  
24  
25  
26 White, H. D., & Griffith, B. C. (1981). Author cocitation: A literature measure of intellectual  
27  
28 structure. *Journal of the Association for Information Science and Technology*, 32(3), 163-  
29  
30 171.  
31  
32  
33 White, H. D., & McCain, K. W. (1998). Visualizing a discipline: An author co-citation analysis of  
34  
35 information science, 1972-1995. *Journal of the American society for information*  
36  
37 *science*, 49(4), 327-355.  
38  
39  
40 Wilson, F., & Post, J. E. (2013). Business models for people, planet (& profits): exploring the  
41  
42 phenomena of social business, a market-based approach to social value creation. *Small*  
43  
44 *Business Economics*, 40(3), 715-737.  
45  
46  
47  
48 Yin, R. (1994). *Case study research: Design and methods*. Beverly Hills.  
49  
50  
51 Yue, W., & Wilson, C. S. (2004). Measuring the citation impact of research journals in clinical  
52  
53 neurology: A structural equation modelling analysis. *Scientometrics*, 60(3), 317-332.  
54  
55  
56 Yunus, M. (2007). *Creating a world without poverty: Social business and the future of capitalism*.  
57  
58 Public Affairs.  
59  
60  
61  
62  
63  
64  
65

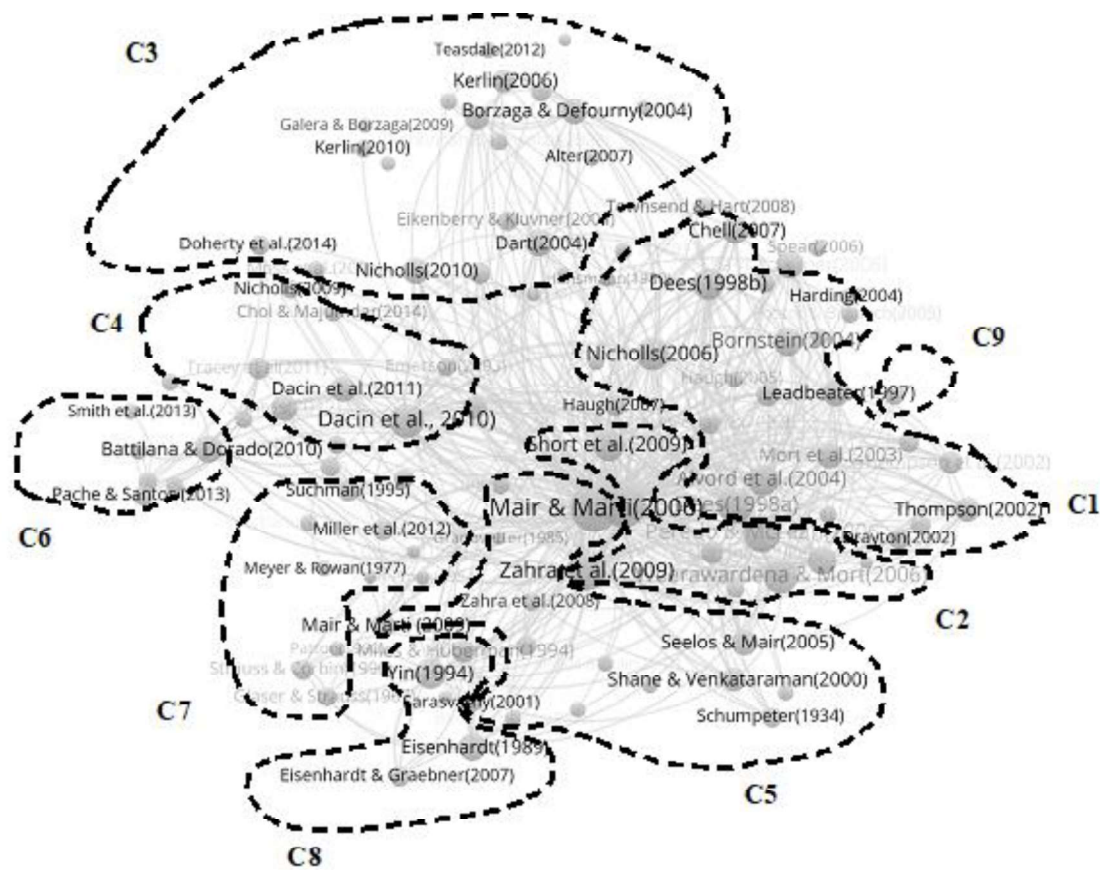
- 1  
2  
3  
4 Yunus, M., Moingeon, B., & Lehmann-Ortega, L. (2010). Building social business models:  
5  
6 Lessons from the Grameen experience. *Long range planning*, 43(2), 308-325.  
7  
8  
9 Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social  
10  
11 entrepreneurs: Motives, search processes and ethical challenges. *Journal of business*  
12  
13 *venturing*, 24(5), 519-532.  
14  
15  
16 Zahra, S. A., Rawhouser, H. N., Bhawe, N., Neubaum, D. O., & Hayton, J. C. (2008).  
17  
18 Globalization of social entrepreneurship opportunities. *Strategic entrepreneurship journal*,  
19  
20 2(2), 117-131.  
21  
22  
23  
24 Zhao, H., Zhang, F., & Kwon, J. (2017). Corporate social responsibility research in international  
25  
26 business journals: An author co-citation analysis. *International Business Review*.  
27  
28 <https://doi.org/10.1016/j.ibusrev.2017.09.006>  
29  
30  
31  
32  
33  
34  
35  
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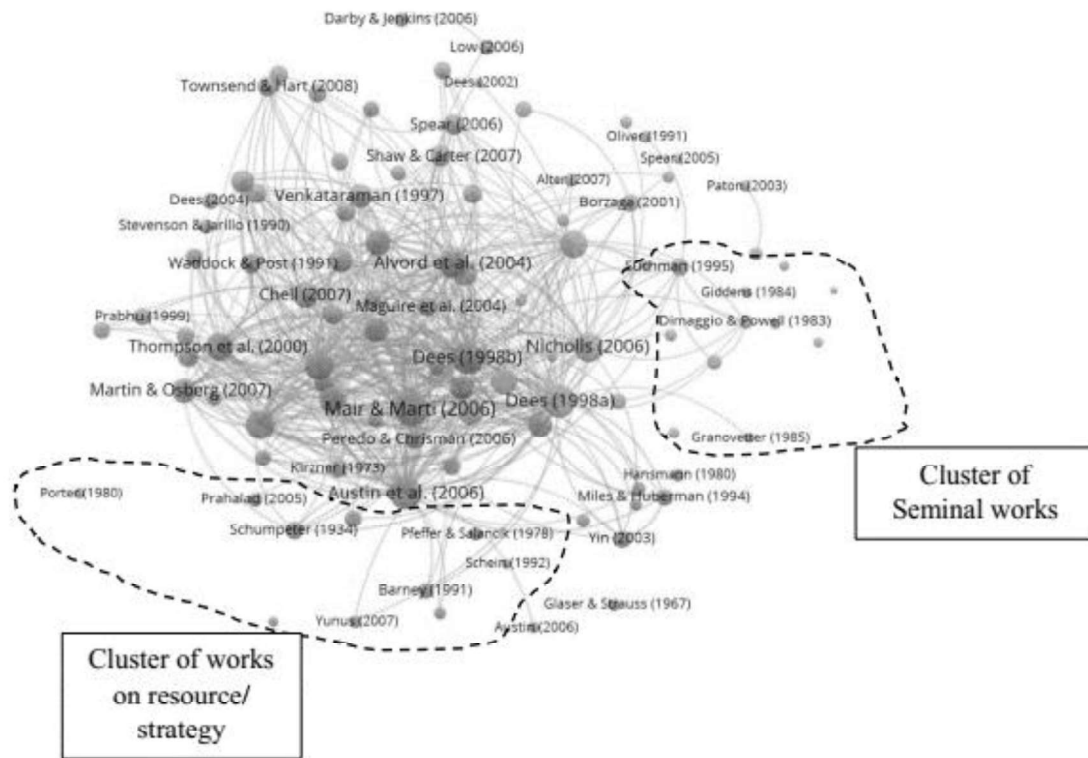
**Figure 1.** Design of the empirical study



