A Bibliometric Analysis of Research on Social Cohesion from 1994–2020

Louis Moustakas

Institute for European Sport Development and Leisure Studies, German Sport University Cologne, 50933 Cologne, Germany; lmoustakas@dshs-koeln.de

Abstract: Social cohesion is recognised as the glue that holds societies together and is connected to numerous positive social outcomes. Many authors have defined the term and its dimensions, leading to a wide range of different perspectives. Indeed, an array of dimensions have emerged as researchers have conceptualized social cohesion based on the theoretical assumptions of their disciplines. This wide range of disciplinary contributions has created a rich but muddled research field. In line with the growing recognition of social cohesion, there is a need to better understand social cohesion’s evolution and status within broader academic research. Thus, this study has two main objectives: (i) to analyse the nature and evolution of literature related to social cohesion and (ii) to identify the thematic areas related to social cohesion research and their connections to specific disciplines. To achieve this, a bibliometric analysis of 5027 journal articles listed in the Web of Science (WoS) was conducted. Through this, a substantial increase in research activity was noted, and the broad, multidisciplinary nature of the research is also illustrated. However, there remains room for further collaboration across disciplines as well as research exploring how different social groups and institutions contribute to social cohesion.

Keywords: bibliometric analysis; citation analysis; social cohesion; inequality; health; diversity; research; publications

1. Introduction

Changing migratory patterns, increased urban concentration, ageing populations, and the structural transformation of economies have posed significant challenges to countries and communities worldwide. Recognising these converging trends, policy-makers have increasingly shifted their focus towards promoting greater social cohesion [1,2]. Often presented as a holistic and multi-dimensional concept, social cohesion is considered the glue that holds societies together and is seen as essential to address challenges and move together in a common direction. For instance, the Council of Europe [2] defines social cohesion “as the capacity of a society to ensure the wellbeing of all its members—minimising disparities and avoiding marginalisation—to manage differences and divisions and ensure the means of achieving welfare for all members.” The concept is connected to numerous positive social outcomes in the academic literature, including economic productivity, environmental sustainability, greater social stability, increased peace, and increased physical activity [3–7]. More recently, social cohesion has also been associated with an effective response to and recovery from the COVID-19 pandemic [8–10].

Intellectually, there is a long history behind the concept of social cohesion that can be traced back to Emile Durkheim’s works in the late 19th century [11,12]. Since then, numerous authors from various academic fields have engaged with the concept of social cohesion, further expanding literature around the topic. As a result, the last 15 years have seen many works attempt to summarise, define, and further conceptualise the term. These efforts have led to a range of both narrower [13,14] and broader understandings of social cohesion [12]. Within this body of work, what is most striking is the sheer range of...
(sub)dimensions associated with the conceptualisation and measurement of social cohesion. Shared values, shared experiences, civic participation, mutual help, trust in others, place identification, social networks, social order, acceptance of diversity, wellbeing, equality, and social mobility are but a handful of the dimensions considered by some to be constituent parts of social cohesion [1,12,14–16]. In contrast, other authors push back against the sometimes expansive view of social cohesion, arguing that these conceptualisations confuse the core elements of social cohesion with its antecedents or consequences [13,17].

One of the main reasons for this expansive understanding of social cohesion is the significant amount of work done in different disciplines. This wide range of dimensions and sub-dimensions have become associated with social cohesion, as researchers have conceptualized social cohesion “based on the theoretical assumptions of their own discipline” [11]. For example, psychology concentrates on processes within and between small groups [11], whereas in anthropology, cultural practices and rituals are often at the centre [18]. The high involvement of civil society and government actors further expands the perspectives present surrounding social cohesion. Over time, numerous thematic research or civil society networks have also emerged, including the International Migration, Integration, and Social Cohesion in Europe network [19] and the Social Cohesion Hub [20]. In turn, the scope of disciplinary and organisational contributions has created a rich but muddled research field and has made it difficult to get a sense of the structure or status of research on the topic. This creates the risk that a researcher may miss contributions and debates from other fields that could have impacted their work and supported greater theoretical development around social cohesion.

At the same time, the growing importance of social cohesion and significant work to define the concept point to a need to better map and understand this field of research. Numerous narrative reviews have been conducted on social cohesion, but these reviews have typically focused on selected disciplines, such as social science, policy [12,14], or psychology [11]. Social cohesion has often been portrayed as a fluctuating quasi-concept that is bound to the assumptions of specific disciplines [11,21]. There has been a lack of broader, systematic approaches to map out the commonalities, connections, and differences regarding how specific disciplines engage with the subject. In turn, this can make the topic difficult to navigate and create blind spots or silos that can stifle innovation. Against this background, the following paper seeks to identify the structure of the research on social cohesion across the variety of disciplines that have tackled the subject and explore connections, silos, and key topics within this research. Though some recent research has mapped social cohesion research in relation to ideas of social vulnerability [22], this paper aims for a much broader and expansive mapping that includes all disciplines that have investigated social cohesion, including psychology, sociology, political science, public health, and others. In particular, this study has two main objectives: (i) to identify and analyse the nature and evolution of literature related to social cohesion and (ii) to identify the thematic areas related to social cohesion research and their connection to specific disciplines. To achieve this, a bibliometric analysis of social cohesion research found through the Web of Science (WoS) was conducted. Such an approach was considered appropriate since social cohesion is a broad and large research topic that could not be easily mapped or evaluated through a manual, systematic literature review [23]. Indeed, as Block and Fisch [24] noted, bibliometric analysis can “structure a field and detect links between disciplines, identify topic clusters, literature gaps and academic silos, and show the most impactful authors and their research.” In the end, this work aims to give fellow scholars a roadmap to this increasingly important topic and contribute to identifying trends, gaps, and connections within the published research.

Moving forward, this paper progresses in three steps. First, the paper’s methodology is presented in more detail, especially as it concerns the search strategy and data analysis. Second, the results of the bibliometric analysis are presented, including overall publication trends, co-author analysis, and co-word analysis. Finally, these results are brought together and critically discussed to suggest future directions for social cohesion research.
2. Methodology

The bibliometric methodology encapsulates the application of quantitative techniques on bibliometric data and summarizes the bibliometric and intellectual structure of a field by analysing the relationships between different research components [23,24]. This data can serve to illustrate the contributions of specific disciplines, identify connections and silos, as well as identify trends and potential gaps [23,24]. As such, it provides both a science mapping and a performance analysis that helps establish the thematic evolution of a field of research [22,25].