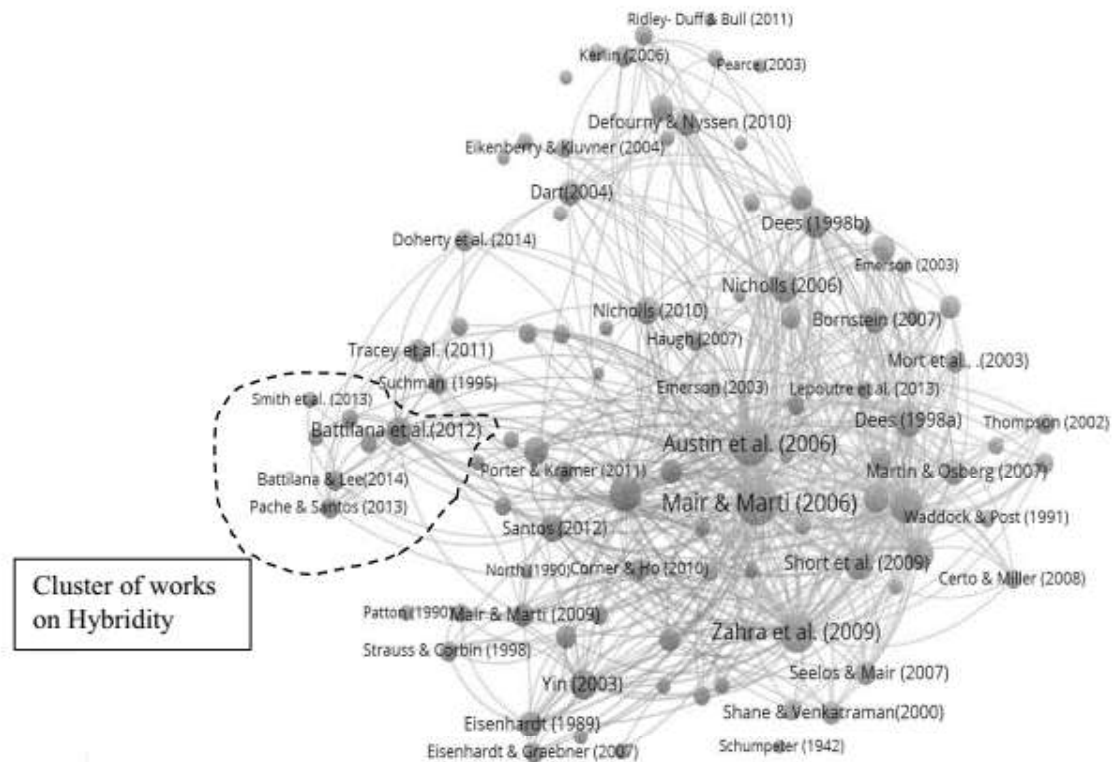
**Figure 2.** Annual distribution of 1296 social entrepreneurship publications during 1996-2017



**Figure 3.** Intellectual structure of the social entrepreneurship research  
 Note: C represents cluster



**Figure 4.** Intellectual structure of the social entrepreneurship research [2006 to 2011]



**Figure 5.** Intellectual structure of the social entrepreneurship research [2012 to 2014]



Time Scale	Before 2006	2006 Onwards	2010 Onwards	After 2017
Focus Area	Social entrepreneur Social entrepreneurship	Social enterprise Social entrepreneurship	Hybrid social enterprise Social entrepreneurship	Ethical social enterprise Hybrid social enterprise
Key Developments	<ul style="list-style-type: none"> <li>Emergence of social entrepreneurship and social entrepreneur</li> </ul>	<ul style="list-style-type: none"> <li>Theoretical conceptualization of social entrepreneurship</li> <li>Differentiation of social entrepreneurship construct from commercial entrepreneurship</li> <li>Linkage of social entrepreneurship construct to not-for-profit and community entrepreneurship</li> <li>Theoretical conceptualization of social enterprise</li> </ul>	<ul style="list-style-type: none"> <li>Examination of hybridity challenges and solutions of social enterprise</li> <li>Critical review of literature on social entrepreneurship</li> </ul>	<p>Future area of development</p> <ul style="list-style-type: none"> <li>Understanding the ethical aspects of social enterprise</li> <li>Subscribing to quantitative research</li> <li>Adoption of organizational theories beyond institutional theory</li> </ul>
Key Outcomes	<ul style="list-style-type: none"> <li>Definitions of social entrepreneurship</li> <li>Characteristics of social entrepreneur</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of social entrepreneurship construct</li> <li>Identifying unique characteristics of social entrepreneurship</li> <li>Defining characteristics of social enterprise</li> <li>Identifying typologies of social enterprises</li> </ul>	<ul style="list-style-type: none"> <li>Understanding of challenges related to hybrid social enterprise</li> <li>Exploration of how hybrid social enterprise can overcome different challenges</li> </ul>	<p>Expected outcomes</p> <ul style="list-style-type: none"> <li>Integration of ethics in social enterprise</li> <li>Criteria for performance measurement of ethical social enterprise</li> <li>Strengthening the theoretical foundations of social entrepreneurship</li> </ul>