Given this dual function, this method has increasingly been used to map out a variety of socially oriented, multidisciplinary fields, such as intellectual capital [26], green marketing [27], career success [28], community resilience [29], or agricultural policy [30]. Likewise, as discussed above, the broad and multidisciplinary—yet still unstructured—nature of social cohesion research makes the topic suitable for this approach.

In this study, a process was established to determine the search terms, select an appropriate database, establish selection criteria for the search, select software for analysis, and analyse the results. These steps are presented in Figure 1 below and described in more detail in the following paragraphs.

Figure 1. Methodological scheme for the bibliometric analysis.

2.1. Definition of Search Terms

As described in the introduction, the goal of the present paper is to (i) identify and analyse the nature and evolution of literature related to social cohesion research and (ii) to identify the thematic areas related to social cohesion research and their connection to specific disciplines.

This paper explicitly aims to explore the multidisciplinary nature of social cohesion research. However, it is also crucial to avoid including similar-sounding yet materially different concepts, such as team or group cohesion [31]. Likewise, this study does not aim to capture cohesion as it is understood in specific fields, such as chemistry, geology, or computer science. Thus, for the purposes of this study, a single search term, “social cohesion,” was chosen to restrict results to the topic at hand.

2.2. Selection of Database

Web of Science (WoS) was selected as the database for this study. WoS is a selective, multidisciplinary, comprehensive database that covers the broad range of disciplines under investigation here [32] and has been regularly used in bibliometric analyses elsewhere [22,27,33].
In particular, WoS was chosen due to its disciplinary coverage, quality standards, and tools for data extraction/visualization.

2.3. Selection Criteria

A topical search was conducted on Web of Science using the search term “social cohesion” (title, abstract, author keywords, KeywordPlus; TS = (“social cohesion”)) on 1 November 2021. All articles, review articles, book chapters, and proceedings papers from 1994 to 2020 were included in the results. This time frame was chosen as social cohesion started becoming more widely used in literature and policy in the mid-90s [22,34]. The decision to expand the results beyond journal articles was taken in recognition of the significant non-journal contributions that are often cited in social cohesion texts, including from Jenson [35] or Berger-Schmitt [36]. Likewise, no restrictions on language were set. In short, the search term and parameters were chosen to reflect the range of research on social cohesion and the inherently broad nature of bibliometric analysis [24]. Following the application of these criteria in WoS, bibliographic data were extracted in text (.txt) format, and no further data cleaning was performed.

2.4. Selection of Software

Two software were used to support the management and analysis of the data obtained. Microsoft Excel 2020, which is a common spreadsheet and data-visualisation programme, was used to manage data tables and generate figures related to publication trends, citation trends, top authors, most cited papers, top countries, top institutions, and the research disciplines engaged in research around social cohesion. VOSViewer is a free software tool for constructing and visualizing bibliometric networks [37]. This software was used to extract authorship, citation, and keyword data and perform co-citation, co-country, and co-word analysis [37,38].

2.5. Data Analysis

Data analysis was done in two parts. The first was a performance analysis that mapped growth patterns of publications; identified contributions made by countries, universities, and authors; and identified the most prominent journals related to social cohesion. The second component of the analysis focused on a science mapping that looked at the intellectual structure of the field through the construction of bibliometric maps [23,25]. In particular, here, the co-occurrences of author keywords, countries, and authors were examined. Finally, a narrative review of keyword clusters was performed to complement this. To do this, at a minimum, titles and abstracts for the top 50 most cited papers featuring at least one of the top 5 keywords within a given cluster were reviewed. This analysis allowed for a structured summary of some of the key trends and findings within a cluster while still sensibly navigating the high amounts of content generated by bibliometric analysis.

3. Results

In the present study, a total of 5027 records published across 2362 journal, book, or conference titles from 1994 to 2020 were analysed. As illustrated in Figure 2, there has been substantial growth in publications since 1994, with over 55% of publications originating between 2016–2020 alone. Likewise, the retained records experienced a sharp increase in overall citations, garnering nearly 57% of their 94,893 total citations between 2016–2020.
Figure 2. Yearly records, cumulative records, and yearly citations for “social cohesion”. The left vertical axis represents the number of records; the right vertical axis represents the number of citations.

3.1. Top Countries, Top Institutions, and Co-Country Analysis

The 20 most prolific countries and institutional affiliations in terms of social cohesion-related research are presented in Tables 1 and 2, respectively. In total, the retained documents represented 134 countries and 3510 institutional affiliations.

Table 1. Top 20 countries for research on “social cohesion”. Multiple countries are possible for each record.

| Country          | Records | % of 6569 |
|------------------|---------|-----------|
| United States    | 1315    | 20.02%    |
| United Kingdom   | 973     | 14.81%    |
| Australia        | 353     | 5.37%     |
| Spain            | 330     | 5.02%     |
| Canada           | 328     | 4.99%     |
| The Netherlands  | 308     | 4.69%     |
| Germany          | 225     | 3.43%     |
| South Africa     | 192     | 2.92%     |
| France           | 168     | 2.56%     |
| Italy            | 163     | 2.48%     |
| China            | 149     | 2.27%     |
| Belgium          | 118     | 1.80%     |
| Sweden           | 97      | 1.48%     |
| Brazil           | 90      | 1.37%     |
| Denmark          | 83      | 1.26%     |
Table 1. Cont.

| Country         | Records | % of 6569 |
|-----------------|---------|-----------|
| Switzerland     | 78      | 1.19%     |
| Japan           | 77      | 1.17%     |
| Mexico          | 75      | 1.14%     |
| Norway          | 65      | 0.99%     |
| New Zealand     | 61      | 0.93%     |

Table 2. Top 20 affiliations for research on “social cohesion”. Multiple affiliations are possible for each record.