**Figure 6.** Evolution of social entrepreneurship field

**Table 1** Representative list of review studies on social entrepreneurship

Studies	Type of study	Methodology	Period	Number of papers analyzed	Main ideas
Austin et al. (2006)	Qualitative	Literature review	Not mentioned	Not mentioned	Highlights differences between commercial and social enterprises in terms of markets, mission, capital, people and performance.
Bacq and Janssen (2011)	Qualitative	Literature review	Not mentioned	Not mentioned	Reviews definition of SE and its conceptualization across geographies.
Certo and Miller (2008)	Qualitative	Literature review	Not mentioned	Not mentioned	Reviews definition of SE and suggests future research directions.
Choi and Majumdar (2014)	Qualitative	Literature review	Not mentioned	Not mentioned	Argues that SE is an essentially contested concept and hence a unified definition is not possible. Viewing it as a cluster concept will facilitate the development of structured and systematic future research.
Dacin, Dacin and Tracey (2011)	Qualitative	Literature review	Not mentioned	Not mentioned	Examines the promise of social entrepreneurship as a domain of inquiry and suggests future research areas and a set of research questions.
Dacin, Dacin and Matear (2010)	Qualitative	Literature review	Not mentioned	Not mentioned	Differentiates social entrepreneurship from other related areas and suggests future research questions.
Doherty et al. (2014)	Qualitative	Structured literature review	Not mentioned	129	Discusses about hybrid nature of social enterprises and the impact of hybridity on management of social mission, financial resource acquisition and human resource mobilization.
Galera and Borgaza (2009)	Qualitative	Literature review	Not mentioned	Not mentioned	Emphasizes on the importance of legal recognition of social entrepreneurship for the research advancement of the field.

Studies	Type of study	Methodology	Period	Number of papers analyzed	Main ideas
Granados et al. (2011)	Quantitative	Citation analysis	1991-2010	286	Provides intellectual structure of social entrepreneurship field and discusses current maturation of the field based on epistemological orientation.
Haugh (2005)	Qualitative	Thematic analysis	Not mentioned	Not mentioned	Categorizes social entrepreneurship research agenda in to eight themes and suggests future area of research.
Lehner and Kaniskas (2013)	Qualitative	Content analysis	2005-2011	>300	Discusses about pre-paradigmatic status of social entrepreneurship research.
Mair and Marti (2006)	Qualitative	Literature review	Not mentioned	Not mentioned	Defines social entrepreneurship from process perspective, discusses how sociology and organizational theory can be applied to social entrepreneurship.
Rey-Marti et al. (2016)	Quantitative	Citation analysis	1964-2015	2984	Identifies research area with greater research output, country and language responsible for most research in the discipline, journal that publishes most research and most relevant authors in the area.
Sassmannshausen and Volkmann, (2018)	Quantitative	Citation analysis	1954-2013	20000	Identifies most cited articles, discusses methodological issues and provides suggestions on overcoming those issues.
Short et al. (2009)	Qualitative	Content analysis	1991-2008	152	Classifies article based on type and methodology, Delineates boundary of social entrepreneurship research.
Thompson (2008)	Qualitative	Literature review	Not mentioned	Not mentioned	Highlights distinctiveness and linkages among social entrepreneurship, social enterprise and social entrepreneur.

**Table 2** Most cited documents on social entrepreneurship research

Ranking	Most cited documents	Number of citations
1	Mair and Marti (2006)	292
2	Austin et al. (2006)	244
3	Dees (1998a)	181
4	Zahra et al. (2009)	171
5	Peredo and McLean (2006)	156
6	Dacin et al. (2010)	140
7	Yin (1994)	139
8	Nicholls (2006)	136
9	Borzaga and Defourny (2004)	135
10	Dees (1998b)	123
11	Bornstein (2007)	118
12	Weerawardena and Mort (2006)	117
13	Short et al. (2009)	115
14	Alvord et al. (2004)	112
15	Dart (2004)	107
16	Eisenhardt (1989)	99
17	Martin and Osberg (2007)	96
18	Defourny and Nyssen (2010)	93
19	Leadbeater (1997)	93
20	Kerlin (2006)	87
21	Battilana and Dorado (2010)	85
22	Nicholls (2010)	83
23	Dacin et al. (2011)	81
24	Chell (2007)	80
25	Shane and Venkatraman(2000)	79
26	Prahalad (2005)	78

Ranking	Most cited documents	Number of citations
27	Miles and Huberman (1994)	77
28	Santos (2012)	76
29	Nyssens (2006)	71
30	Seelos and Mair (2005)	70
31	Dimaggio and Powell (1983)	67
32	Sharir and Lerner (2006)	66
33	Di Domenico et al. (2010)	65
34	Miller et al. (2012)	63
35	Thompson (2002)	63
36	Mort et al. (2003)	63
37	Mair and Marti (2009)	61
38	Glaser and Strauss (1967)	60
39	Doherty et al. (2014)	59
40	Peredo and Chrisman (2006)	59
41	Shaw and Carter (2007)	59
42	Eikenberry and Kluvner (2004)	58
43	Strauss and Corbin (1990)	58
44	Schumpeter (1934)	57
45	Suchman (1995)	57
46	Thompson et al. (2000)	55
47	Eisenhardt and Graebner (2007)	51
48	Porter and Kramer (2011)	51
49	Bacq and Janssen (2011)	50
50	Defourny and Nyssen (2008)	50
51	Tracey et al. (2011)	50
52	Battilana and Lee(2014)	46
53	Kerlin (2010)	46
54	Pache and Santos (2013)	46

Ranking	Most cited documents	Number of citations
55	Pearce (2003)	46
56	Haugh (2007)	45
57	Tracey and Philips (2007)	45
58	Emerson (2003)	43
59	Patton (1990)	43
60	Yunus (2007)	43
61	Corner and Ho (2010)	42
62	Nicholls (2009)	42
63	Drayton (2002)	41
64	Certo and Miller (2008)	40
65	Schumpeter (1942)	40
66	Teasdale (2012)	40
67	Haugh (2005)	38
68	Sarasvathy (2001)	38
69	Waddock and Post (1991)	38
70	Alter (2007)	37
71	Baker and Nelson (2005)	37
72	Choi and Majumdar (2014)	37
73	Fowler (2000)	37
74	Emerson and Twersky (1996)	36
75	Hansmann (1980)	36
76	Jay (2013)	36
77	Zahra et al. (2008)	36
78	Dees et al. (2002)	35
79	Granovetter (1985)	35
80	Lepoutre et al. (2013)	35
81	Putnam (2000)	35
82	Dees (2007)	34

Ranking	Most cited documents	Number of citations
83	Dorado (2006)	34
84	Foster and Bradach (2005)	34
85	Giddens (1984)	34
86	Mair et al. (2006)	34
87	Mair et al. (2012)	34
88	Moss et al.(2011)	34
89	Parkinson and Howorth (2008)	34
90	Yunus et al. (2010)	34
91	Dey and Steyart (2010)	33
92	Pache and Santos (2010)	33
93	Spear (2006)	33
94	Tracey and Jarvis (2007)	33
95	Amin Ash(2003)	32
96	Hair et al. (1998)	32
97	Meyer and Rowen (1977)	32
98	Ridley- Duff and Bull (2011)	32
99	Townsend and Hart (2008)	32
100	Barney (1991)	31
101	Freeman (1984)	31
102	Galera and Borzaga (2009)	31
103	Harding (2004)	31
104	Maguire et al. (2004)	31
105	Battilana et al.(2012)	30
106	North (1990)	30
107	Seelos and Mair (2007)	30
108	Smith et al.(2013)	30
109	Venkataraman (1997)	30

**Table 3** List of journals where the most cited documents on social entrepreneurship research have been published

Title of journal	Frequency	Percentage (%)
Entrepreneurship theory and practice	8	7.34
Academy of management review	7	6.42
Academy of management journal	5	4.59
Journal of world business	4	3.67
Harvard business review	3	2.75
Journal of business venturing	3	2.75
Social enterprise journal	3	2.75
American journal of sociology	2	1.83
Business horizons	2	1.83
California management review	2	1.83
Journal of business ethics	2	1.83
Organization science	2	1.83
Public administration review	2	1.83
Stanford social innovation review	2	1.83
Strategic entrepreneurship journal	2	1.83
The academy of management perspectives	2	1.83
Voluntas: International journal of voluntary and nonprofit organizations	2	1.83
Entrepreneurship and regional development	2	1.83
Academy of management annals	1	0.92
Academy of management learning & education	1	0.92
Accounting, organizations and society	1	0.92
Administrative science quarterly	1	0.92
Advances in entrepreneurship, firm emergence and growth	1	0.92
American sociological review	1	0.92
Business ethics quarterly	1	0.92
Business strategy review	1	0.92

Title of journal	Frequency	Percentage (%)
International journal of management reviews	1	0.92
International journal of nonprofit and voluntary sector	1	0.92
International journal of public sector management	1	0.92
International journal of social economics	1	0.92
International small business journal	1	0.92
Journal of developmental entrepreneurship	1	0.92
Journal of enterprising communities: people and places in the global economy	1	0.92
Journal of management	1	0.92
Journal of small business and enterprise development	1	0.92
Journal of social entrepreneurship	1	0.92
Long range planning	1	0.92
Management decision	1	0.92
Nonprofit management and leadership	1	0.92
Small business economics	1	0.92
Society	1	0.92
The journal of applied behavioral science	1	0.92
The Yale law journal	1	0.92
Third world quarterly	1	0.92
Others	28	25.69
<b>TOTAL</b>	<b>109</b>	<b>100.00</b>

**Table 4** List of articles in different clusters

<b>Cluster</b>	<b>Articles</b>
1	Alvord et al. (2004); Bornstein (2007); Chell (2007); Dees (1998a); Dees (1998b); Drayton (2002); Leadbeater (1997); Martin and Osberg (2007); Nicholls (2006); Seelos and Mair (2005); Sharir and Lerner (2006); Shaw and Carter (2007); Thompson (2002); Thompson et al. (2000); Waddock and Post (1991).
2	Austin et al. (2006); Mair et al. (2006); Peredo and McLean (2006); Short et al. (2009); Weerawardena and Mort (2006); Zahra et al. (2009).
3a	Alter (2007); Borzaga and Defourny (2004); Defourny and Nyssen (2008); Defourny and Nyssen (2010); Doherty et al. (2014); Galera and Borzaga (2009); Kerlin (2006); Kerlin (2010); Nyssens (2006); Parkinson and Howorth (2008); Pearce (2003); Ridley- Duff and Bull (2011); Teasdale (2012); Yunus et al. (2010).
3b	Dart (2004); Dey and Steyart (2010); Eikenberry and Kluvner (2004); Nicholls (2010).
4a	Bacq and Janssen (2011); Choi and Majumdar (2014); Dacin et al. (2010); Dacin et al. (2011); Mair et al. (2012); Miller et al. (2012); Santos (2012).
4b	Battilana et al. (2012); Emerson (2003); Moss et al.(2011); Nicholls (2009).
5a	Certo and Miller (2008); Corner and Ho (2010); Dees JG(2007); Di Domenico et al. (2010); Hair et al. (1998); Harding (2004); Haugh (2005); Lepoutre et al. (2013); Mair and Marti (2006); Mort et al. (2003); Spear (2006); Tracey and Jarvis (2007); Tracey and Philips (2007); Zahra et al. (2008).
5b	Baker and Nelson (2005); Sarasvathy (2001); Schumpeter (1934); Shane and Venkatraman(2000); Venkataraman (1997).
5c	Emerson and Twersky (1996); Foster and Bradach (2005); Fowler (2000); Haugh (2007); Peredo and Chrisman (2006).
5d	Maguire et al. (2004); Mair and Marti (2009); Seelos and Mair (2007); Townsend and Hart (2008).
6	Battilana and Dorado (2010); Battilana and Lee(2014); Jay (2013); Pache and Santos (2010); Pache and Santos (2013); Smith et al.(2013); Tracey et al. (2011).
7a	Barney (1991); Dimaggio and Powell (1983); Freeman (1984); Giddens (1984); Granovetter (1985); Meyer and Rowen (1977); North (1990); Schumpeter (1942); Suchman (1995).
7b	Amin et al. (2003); Dees (2002); Hansmann (1980); Porter and Kramer (2011); Prahalad (2005); Putnam (2000); Yunus (2007).
7c	Glaser and Strauss (1967); Patton (1990); Strauss and Corbin (1990).
8	Eisenhardt and Graebner (2007); Eisenhardt (1989); Miles and Huberman (1994); Yin (1994).
9	Dorado (2006).