| Affiliations                                           | Record Count | % of 11,180 |
|-------------------------------------------------------|--------------|-------------|
| University of London                                  | 191          | 1.71%       |
| University of California System                       | 140          | 1.25%       |
| Harvard University                                   | 97           | 0.87%       |
| University College London                             | 84           | 0.75%       |
| University of Michigan                                | 78           | 0.70%       |
| University of Amsterdam                               | 77           | 0.69%       |
| Harvard T.H. Chan School of Public Health             | 74           | 0.66%       |
| University of Oxford                                  | 71           | 0.64%       |
| Johns Hopkins University                              | 64           | 0.57%       |
| University of Texas System                            | 62           | 0.55%       |
| University of North Carolina                          | 57           | 0.51%       |
| Columbia University                                   | 56           | 0.50%       |
| Centre National de la Recherche Scientifique (CNRS)   | 55           | 0.49%       |
| University of Manchester                              | 51           | 0.46%       |
| Utrecht University                                    | 50           | 0.45%       |
| Cardiff University                                    | 48           | 0.43%       |
| Johns Hopkins Bloomberg School of Public Health       | 48           | 0.43%       |
| University of British Columbia                        | 45           | 0.40%       |
| State University System of Florida                    | 43           | 0.38%       |
| Vrije Universiteit Amsterdam                          | 43           | 0.38%       |

At a country level, English-speaking countries occupy the top three positions, with the United States, the United Kingdom, and Australia combining alone for just over 40% of global research around the topic of social cohesion. Overall, 16 of the 20 countries are designated as high-income countries, with China, Mexico, South Africa, and Brazil classified as upper-middle-income [39]. In terms of affiliations, the University of London, the University of California System, and Harvard University represent the most prolific institutions. In the non-English-speaking world, Dutch universities are especially prominent, with three institutions within the top 20.

Using VOSViewer, a co-country analysis was run, and clusters were generated using the association strength method. Only countries with a minimum of ten documents were included, leading to a total of 61 countries divided into 11 clusters, which can be seen in Figure 3. Clusters represent sets of closely related countries, and countries that co-occur more tend to be closer to each other in the visualization [38]. The USA and England (UK) are at the centre and include 537 and 567 links, respectively. Beyond these two countries, the clusters and positions of the countries suggest that primarily linguistic or regional groupings have formed. For instance, the orange cluster predominantly features Scandinavian countries, the green cluster includes numerous Central European countries, and the bottom-left corner of the dark blue cluster includes many developed Asian nations.
3.2. Research Categories and Titles

Disciplinary categories (Web of Science Categories) were extracted from the results, indicating that 197 distinct categories engaged in some form of social cohesion-related research. As presented on the TreeMap in Figure 4, Public Occupational Environmental Health, Sociology, Environmental Studies, Educational Research, and Interdisciplinary Social Sciences are the most prominent categories. Together, these five categories account for just over 40% of all research.

At the conference, book or journal title level, 2362 titles were identified. In particular, journals related to social, health, and urban sciences, including Social Science Medicine, Social Indicators Research, Urban Studies, and Health Place, rank within the top five. Notably, four multidisciplinary, open-access “megajournals”—PLoS One, Sustainability, International Journal of Environmental Research and Public Health, and BMC Public Health—also place within the top eight. Overall, the top 20 journals have an average impact factor of 3.768 and come from ten different publishers. Table 3 presents the top 20 titles ranked according to total social cohesion-related publications.
Figure 4. TreeMap of top 20 Web of Science research categories for “social cohesion”.

Table 3. Top 20 titles (journals, books, conference proceedings) by total records.

| Title                                                                 | Publisher                      | 2-Year Impact Factor (2020) | Records | % of 5027 |
|----------------------------------------------------------------------|--------------------------------|-----------------------------|---------|-----------|
| Social Science Medicine                                              | Elsevier                       | 4.634                       | 97      | 1.93      |
| Social Indicators Research                                           | Springer Nature                | 2.614                       | 68      | 1.353     |
| PLoS ONE                                                              | Public Library of Science      | 3.240                       | 60      | 1.194     |
| Urban Studies                                                         | SAGE                           | 4.663                       | 57      | 1.134     |
| Health Place                                                          | Elsevier                       | 4.078                       | 50      | 0.995     |
| Sustainability                                                        | MDPI                           | 3.251                       | 46      | 0.915     |
| International Journal of Environmental Research and Public Health    | MDPI                           | 3.390                       | 44      | 0.875     |
| BMC Public Health                                                     | Springer Nature                | 3.295                       | 36      | 0.716     |
| Journal of Ethnic and Migration Studies                              | Taylor and Francis             | 5.340                       | 27      | 0.537     |
| Animal Behaviour                                                      | Elsevier                       | 2.884                       | 26      | 0.517     |
| Journal of Community Psychology                                       | Wiley                          | 2.282                       | 26      | 0.517     |
| Journal of Epidemiology and Community Health                         | BMJ                            | 3.710                       | 22      | 0.438     |
| American Journal of Community Psychology Cities                       | Wiley                          | 3.554                       | 21      | 0.418     |
| American Journal of Public Health                                     | American Public Health          | 9.308                       | 17      | 0.338     |
| BMJ Open                                                              | BMJ                            | 2.692                       | 17      | 0.338     |
| Frontiers in Psychology                                               | Frontiers Media                | 2.990                       | 17      | 0.338     |
| Ethnicities                                                           | SAGE                           | 0.667                       | 16      | 0.318     |
| European Planning Studies                                             | Taylor and Francis             | 3.269                       | 16      | 0.318     |
3.3. Most Cited Documents

At the document level, the most cited works cover a range of disciplines and topics, including nature, urban life, mortality, team processes, and violent crime. Table 4 presents the top ten most cited documents based on total citations. The most cited document, from Sampson and colleagues [40], studies residents in various Chicago neighbourhoods and finds that collective efficacy, which they define as social cohesion among neighbours and their willingness to act on behalf of the common good, is linked to reduced violence. Other documents look at, for instance, the connections between income inequality and health [41, 42] or how team cohesion affects team effectiveness [43].