**Table 5** Degree centrality measures for documents with five highest scores

Documents	Degree Centrality
Alvord et al. (2004); Austin et al. (2006); Chell (2007); Dacin et al. (2010); Dees (1998a); Dees (1998b); Eikenberry and Kluvner (2004); Yin (1994); Zahra et al. (2009).	108
Dacin et al. (2011); Dart (2004); Defourny and Nyssen (2010); Di Domenico et al. (2010); Mair and Marti (2006); Peredo and Chrisman (2006); Sharir and Lerner (2006); Weerawardena and Mort (2006).	107
Bacq and Janssen (2011); Bornstein (2007); Borzaga and Defourny (2004); Eisenhardt (1989) ; Leadbeater (1997); Martin and Osberg (2007); Miles and Huberman (1994); Short et al. (2009); Tracey et al. (2011).	106
Battilana and Dorado (2010); Corner and Ho (2010); Kerlin (2006); Mair and Marti (2009); Nicholls (2006); Peredo and McLean (2006); Santos (2012); Suchman (1995).	105
Dimaggio and Powell (1983); Emerson (2003); Nicholls (2010); Shane and Venkatraman(2000).	104

**Table 6** Closeness centrality measures for documents with five highest scores

Documents	Closeness Centrality
Alvord et al. (2004); Austin et al. (2006); Chell (2007); Dacin et al. (2010); Dees (1998a); Dees (1998b); Eikenberry and Kluvner (2004); Yin (1994); Zahra et al. (2009).	100
Dacin et al. (2011); Dart (2004); Defourny and Nyssen (2010); Di Domenico et al. (2010); Mair and Marti (2006); Peredo and Chrisman (2006); Sharir and Lerner (2006); Weerawardena and Mort (2006).	99.083
Bacq and Janssen (2011); Bornstein (2007); Borzaga and Defourny (2004); Eisenhardt (1989) ; Leadbeater (1997); Martin and Osberg (2007); Miles and Huberman (1994); Short et al. (2009); Tracey et al. (2011).	98.182
Battilana and Dorado (2010); Corner and Ho (2010); Kerlin (2006); Mair and Marti (2009); Nicholls (2006); Peredo and McLean (2006); Santos (2012); Suchman (1995).	97.297
Dimaggio and Powell (1983); Emerson (2003); Nicholls (2010); Shane and Venkatraman(2000).	96.429

**Table 7** Betweenness centrality measures for documents with five highest scores

Documents	Betweenness Centrality
Alvord et al. (2004); Austin et al. (2006); Chell (2007); Dacin et al. (2010); Dees (1998a); Dees (1998b); Eikenberry and Klavner (2004); Yin (1994); Zahra et al. (2009).	5.693
Dacin et al. (2011); Di Domenico et al. (2010).	5.589
Dart (2004).	5.573
Mair and Marti (2006).	5.523
Defourny and Nyssen (2010).	5.507

## Online Supplement

**Name of the article:** Mapping the Intellectual Structure of Social Entrepreneurship Research: A Citation/Co-citation Analysis

**Authors:** Pradeep Kumar Hota, Balaji Subramanian, Gopalakrishnan Narayanamurthy

### Summary of the 109 documents used for the co-citation analysis

Cluster	Documents	Publication	Article type	Target	Main Ideas
1	Alvord et al. (2004)	Journal article	Empirical	Academic	Based on a study of 7 successful social enterprises, this article suggests factors associated with successful social entrepreneurship. Focus is on social entrepreneurship that lead to change in the lives of poor and marginalized group.
1	Bornstein (2007)	Book	Conceptual	Academic / Practitioner	Discuss the profiles of social entrepreneurs who are bringing innovative, successful and grassroots approaches to solve social problems.
1	Chell (2007)	Journal article	Conceptual	Academic	Discusses convergence between the entrepreneurial process of social and economic entrepreneurship. It concludes that definition of entrepreneurship can be modified to include social and economic value and then it can be used for both economic and social entrepreneurship.
1	Dees (1998a)	Online article	Conceptual	Practitioner	Explains the meaning of the term social entrepreneurship, which subsequently became a foundation for social entrepreneurship research.
1	Dees (1998b)	Journal article	Conceptual	Practitioner	Proposes a framework called social enterprise spectrum that helps to position different types of organizations, with ideal philanthropic organizations at one end and ideal commercial organizations at the other end.
1	Drayton (2002)	Journal article	Conceptual	Practitioner	Examines the transformation of social half of the society to a business like entrepreneurial/competitive nature and the resulting management challenges that emerge from this transformation.
1	Leadbeater (1997)	Book	Conceptual	Practitioner	Discusses about the inability of welfare state to address social issues and the importance of social entrepreneurship and social entrepreneurs in addressing the social issues.
1	Martin & Osberg (2007)	Journal article	Conceptual	Practitioner	Acknowledges definitional debates in social entrepreneurship literature and argues that lack of clarity in definition leads to consider anything related to social benefit as social entrepreneurship.
1	Nicholls (2006)	Book	Conceptual	Academic / Practitioner	Clarifies ambiguity around the term social entrepreneurship and establishes a framework to understand it.

<b>Cluster</b>	<b>Documents</b>	<b>Publication</b>	<b>Article type</b>	<b>Target</b>	<b>Main Ideas</b>
1	Seelos & Mair (2005)	Journal article	Conceptual	Academic	Discusses social entrepreneurship as a way of combining resourcefulness of traditional entrepreneurship with social mission leading to the development of sustainable business models to address social challenges.
1	Sharir & Lerner (2006)	Journal article	Empirical	Academic	Based on an exploratory qualitative study of 33 ventures, this article identifies factors affecting success of social ventures.
1	Shaw & Carter (2007)	Journal article	Conceptual	Academic	Explores the historical and theoretical antecedents of social enterprise and its contemporary practice and compares social and for-profit enterprises.
1	Thompson (2002)	Journal article	Conceptual	Academic	Defines social entrepreneurship and social enterprise, and also provides a map for understanding the complexity in the world of social entrepreneur and volunteer sector.
1	Thompson et al. (2000)	Journal article	Conceptual	Academic	Defines social entrepreneurship and looks at social entrepreneurship development in the light of Government's thrust for social sector. Also identifies several challenges that need to be addressed by social enterprises.
1	Waddock & Post (1991)	Journal article	Conceptual	Academic	As one of the initial papers in the domain, it discusses what social entrepreneurship is and what role it plays in public domain. Further it discusses conditions that contribute to social entrepreneurial action.
2	Austin et al. (2006)	Journal article	Conceptual	Academic	Compares social and commercial entrepreneurship using a prevailing analytical model from commercial entrepreneurship and highlights key similarities and difference between them.
2	Mair et al. (2006)	Book	Conceptual	Academic / Practitioner	Discusses the concept of social entrepreneurship and how it has evolved over time.
2	Peredo & McLean (2006)	Journal article	Conceptual	Academic	Undertakes an analytical, critical and synthetic examination of social entrepreneurship by considering both the social and entrepreneurship elements.
2	Short et al. (2009)	Journal article	Conceptual	Academic	Conducted a review of social entrepreneurship research, classified articles based on type and methodology and delineated boundary of social entrepreneurship research.
2	Weerawardena & Mort (2006)	Journal article	Conceptual	Academic	Delineated social entrepreneurship as a multi-dimensional construct with the dimensions of innovativeness, proactiveness and risk management operating within the constraints of environment, sustainability and social mission.
2	Zahra et al. (2009)	Journal article	Conceptual	Academic	Defines social entrepreneurship, discusses its role in creating social wealth, provides typologies of entrepreneur, notes opportunity search processes and highlights the major ethical challenges facing social entrepreneur.
3a	Nyssens (2006)	Book	Conceptual	Academic / Practitioner	Provides a comprehensive and comparative analysis of social enterprises across Europe and suggest directions for policy makers.

<b>Cluster</b>	<b>Documents</b>	<b>Publication</b>	<b>Article type</b>	<b>Target</b>	<b>Main Ideas</b>
3a	Alter (2007)	Online article	Conceptual	Practitioner	Discusses different typologies of social enterprises based on a mix of social values and goals with commercial business practices.
3a	Borzaga & Defourny (2004)	Book	Conceptual	Academic / Practitioner	Discusses emergence of social enterprises, their characteristics, future prospect and contribution to society.
3a	Defourny & Nyssen (2008)	Journal article	Conceptual	Academic	Synthesizes evolution of social enterprises across Europe and the key challenges these organizations face.
3a	Defourny & Nyssen (2010)	Journal article	Conceptual	Academic	Discusses how social entrepreneurship has been conceptualized in Europe and the United states and examines the degree of convergence and divergence between the two conceptualizations.
3a	Doherty et al, (2014)	Journal article	Conceptual	Academic	Argues that social enterprises are hybrid organizations owing to their dual mission of social value creation and financial sustainability. Further proposes a set of research questions related to hybridity of social enterprises.
3a	Galera & Borzaga (2009)	Journal article	Conceptual	Academic	Provides a comprehensive overview of research in social entrepreneurship by focusing on how the concept has been implemented in various European countries.
3a	Kerlin (2006)	Journal article	Conceptual	Academic	Through an extensive review of literature, this article compares and contrasts American and European social enterprises in terms of historical, institutional and legal factors.
3a	Kerlin (2010)	Journal article	Conceptual	Academic	Compares the concept, practice, and context of social enterprises across seven regions globally and highlights the role played by variations in socioeconomic contexts in determining differences in social enterprises.
3a	Parkinson & Howorth (2008)	Journal article	Empirical	Academic	Questions the use of entrepreneurship discourse to social entrepreneurship and argues that social entrepreneurs need to rewrite their discourse to articulate their own realities.
3a	Pearce (2003)	Online article	Conceptual	Academic	Discusses the emergence of social enterprises, distinguishing them from other types of organizations, and arguing for a separate legal status. Also demonstrates the social and environmental values created by social enterprises.
3a	Ridley- Duff & Bull (2011)	Book	Conceptual	Academic / Practitioner	Explores the development of the social investment industry, discussing the distinct pathways that social enterprises follow and examining the management of social enterprises across different context in the global economy.
3a	Teasdale (2012)	Journal article	Conceptual	Academic	Recognizes conceptual confusions existing in social entrepreneurship literature and attempts to make sense of different social enterprise forms, academic explanations and policy and practitioner discourses.

<b>Cluster</b>	<b>Documents</b>	<b>Publication</b>	<b>Article type</b>	<b>Target</b>	<b>Main Ideas</b>
3a	Yunus et al. (2010)	Journal article	Empirical	Practitioner	Discusses the development of Grameen model and highlights five lessons that can be learned from the Grameen experience about development of a social business model.
3b	Dart (2004)	Journal article	Conceptual	Academic	Takes an institutional perspective and shows how social enterprises gain moral legitimacy by being pro-market and businesslike.
3b	Dey & Steyart (2010)	Journal article	Conceptual	Academic	Discusses about different narratives of social entrepreneurship and critically analyzes each of the narratives.
3b	Eikenberry & Klivner (2004)	Journal article	Conceptual	Academic	Takes a critical approach and discusses how social enterprises and in general the marketization of not-for profit sector impacts the contribution of these organizations to civil society.
3b	Nicholls (2010)	Journal article	Conceptual	Academic	Reviews research in social entrepreneurship and conceptualizes social entrepreneurship as a field of action in its pre-paradigmatic state lacking established methodology.
4a	Bacq & Janssen (2011)	Journal article	Conceptual	Academic	Clarifies the concept of social enterprise, social entrepreneur and social entrepreneurship and examines difference in the way these are conceptualized based on geographic and thematic criteria.
4a	Choi & Majumdar (2014)	Journal article	Conceptual	Academic	Argues that social entrepreneurship is an essentially contested concept and a unified definition is not plausible. Therefore, it proposes a cluster concept that can help to advance social entrepreneurship research.
4a	Dacin et al. (2010)	Journal article	Conceptual	Academic	Examines existing literature in social entrepreneurship to identify the uniqueness of social entrepreneurship research and whether existing theories in entrepreneurship can explain social entrepreneurial phenomena. Discusses avenues for future research based on application of existing theories to social entrepreneurial context.
4a	Dacin et al. (2011)	Journal article	Conceptual	Academic	Through an extensive review, highlights the issues in social entrepreneurship research in terms of conceptual ambiguity, definitional debates and ill-defined field boundary leading to difficulties in arriving at a set of meaningful research questions. Proposes a set of research questions for future directions.
4a	Mair et al. (2012)	Journal article	Empirical	Academic	Develops a typology of social entrepreunering models on the basis of four forms of capital - social, economic, human, and political. Describes avenues for theorizing the different forms of social enterprise models.
4a	Miller et al. (2012)	Journal article	Conceptual	Academic	Discusses three mechanisms that transform compassion into social entrepreneurship and highlights the institutional conditions under which they are most likely to do so.
4a	Santos (2012)	Journal article	Conceptual	Academic	By focusing on the concept of value creation and value appropriation, this article proposes a positive theory of social entrepreneurship. It also discusses the role of social entrepreneurship in modern economic systems.