Table 4. Top 10 most cited documents on “social cohesion”.

| Document Title                                                                 | Authors                                    | Publication Title       | Total Citations | Reference |
|--------------------------------------------------------------------------------|--------------------------------------------|-------------------------|-----------------|-----------|
| Neighborhoods and violent crime: A multilevel study of collective efficacy      | Sampson, RJ; Raudenbush, SW; Earls, F       | Science                 | 6409            | [40]      |
| Network structure and knowledge transfer: The effects of cohesion and range     | Reagans, R; McEvily, B                     | Administrative Science Quarterly | 1809            | [44]      |
| Social capital, income inequality, and mortality                              | Kawachi, I; Kennedy, BP; Lochner, K; Prothrow-Stith, D | American Journal of Public Health | 1717            | [45]      |
| Nature and Health                                                             | Hartig, Terry; Mitchell, Richard; de Vries, Sjerp; Frumkin, Howard | Annual Review of Public Health | 1128            | [46]      |
| Subcultures of Consumption—An Ethnography of The New Bikers                  | Schouten, JW; McAlexander, JH              | Journal of Consumer Research | 1030            | [47]      |
| The death of the social? Re-figuring the territory of government              | Rose, N                                    | Economy and Society     | 942             | [48]      |
| Income inequality and mortality: importance to health of individual income, psychosocial environment, or material conditions | Lynch, JW; Smith, GD; Kaplan, GA; House, JS | BMJ—British Medical Journal | 828             | [42]      |
| Social cohesion, social capital and the neighbourhood                         | Forrest, R; Kearns, A                      | Urban Studies           | 798             | [16]      |
| Relating member ability and personality to work-team processes and team effectiveness | Barrick, MR; Stewart, GL; Neubert, MJ; Mount, MK | Journal of Applied Psychology | 797             | [43]      |
| The neighborhood context of adolescent mental health                          | Aneshensel, CS; Sucoff, CA                 | Journal of Health and Social Behavior | 768             | [49]      |

3.4. Most Productive Authors, Most Cited Authors and Co-Author Analysis

Table 5 illustrates the top 10 most productive authors in terms of documents and the top 10 most cited authors. Both categories were calculated using full counting in VOSViewer, meaning that each document or citation carries the same weight regardless of the total amount of authors in a given document. For citations, no minimum threshold for documents was used. Though Kawachi and Roux appear in each category, for the most part, there is little overlap between the top performers.
Table 5. Top 10 most productive and most cited authors on “social cohesion”.

| Most Productive | Most Cited |
|-----------------|------------|
| Author          | Documents | Author       | Citations |
| Kawachi, I      | 55        | Earls, F     | 6435       |
| Roux, AVD       | 24        | Raudenbush, S| 6409       |
| Kondo, K        | 23        | Sampson, R   | 6409       |
| Liu, Y          | 13        | Kawachi, I   | 4501       |
| Galea, S        | 12        | Kennedy, B   | 3372       |
| Aida, J         | 11        | Lochner, K   | 2223       |
| Dunbar, RIM     | 10        | De Vries, S  | 2132       |
| Laurence, J     | 10        | Roux, AVD    | 1943       |
| Kerrigan, D     | 10        | McEvily, B   | 1809       |
| Andrews, R      | 10        | Reagans, R   | 1809       |

Using VOSViewer, a co-author analysis was run, and clusters were generated using the association strength method. Only authors with a minimum of five documents were included, leading to a total of 144 authors. Of that, only 68 authors are featured within the interconnected central (dark blue, orange, red, green, yellow, pink, and brown) clusters presented in Figure 5. Clusters represent sets of closely related authors, and authors that co-occur more tend to be closer to each other in the visualization [38].

Figure 5. Co-author network for “social cohesion.” The size of each node (circle) indicates the number of documents associated with an author [38]. Lines represent co-occurrence between two authors and appear when authors co-occur at least once.
Numerous authors identified within the central clusters have focused extensively on the links between social cohesion, neighbourhood factors, and health, including Kawachi, Roux, Kondo, De Vries, Liu, Bourdeaudhuij, and Nieuwenhuijsen [50–53]. In contrast, many authors who have analysed the socio-political conception and measurement of social cohesion, including Delhey, Kearns, Whitehouse, and Novy, are on the outskirts and not associated with any given cluster [15,54,55].

3.5. Keyword Occurrence and Co-Occurrence

Using Author Keyword analysis in VOSViewer, a total of 10,855 keywords were identified. The top 20 sorted per total occurrences, as illustrated in Table 6, reflect a mix of terms from sociology (e.g., social capital), health (e.g., depression, physical activity), political science (e.g., citizenship, immigration), and psychology (e.g., collective efficacy), amongst others.

Table 6. Top 20 author keywords for documents on “social cohesion.” Link strength indicates the total number of links between a keyword and other keywords.

| Keyword            | Occurrences | Link Strength |
|--------------------|-------------|---------------|
| social cohesion    | 896         | 924           |
| social capital     | 254         | 368           |
| neighbourhood      | 121         | 203           |
| community          | 87          | 132           |
| diversity          | 80          | 136           |
| mental health      | 77          | 112           |
| physical activity  | 77          | 105           |
| integration        | 73          | 125           |
| neighbourhoods     | 68          | 97            |
| social networks    | 68          | 89            |
| citizenship        | 67          | 115           |
| multiculturalism    | 62          | 93            |
| cohesion           | 60          | 47            |
| collective efficacy| 60          | 74            |
| immigration        | 59          | 102           |
| trust              | 57          | 96            |
| identity           | 56          | 68            |
| migration          | 56          | 79            |
| depression         | 56          | 84            |
| wellbeing          | 55          | 57            |

Using VOSViewer’s co-occurrence analysis, author keywords were mapped and visually networked [38]. A thesaurus was developed to merge relevant keywords spelt differently in American or British English (e.g., behavior and behaviour). In order to preserve the meaning and intent of the authors; however, plural and singular terms (e.g., network and networks) as well as conceptually similar terms (e.g., inclusion and social inclusion) were not merged.