<b>Cluster</b>	<b>Documents</b>	<b>Publication</b>	<b>Article type</b>	<b>Target</b>	<b>Main Ideas</b>
4b	Battilana et al.(2012)	Journal article	Empirical	Practitioner	Based on a study of social enterprises, this paper analyzes the rise of hybrid organizations and examines the issue faced by these organizations when they attempt to combine two seemingly different objectives.
4b	Emerson (2003)	Journal article	Conceptual	Practitioner	Argues that all organizations whether for-profit or not-for-profit generates economic, social and environmental values and by investing in these organizations, investors simultaneously generate all forms of value.
4b	Moss et al.(2011)	Journal article	Empirical	Academic	Highlights existence of dual identities, utilitarian and normative identities, in social enterprises owing to their focus on social value creation and financial sustainability. Also notes that social enterprises, as compared to for-profit organizations exhibit more normative identity.
4b	Nicholls (2009)	Journal article	Conceptual	Academic	Looks at the duality issue from an accounting perspective and argues that social enterprises practice 'Blended Value Accounting' and report financial, social and environmental performance.
5a	Certo & Miller (2008)	Journal article	Conceptual	Academic	Discusses about different business models operating in fair trade system in terms of how value chain is governed and suggests the need for more nuanced understanding of fair trade.
5a	Corner & Ho (2010)	Journal article	Empirical	Academic	Through an exploratory inductive approach, this article argues that opportunities are identified in social entrepreneurship through dynamic interaction between multiple actors.
5a	Dees JG(2007)	Journal article	Conceptual	Practitioner	Argues for the promotion of social entrepreneurship to solve social problems and calls for a supportive infrastructure to social entrepreneurs.
5a	Di Domenico et al, (2010)	Journal article	Empirical	Academic	Extends the concept of bricolage to social entrepreneurial context and proposes different dimensions of social entrepreneurial bricolage.
5a	Hair et al. (1998)	Book	Empirical	Academic	A classic book that discusses different techniques of quantitative data analysis.
5a	Harding (2004)	Journal article	Conceptual	Practitioner	Discusses the potential of social entrepreneurship to make not-for-profit organizations financially sustainable.
5a	Haugh (2005)	Journal article	Conceptual	Academic	Categorizes social entrepreneurship research into eight different themes and suggests future research directions based on them.
5a	Lepoutre et al. (2013)	Journal article	Empirical	Academic	Discusses about quantitatively measuring social entrepreneurship activity using Global Entrepreneurship Monitor data.
5a	Mair & Marti (2006)	Journal article	Conceptual	Academic	Looks at the conceptualization of social entrepreneurship from the perspective of a good theory, providing explanation, prediction and delight. Also provides a definition of social entrepreneurship as a process involving innovative use of resources to address social problems.

<b>Cluster</b>	<b>Documents</b>	<b>Publication</b>	<b>Article type</b>	<b>Target</b>	<b>Main Ideas</b>
5a	Mort et al., (2003)	Journal article	Conceptual	Academic	Conceptualizes social entrepreneurship as a multidimensional construct involving entrepreneurially virtuous behavior, risk taking, proactiveness, innovativeness, social opportunity recognition, and judgment capacity. Proposes a framework to analyze both social and economic entrepreneurships.
5a	Spear (2006)	Journal article	Empirical	Academic	Uses resource scarcity theory and agency theory to understand social venture franchising through an in-depth case study.
5a	Tracey & Jarvis (2007)	Journal article	Empirical	Academic	Argues that educating social entrepreneurs has its own challenges and it is not same as educating entrepreneurs and necessary additions must be done to entrepreneurship education to make it suitable for social entrepreneurs.
5a	Tracey & Phillips (2007)	Journal article	Conceptual	Academic	Using behavioral theory of the firm, this article discusses the factors contributing to the formation and rapid internationalization of social ventures. Also discusses key attributes of social opportunities and how they shape timing and scope of international operation.
5a	Zahra et al., (2008)	Journal article	Conceptual	Academic	Defines entrepreneurial bricolage and identifies different dimensions of it using an exploratory study. Discusses about the nature of serial and parallel bricolage and their implications.
5b	Baker & Nelson (2005)	Journal article	Empirical	Academic	Develops the idea of effectuation decision making as different from causation decision making in entrepreneurs.
5b	Sarasvathy (2001)	Journal article	Conceptual	Academic	A seminal book that analyzes capitalist society and economic processes.
5b	Schumpeter (1934)	Book	Conceptual	Academic	Proposes a conceptual framework for research in entrepreneurship area by drawing insights from multiple social science disciplines.
5b	Shane & Venkataraman(2000)	Journal article	Conceptual	Academic	Argues for the need to specify distinct contributions of entrepreneurship field research domain to the broader understanding of business. Also highlights the issues existing in entrepreneurship research.
5b	Venkataraman (1997)	Journal article	Conceptual	Academic	Reports the work of the Homeless Economic Development Fund for people interested in non-for-profit business development.
5c	Emerson & Twersky (1996)	Online article	Empirical	Academic	Discusses the cases of not-for-profit organizations seeking profits and the corresponding challenges.
5c	Foster & Bradach (2005)	Journal article	Conceptual	Practitioner	Discusses the extent to which social entrepreneurship and civic innovation could provide a new framework for NGDOs.
5c	Fowler (2000)	Journal article	Conceptual	Academic	