To narrow the visualisation to a manageable set of keywords, only words with 20 occurrences were retained, leading to a total of 90 words divided into three clusters (green, red, blue; see Figure 6). Clusters represent sets of closely related nodes, and terms that co-occur more tend to be closer to each other in the visualisation [38]. Clusters were formed using the association strength method and, to facilitate analysis and reduce small clusters, clusters were required to include at least 12 items [38]. In the following sub-sections, a narrative review of some of the key themes and trends embedded in each cluster is provided. However, it should be noted that these summaries are meant to be illustrative and are not exhaustive. In addition, numerous articles use keywords associated with multiple clusters, and there is room to debate which thematic cluster individual articles best fit.
perspective, Manstead [59] found that individuals from lower social classes may be more likely to help others in distress but that they are also more likely to have a lower sense of personal control and view migrants as economic threats, thereby potentially threatening overall social cohesion.

Another segment of this cluster looks at how education can mediate social cohesion in different contexts [62–67]. Many of these articles suggest a positive role for education as it relates to social cohesion, as education can be used to instil common norms that increase social cohesion [64]. Likewise, Little and Green [66] argued education was an essential precondition for countries such as China, Taiwan, or Japan to handle globalisation successfully. However, there is an opposite side to these arguments, whereby education may be used as a vehicle to stoke nationalism and inter-ethnic tensions. For instance, Durrani and Dunne argued that the Pakistani national curriculum serves to delineate the boundary between the “Muslim Pakistani self and the antagonist, non-Muslim “other” [63].
3.5.2. Green Cluster: Identity, Diversity, and Social Cohesion

This cluster generally explores how identity or diversity, be it at the ethnic, religious, or class level, mediates social cohesion or its specific dimensions, such as social relations, civic participation, or trust [68–77]. In particular, much of the research here explicitly looks at how diversity connects to various facets of social cohesion. For instance, Koopmans and colleagues performed an experiment and established that participants exposed to stimuli that emphasised the diversity of the neighbourhoods reported lower levels of trust [76]. Other studies using a European-, national-, or neighbourhood-level data study confirmed this finding, suggesting that greater diversity reduces trust, access to resources, or social capital [68,77,78]. However, the debate around the impact of diversity on social cohesion is hardly settled [74], with other studies finding that diversity positively contributes to economic development [69] and even higher perceived social cohesion [79]. For instance, Portes and Vickstrom contended that “diversity contributes to the long-term viability of nations dependent on modern, not backward, forms of association” [80]. In one highly-cited study, Letki found that socio-economic status is far more decisive, “while the eroding effect of racial diversity is limited” [81].

Relatedly, there is extensive debate within these documents and others about whether diversity is truly detrimental to social cohesion or if it is rather social segregation that is the main culprit. Uslaner argued in this latter direction, contending that residential segregation leads to lower levels of trust and that people with diverse social networks, in fact, have higher levels of trust [73]. Likewise, other authors also explored how various forms of segregation impact social cohesion [75,82,83]. Of note, Van der Meer and Tolsma, in a review of 90 studies, concluded that people in diverse environments are less likely to trust their neighbours, but this does not spill over to generalized trust or civic participation.

3.5.3. Red Cluster: Social Cohesion, the Neighbourhood, and Health

This cluster predominantly focuses on how (perceived) social cohesion in neighbourhoods or other geographic settings impact various measures of health, quality of life, and wellbeing. These studies tend to associate higher social cohesion with several positive health outcomes, including better mental health [50,53,84,85], reduced smoking [86], improved general health [87], and higher levels of physical activity [5,88–90].

Many of these studies rely primarily on the concept of social capital to help measure or define social cohesion, sometimes even presenting the concepts as equivalent [91–95]. Furthermore, more broadly, notions of social support and social relationships play a crucial role in these studies [87,96] even if social capital is conceptually not at the forefront. For instance, one study found that higher social capital was connected to higher self-rated health in Japan even when controlling for economic factors [32]. Elsewhere, Kennedy and colleagues found that lower social capital is connected to higher mortality rates in Russia [92]. Of note, however, is that this latter study used a broad interpretation of social capital that includes trust in government, crime, work relations, and civic engagement.

Other studies use various composite measures of social cohesion and implement these measures primarily at the neighbourhood level. These studies show that higher perceived neighbourhood social cohesion is tied to higher self-rated health [87], better physical and mental health [84], and increased walking [89]. However, these studies do not look at social cohesion on their own but also consider other environmental or social factors, such as access to parks or family support.

4. Discussion

Through the use of bibliometric analysis, this paper has mapped out the structure, evolution, and key themes embedded within research related to social cohesion. Certainly, this paper is not without its limitations. The use of only one database may have excluded valuable results, especially considering that other databases (e.g., Scopus) tend to provide a greater breadth of results [32]. Likewise, though language was not an exclusion criterion, the search term was not explicitly translated into other languages. This means that the
academic contributions of non-English-speaking countries have likely been minimised. Finally, other software (e.g., Pajek, CiteNet Explorer) or analyses (co-citation analysis, three field analysis) could also expand the understanding of the research field. Nonetheless, some conclusions and potential further directions can be drawn out based on the results above.

First and foremost, the findings here illustrate the significant growth and attention given to the concept of social cohesion. In fact, the last five years of this analysis featured more than 50% of the retained publications and 57% of citations. This alone confirms the increasing recognition of social cohesion as an integral component of social progress, be it in relation to health, economic development, peace, or any other number of areas. Indeed, part of the growth in social cohesion research can likely be attributed to greater academic and political recognition of the multi-dimensional nature of social development. As MacFadden and colleagues noted, social progress is no longer solely explained by economic factors but also by a range of political and social factors [22]. Relatedly, many of the most productive countries in terms of social cohesion research have developed policies and related programmes focusing explicitly on social cohesion, including in Australia [97,98], the United Kingdom [71,99], Canada [35], and Europe [2,100]. These policies and associated funding may have also spurred the growth in research on social cohesion.

The recognition of the many socio-political factors behind social progress also manifests itself in the content of the publications, many of which explore the complex and intertwined realities of social cohesion, inequality, identity, education, health, and wellbeing. Likewise, the disciplines, keywords, and thematic areas investigated by the retained publications strengthen the contention that social cohesion is a highly multidisciplinary research topic [11]. The multidisciplinary nature of social cohesion may be even greater than initially expected. Schiefer and van der Noll [14] argued that academic “discourse takes predominantly place within and between the disciplines of Sociology, Political Science, and Psychology.” However, the literature identified here is significantly broader and prominently includes contributions from public health, education, economics and management. Overall, 197 distinct categories (Web of Science Categories) were identified, and other major disciplines, such as history, philosophy, or anthropology, also feature in the top 30.

The analysis of citations and keywords can also help draw some conclusions about the disciplinary nature of social cohesion research. Though there is this wide range of disciplines associated with the topic, research broadly coalesces around a few central themes. One research cluster seeks to explain how structural factors, such as inequality, economic development, or education, affect social cohesion at different geographic levels. A second cluster zooms in to the individual level and investigates how facets of identity, for example, at the ethnic, religious, or economic level, mediate social cohesion. Finally, a last cluster of research explores how (perceived) social cohesion affects subjective and objective measures of health and wellbeing. The structure of these different clusters provides a first mapping of research on social cohesion and has some valuable theoretical implications. In their review of social science research on social cohesion, Schiefer and van der Noll [14] contended that inequality is an antecedent of social cohesion, whereas wellbeing is a result of greater social cohesion. The thematic clusters identified here and the content within the included publications certainly reinforce this. Numerous papers suggest that inequality and segregation are critical drivers of reduced social cohesion. Likewise, extensive literature in the health field ties higher social cohesion to any number of positive health or quality of life outcomes.

Yet, despite the connections between inequality, health, wellbeing, and social cohesion suggested here, there is an evident lack of disciplinary cooperation in social cohesion research. Though health-focused researchers regularly collaborate, social scientists appear much more isolated from each other, and there is little overlap between health and social scientists. One potential consequence of this disciplinary segregation is continued confusion and overlap between distinct concepts. As Van der Meer and Tolsma argued, there has been a “use of broad concepts, such as social capital, social cohesion and social trust, to denote
widely different empirical phenomena” [83]. This is reflected in the publications included here, especially in the health cluster, where certain concepts, such as trust or social capital, are presented as equivalent to social cohesion. Greater interaction and collaboration across disciplinary boundaries could contribute to further theoretical and conceptual precision and help dispel the notion that social cohesion is merely a “quasi-concept” [21]. At present, however, it appears that research on social cohesion is very compartmentalized, and this may stifle the collaboration and innovation required to tackle multifaceted issues, such as social cohesion [101].

Finally, the results here can provide some general future directions for research. At the keyword level, a number of terms are directly related to individuals or narrowly defined groups and their identities (e.g., immigrants, youth, race). Policy around social cohesion has been criticized for putting the responsibility for greater social cohesion at the feet of individuals already facing various forms of social insecurity [102,103]. As Lynch and colleagues [42] noted, there has been limited discussion on how “focusing on what materially and politically disenfranchised communities can do for themselves may be akin to victim blaming.” Almost two decades later, this point was echoed by Nixon, who observed that many policy and research responses focus exclusively on marginalised groups and fail to address underlying structural issues [104]. The top keywords identified here suggest that social cohesion research may also be somewhat guilty of this “victim-blaming.” Terms related to government or policy (e.g., policy, welfare state) are in the bottom third of occurrences amongst the 90 retained keywords. Moreover, other terms referring to groups in positions of power or privilege (e.g., businesses, wealthy people) do not appear. Though there have certainly been numerous authors who have analysed the role and impact of policy or government action on social cohesion, these results suggest that there is ample room for more empirical and theoretical work in this area. Likewise, there is fertile ground to explore how people in positions of relative privilege experience and influence social cohesion.

5. Conclusions

Through a bibliometric analysis of social cohesion research from 1994 to 2020, this study has sought to map out and identify the structure of research around this topic. The results have shown significant growth in publications and citations on the topic over the last five years. In addition, the contributions to the research stretch across a wide array of disciplines, including health, education, psychology, and numerous other social sciences. Yet, the cooperation between these disciplines is visibly limited, with health and social sciences seldom working together to produce research outputs. This has limited the theoretical development of the field and has perhaps contributed to further muddying the understanding of social cohesion. In addition, the available research predominantly looks at so-called marginalised groups and devotes considerably less attention to individuals or institutions in positions of power or influence.

Funding: The Article Processing Charge (APC) was graciously waived by MDPI. There are no other funding sources to report.

Data Availability Statement: Data sharing not applicable.

Acknowledgments: Thanks to Denise Robrade of the German Sport University for feedback on a previous version of this manuscript.

Conflicts of Interest: The author declares no conflict of interest.