<b>Cluster</b>	<b>Documents</b>	<b>Publication</b>	<b>Article type</b>	<b>Target</b>	<b>Main Ideas</b>
5c	Haugh (2007)	Journal article	Empirical	Academic	Provides a six stage process model for non-profit community led venture: opportunity identification, idea articulation, idea ownership, stakeholder mobilization, opportunity exploitation and stakeholder reflection.
5c	Peredo & Chrisman (2006)	Journal article	Conceptual	Academic	Develops the concept of community-based enterprises and proposes a theoretical model of the determinants, characteristics and consequences of community based enterprises.
5d	Maguire et al. (2004)	Journal article	Empirical	Academic	Discusses the dynamics of institutional entrepreneurship in an emerging field and explores the critical activities associated with it.
5d	Mair & Marti (2009)	Journal article	Empirical	Academic	Discusses the roles and activities of entrepreneurial actors, operating under conditions of institutional void in developing countries, to address social issues.
5d	Seelos & Mair (2007)	Journal article	Empirical	Academic	Based on an exploratory case study of two social enterprises, this article develops a strategic framework for organizations working in bottom of pyramid market.
5d	Townsend & Hart (2008)	Journal article	Conceptual	Academic	Discusses how perception of institutional ambiguity leads to the variance in choice of organizational forms for social enterprises.
6	Battilana & Dorado (2010)	Journal article	Empirical	Academic	This article argues that hybrid organizations, when faced with challenges of conflicting identities, must create a common organizational identity that strikes a balance between the conflicting identities.
6	Battilana & Lee(2014)	Journal article	Conceptual	Academic	Proposes that social enterprises are ideal type of hybrid organizations as they combine aspects of charity with business. Also provides a hybrid organizing framework with five dimensions.
6	Jay J(2013)	Journal article	Empirical	Academic	Identifies that hybrid organizations, in their attempt to provide innovative solution to complex problems, combine multiple institutional logics and hence face institutional complexity. It develops a process model of organizations addressing challenges arising out of the complexity.
6	Pache & Santos (2010)	Journal article	Conceptual	Academic	Discusses how organizations respond to conflicts arising out of competing institutional demands while taking into account internal political processes.
6	Pache & Santos (2013)	Journal article	Empirical	Academic	This article, studying how hybrid organizations manage institutional complexity, suggests that hybrid organizations selectively incorporate prescriptions from each of the logics.
6	Smith et al.(2013)	Journal article	Conceptual	Academic	Identifies different types of tensions faced by social enterprises and discusses the different theoretical lenses that can be used to study these tensions.
6	Tracey et al. (2011)	Journal article	Empirical	Academic	Examines how institutional entrepreneurs create new organizational forms, shedding light on the relationship between individual, organizational, and societal level institutional processes.

<b>Cluster</b>	<b>Documents</b>	<b>Publication</b>	<b>Article type</b>	<b>Target</b>	<b>Main Ideas</b>
7a	Barney (1991)	Journal article	Conceptual	Academic	Seminal work on Resource Based View that attributes resource position of a firm as its source of competitive advantage.
7a	Dimaggio & Powell (1983)	Journal article	Conceptual	Academic	Discusses how isomorphic processes - coercive, mimetic, and normative, leads to the similarities among organizations in an organizational field.
7a	Freeman (1984)	Book	Conceptual	Academic	Classic book that discusses about the stakeholder approach in strategic management.
7a	Giddens (1984)	Book	Conceptual	Academic	A seminal book on the relationship between structure and agents.
7a	Granovetter (1985)	Journal article	Conceptual	Academic	A seminal article arguing that economic action is embedded in the structure of social relations.
7a	Meyer & Rowen (1977)	Journal article	Empirical	Academic	A seminal paper on institutional theory arguing that organizations become isomorphic with their institutional environment to gain legitimacy and resources.
7a	North (1990)	Book	Conceptual	Academic	A classic book that explains how the institutions and institutional change affect the performance of economies, both at a given time and over time.
7a	Schumpeter (1942)	Book	Conceptual	Academic	A seminal work on capitalism and entrepreneurship.
7a	Suchman (1995)	Journal article	Conceptual	Academic	A seminal work on legitimacy, defining and identifying different types of legitimacy and the challenges of legitimacy management.
7b	Amin et al. (2003)	Book	Conceptual	Practitioner	Discusses academic and policy expectation in the developed world, the policies of New Labour in Britain and the dynamics of social enterprises in Bristol, London, Middlesbrough and Glasgow.
7b	Dees (2002)	Book	Conceptual	Practitioner	Discusses how not-for-profit can adopt entrepreneurial behavior and techniques to sustain themselves.
7b	Hansmann (1980)	Journal article	Conceptual	Academic	Discusses the importance of not-for-profits and argues that these organizations are a reasonable response to a relatively well-defined set of social needs that can be described in economic terms.
7b	Porter & Kramer (2011)	Journal article	Conceptual	Practitioner	Argues for business approach in addressing social issues by creating shared value. Notes that profit involving shared value enables society to advance more rapidly and allows companies to grow faster simultaneously.
7b	Prahalad (2005)	Book	Conceptual	Academic	Discusses business opportunities with poor as customers and argues that companies need to change their approach of how they do business in developing countries and look these markets as new opportunity.
7b	Putnam (2000)	Book	Conceptual	Academic	Discusses change in behavior of people in America and notes that people have become more disconnected from one another and social structure have disintegrated.

<b>Cluster</b>	<b>Documents</b>	<b>Publication</b>	<b>Article type</b>	<b>Target</b>	<b>Main Ideas</b>
7b	Yunus (2007)	Book	Conceptual	Academic	Introduces and discusses the concept of social business, in which creative visions of entrepreneurs are applied to address social issues.
7c	Glaser & Strauss (1967)	Book	Empirical	Academic	Seminal work that explains grounded theory and discusses how theory can be built systematically from data.
7c	Patton (1990)	Book	Empirical	Academic	A classic book on qualitative research methodology.
7c	Strauss & Corbin (1990)	Book	Empirical	Academic	A seminal book that describes procedures and techniques to undertake grounded theory based qualitative research.
8	Eisenhardt & Graebner (2007)	Journal article	Conceptual	Academic	A seminal work that explains how to do inductive theory building using case study approach.
8	Eisenhardt (1989)	Journal article	Conceptual	Academic	Discusses different opportunities and challenges related to theory building from case study research.
8	Miles & Huberman (1994)	Book	Empirical	Academic	A seminal work that explains different techniques through which qualitative data can be analyzed.
8	Yin (1994)	Book	Empirical	Academic	A seminal work in case study research that explains different stages of carrying out case study research.
9	Dorado (2006)	Journal article	Conceptual	Academic	Discusses difference between the process of social entrepreneurial ventures and entrepreneurial ventures and argues for studying them separately rather than translating findings from one to the other.