References
1. OECD. Perspectives on Global Development 2012: Social Cohesion in a Shifting World; OECD: Paris, France, 2011; ISBN 9789264113145.
2. Council of Europe. New Strategy and Council of Europe Action Plan for Social Cohesion; Council of Europe: Strasbourg, France, 2010.
3. Larsen, C.A. The Rise and Fall of Social Cohesion: The Construction and De-Construction of Social Trust in the US, UK, Sweden and Denmark; Oxford University Press: Oxford, UK, 2013; ISBN 9780199681846.
4. OECD. Perspectives on Global Development 2019; OECD: Paris, France, 2018; ISBN 9789264307926.
38. van Eck, N.J.; Waltman, L. Visualizing Bibliometric Networks. In Measuring Scholarly Impact; Ding, Y., Rousseau, R., Wolfram, D., Eds.; Springer International Publishing: Cham, Switzerland, 2014; pp. 285–320. ISBN 978-3-319-10576-1.
39. World Bank. World Bank Country and Lending Groups. Available online: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups (accessed on 8 December 2021).
40. Sampson, R.J.; Raudenbush, S.W.; Earls, F. Neighborhoods and violent crime: A multilevel study of collective efficacy. Science 1997, 277, 918–924. [CrossRef]
41. Kawachi, I.; Kennedy, B. Income inequality and health: Pathways and mechanisms. Health Serv. Res. 1999, 34, 215.
42. Lynch, J.W.; Smith, G.D.; Kaplan, G.A.; House, J.S. Income inequality and mortality: Importance to health of individual income, psychosocial environment, or material conditions. BMJ 2000, 320, 1200–1204. [CrossRef]
43. Barrick, M.R.; Stewart, G.L.; Neubert, M.J.; Mount, M.K. Relating member ability and personality to work-team processes and team effectiveness. J. Appl. Psychol. 1998, 83, 377–391. [CrossRef]
44. Reagans, R.; McEvily, B. Network Structure and Knowledge Transfer: The Effects of Cohesion and Range. Adm. Sci. Q. 2003, 48, 240–267. [CrossRef]
45. Kawachi, I.; Kennedy, B.P.; Lochner, K.; Prothrow-Stith, D. Social capital, income inequality, and mortality. Am. J. Public Health 1997, 87, 1491–1498. [CrossRef] [PubMed]
46. Hartig, T.; Mitchell, R.; de Vries, S.; Frumkin, H. Nature and health. Annu. Rev. Public Health 2014, 35, 207–228. [CrossRef] [PubMed]
47. Schouten, J.W.; McAlexander, J.H. Subcultures of Consumption: An Ethnography of the New Bikers. J. Consum. RES 1995, 22, 43. [CrossRef]
48. Rose, N. The death of the social? Re-figuring the territory of government. Econ. Soc. 1996, 25, 327–356. [CrossRef]
49. Aneshensel, C.S.; Sucoff, C.A. The Neighborhood Context of Adolescent Mental Health. J. Health Soc. Behav. 1996, 37, 293. [CrossRef] [PubMed]
50. Ichida, Y.; Kondo, K.; Hirai, H.; Hanibuchi, T.; Yoshikawa, G.; Murata, C. Social capital, income inequality and self-rated health in Chita peninsula, Japan: A multilevel analysis of older people in 25 communities. Soc. Sci. Med. 2009, 69, 489–499. [CrossRef]
51. Gold, R.; Kennedy, B.; Connell, F.; Kawachi, I. Teen births, income inequality, and social capital: Developing an understanding of the causal pathway. Health Place 2002, 8, 77–83. [CrossRef]
52. Iammarino, S.; Rodriguez-Pose, A.; Storper, M. Regional inequality in Europe: Evidence, theory and policy implications. J. Econ. Geogr. 2019, 19, 273–298. [CrossRef]
53. van Dyck, D.; Teychenne, M.; McNaughton, S.A.; de Bourdeaudhuij, I.; Salmon, J. Relationship of the perceived social and physical environment with mental health-related quality of life in middle-aged and older adults: Mediating effects of physical activity. PloS ONE 2015, 10, e0120475. [CrossRef]
54. Kearns, A.; Forrest, R. Social Cohesion and Multilevel Urban Governance. Urban Stud. 2000, 37, 995–1017. [CrossRef]
55. Novy, A.; Swiatek, D.C.; Moulaert, F. Social Cohesion: A Conceptual and Political Elucidation. Urban Stud. 2012, 49, 1873–1889. [CrossRef]
56. Coburn, D. Beyond the income inequality hypothesis: Class, neo-liberalism, and health inequalities. Soc. Sci. Med. 2004, 58, 41–56. [CrossRef]
57. Coburn, D. Income inequality, social cohesion and the health status of populations: The role of neo-liberalism. Soc. Sci. Med. 2000, 51, 135–146. [CrossRef]
58. Iammarino, S.; Rodriguez-Pose, A.; Storper, M. Regional inequality in Europe: Evidence, theory and policy implications. J. Econ. Geogr. 2019, 19, 273–298. [CrossRef]
59. Manstead, A.S.R. The psychology of social class: How socioeconomic status impacts thought, feelings, and behaviour. Br. J. Soc. Psychol. 2018, 57, 267–291. [CrossRef]
60. Mustard, S.; Marciryczak, S.; van Ham, M.; Tammaru, T. Socioeconomic segregation in European capital cities. Increasing separation between poor and rich. Urban Geogr. 2017, 38, 1062–1083. [CrossRef]
61. Burgard, S.A.; Kalousova, L. Effects of the Great Recession: Health and Well-Being. Annu. Rev. Sociol. 2015, 41, 181–201. [CrossRef]
62. Brennan, J.; Naidoo, R. Higher education and the achievement (and/or prevention) of equity and social justice. High Educ. 2008, 56, 287–302. [CrossRef]
63. Durrani, N.; Dunne, M. Curriculum and national identity: Exploring the links between religion and nation in Pakistan. J. Curric. Stud. 2010, 42, 215–240. [CrossRef]
64. Gradstein, M.; Justman, M. Human capital, social capital, and public schooling. Eur. Econ. Rev. 2000, 44, 879–890. [CrossRef]
65. Kearns, A.; Lewis, N.; McCreanor, T.; Witten, K. ‘The status quo is not an option’: Community impacts of school closure in South Taranaki, New Zealand. J. Rural. Stud. 2009, 25, 131–140. [CrossRef]
66. Little, A.W.; Green, A. Successful globalisation, education and sustainable development. Int. J. Educ. Dev. 2009, 29, 166–174. [CrossRef]
67. McPherson, M. ‘I Integrate, Therefore I Am’: Contesting the Normalizing Discourse of Integrationism through Conversations with Refugee Women. J. Refug. Stud. 2010, 23, 546–570. [CrossRef]
68. Awaworyi Churchill, S.; Smyth, R. Ethnic diversity, energy poverty and the mediating role of trust: Evidence from household panel data for Australia. *Energy Econ.* **2020**, *86*, 104663. [CrossRef]

69. Bove, V.; Elia, L. Migration, Diversity, and Economic Growth. *World Dev.* **2017**, *89*, 227–239. [CrossRef]

70. Chaskin, R.J.; Joseph, M.L. Building “Community” in Mixed-Income Developments. *Urban Aff. Rev.* **2010**, *45*, 299–335. [CrossRef]

71. Cheong, P.H.; Edwards, R.; Goulbourne, H.; Solomos, J. Immigration, social cohesion and social capital: A critical review. *Crit. Soc. Policy* **2007**, *27*, 24–49. [CrossRef]

72. Dassopoulos, A.; Monnat, S.M. Do Perceptions of Social Cohesion, Social Support, and Local Control Mediate the Effects of Local Community Participation on Neighborhood Satisfaction? *Environ. Behav.* **2011**, *43*, 546–565. [CrossRef]

73. Uslaner, E.M. Segregation, mistrust and minorities. *Ethnocities* **2010**, *10*, 415–434. [CrossRef]

74. Lancee, B.; Dronkers, J. Ethnic, Religious and Economic Diversity in Dutch Neighbourhoods: Explaining Quality of Contact with Neighbours, Trust in the Neighbourhood and Inter-Ethnic Trust. *J. Ethn. Migr. Stud.* **2011**, *37*, 597–618. [CrossRef]

75. Mulvaney-Day, N.E.; Alegría, M. Social cohesion, social support, and health among Latinos in the United States. *Soc. Sci. Res.* **2014**, *47*, 91–107. [CrossRef] [PubMed]

76. Koopmans, R.; Veit, S. Ethnic diversity, trust, and the mediating role of positive and negative interethnic contact: A priming experiment. *Soc. Sci. Rev.* **2014**, *47*, 91–107. [CrossRef] [PubMed]

77. Alvi, S.; Zaidi, A.; Ammar, N.; Culbert, L. A comparative and exploratory analysis of socio-cultural factors and immigrant women's mental health within a Canadian context. *J. Immigr. Minor. Health* **2012**, *14*, 420–432. [CrossRef] [PubMed]

78. Sturgis, P.; Reeksen, T.; Stolle, D.; Trappers, A. Ethnic Diversity and Generalized Trust in Europe. *Comp. Political Stud.* **2009**, *42*, 198–223. [CrossRef]

79. Lancee, B.; Dronkers, J. Ethnic, Religious and Economic Diversity in Dutch Neighbourhoods: Explaining Quality of Contact with Neighbours, Trust in the Neighbourhood and Inter-Ethnic Trust. *J. Ethn. Migr. Stud.* **2011**, *37*, 597–618. [CrossRef]

80. Hooghe, M.; Letki, N. Does Diversity Erode Social Cohesion? Social Capital and Race in British Neighbourhoods. *Political Stud.* **2008**, *56*, 99–126. [CrossRef]

81. Sturgis, P.; Brunton-Smith, I.; Kuha, J.; Jackson, J. Ethnic diversity, segregation and the social cohesion of neighbourhoods in London. *Ethn. Racial Stud.* **2014**, *37*, 1286–1309. [CrossRef]

82. Cassiers, T.; Kesteloot, C. Socio-spatial Inequalities and Social Cohesion in European Cities. *Urban Stud.* **2012**, *49*, 1909–1924. [CrossRef]

83. Rios, R.; Aiken, L.S.; Zautra, A.J. Neighborhood contexts and the mediating role of neighborhood social cohesion on health and psychological distress among Hispanic and non-Hispanic residents. *Ann. Behav. Med.* **2012**, *43*, 30–61. [CrossRef] [PubMed]

84. Alvi, S.; Zaidi, A.; Ammar, N.; Culbert, L. A comparative and exploratory analysis of socio-cultural factors and immigrant women's mental health within a Canadian context. *J. Immigr. Minor. Health* **2012**, *14*, 420–432. [CrossRef] [PubMed]

85. Ahern, J. Does Diversity Erode Social Cohesion? Social Capital and Race in British Neighbourhoods. *Political Stud.* **2008**, *56*, 99–126. [CrossRef]

86. Letki, N. Does Diversity Erode Social Cohesion? Social Capital and Race in British Neighbourhoods. *Political Stud.* **2008**, *56*, 99–126. [CrossRef]

87. Ahern, J.; Galea, S.; Hubbard, A.; Syme, S.L. Neighborhood smoking norms modify the relation between collective efficacy and smoking behavior. *Drug Alcohol Depend.* **2009**, *100*, 138–145. [CrossRef] [PubMed]

88. Mulvaney-Day, N.E.; Alegría, M.; Sribney, W. Social cohesion, social support, and health among Latinos in the United States. *Soc. Sci. Med.* **2007**, *64*, 477–495. [CrossRef] [PubMed]

89. Mendes de Leon, C.F.; Cagney, K.A.; Bienias, J.L.; Barnes, L.L.; Skarupski, K.A.; Scherr, P.A.; Evans, D.A. Neighborhood social cohesion and disorder in relation to walking in community-dwelling older adults: A multilevel analysis. *J. Aging Health* **2009**, *21*, 155–171. [CrossRef]

90. Rios, R.; Aiken, L.S.; Zautra, A. Neighborhood contexts and the mediating role of neighborhood social cohesion on health and psychological distress among Hispanic and non-Hispanic residents. *Ann. Behav. Med.* **2012**, *43*, 30–61. [CrossRef] [PubMed]

91. Meron, Y.; Reuben, R.M.; Cooper, D.A.; Frank, L.D. Does diversity erode social cohesion? A test of five diversity indices in Germany. *Soc. Sci. Res.* **2014**, *47*, 91–107. [CrossRef] [PubMed]
99. Daley, C. Exploring community connections: Community cohesion and refugee integration at a local level. *Community Dev. J.* 2007, 44, 158–171. [CrossRef]

100. European Commission. *Erasmus+ Programme Guide Version 3* (2020): 25 August 2020; European Commission: Brussels, Belgium, 2020.

101. Jacobs, J.A. *In Defense of Disciplines*, University of Chicago Press: Chicago, IL, USA, 2014; ISBN 9780226069326.

102. Helly, D. Les limites de la notion de la cohésion sociale. *Tocqueville Rev. Rev. Tocqueville* 2002, XXIII, 73–101. [CrossRef]

103. Moustakas, L. Sport and social cohesion within European policy: A critical discourse analysis. *Eur. J. Sport Soc.* 2021, 1, 1–18. [CrossRef]

104. Nixon, S.A. The coin model of privilege and critical allyship: Implications for health. *BMC Public Health* 2019, 19, 1637. [CrossRef]