A BIBLIOMETRIC ANALYSIS OF HOUSING AND SETTLEMENT RESEARCH
(Analisis Bibliometrik Kajian Perumahan dan Petempatan)

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ABSTRACT

The purpose of the study is to establish a bibliometric analysis as an extensive review of housing and settlement literature. The research was conducted through Google Scholar and Crossref databases using Publish or Perish (PoP) software. Data were analyzed descriptively based on year of publication, author's name, name and country of institution, publication trend, number of publishers, author productivity, number of citations, and affiliation. To map the research, the data were stored in the Mendeley software, exported to RIS format to include all the information related to the articles. The exported data were analyzed using VOSViewer to determine the bibliometric mapping of housing and settlement research. The results of our study conclude that articles published in reputable journals indexed by Scopus with categories Q1, Q2, and Q3 have a significant effect compared to articles published in non-Scopus journals, especially on the number of citations per article. The study also presents the potential topics for future study based on the analysis of keywords with less frequent occurrence.

*Keyword*s: housing and settlement; bibliometric analysis; Mendeley; VOSViewer; PoP

ABSTRAK

Tujuan kajian ini adalah untuk memantapkan analisis bibliometrik sebagai tinjauan yang lebih terperinci kepada kepustakaan berkaitan perumahan dan petempatan. Penyelidikan ini telah dijalankan dengan menggunakan pangkalan data Google Scholar dan Crossref dengan menggunakan perisian Publish or Perish (PoP). Data telah dianalisis secara deskriptif berdasarkan tahun penerbitan, nama pengarang, nama dan negara institusi, trend penerbitan, bilangan penerbit, produktiviti pengarang, bilangan sitasi, dan afiliasi. Untuk memetakan penyelidikan, data telah disimpan pada perisian Mendeley dan dieksport kepada format RIS untuk menyertakan semua informasi berkaitan makalah. Data yang dieksport dianalisis dengan menggunakan VOSViewer untuk pemetaan bibliometrik kajian perumahan dan petempatan. Hasil daripada kajian ini menyimpulkan bahawa makalah yang diterbitkan di jurnal bereputasi yang diindeks oleh Scopus dengan kategori Q1, Q2 dan Q3 mempunyai kesan yang ketara berbanding makalah yang diterbitkan pada jurnal bukan Scopus, terutamanya dari segi bilangan sitasi bagi setiap makalah. Kajian ini turut memberikan tajuk yang berpotensi untuk dikaji berdasarkan analisis kata kunci yang kurang digunakan.

Kata kunci: perumahan dan petempatan; analisis bibliometrik; Mendeley; VOSViewer; PoP

1. Introduction

Housing is a concept and term that can be seen from various aspects. In literature, the word housing refers to something common, a noun, and a verb. Housing can be interpreted as material objects, goods that can be produced, destroyed, and consumed (Ruonavaara 2018). As explained by Clapham (2018), housing is a unique and complex commodity and has a functionally inherent meaning showing one's identity. Housing in a broad perspective can be interpreted as one of the four pillars of community welfare in addition to security, health education, and safety (Kemeny 2001).

In contrast to housing, the concepts and terms of residential areas are often associated with urban settlements, although globally there is no adequate explanation of the meaning of urban settlement areas. In this case settlement is an interesting study in the disciplines of geography, demography, economics, and regional planning (Valsson *et al*. 2013). However, the notion of settlement evolution is limited to not only material aspects but also the development of the human ability to create, study, and communicate culture, language, myths, and social institutions (Bowen & Gleeson 2018).

The type of research analyzing housing and settlement literature appears in various terms such as systematic review, bibliometric analysis, scientometric, or even traditional literature review. The bibliometric analysis is still limited especially in housing and settlement research. This section allows us to evaluate some previous that apply bibliometric analysis in housing and settlement literature.

Brzezicka (2020), De Paris and Lopes (2018), Demir *et al*. (2020), Hwang *et al*. (1999), Leung (2004) and Nazir *et al* (2020) conducted a literature review on housing through bibliometric analysis. Then Brzezicka (2020) in his research analyzed housing from a price perspective comprehensively by collecting 124 articles from various leading journals and concluded that there is a housing typology with various changes and groups of factors. Furthermore Hwang *et al*. (1999) in their research on the relationship between health and housing have collected as many as 405 articles from various books and journals from 1971 to 1998. Meanwhile Nazir *et al*. (2020) in his research on the comparison of modern housing development in the UK has found 1,279 research articles and academic papers published between the period 1991-2018.

The purpose of the research is to review housing and settlement literature by providing an extensive bibliometric analysis to answer the following research questions (RQ):

RQ1 : How is the trend of housing and settlement research based on the number of publications per year?

RQ2 : What journals have most papers published in the area of housing and settlement research?

RQ3 : What publisher have most papers published in the area of housing and settlement research?

RQ4 : Which articles have the most influence based on citation measures in housing and settlement literature?

RQ5 : Which author's country has contributed the most to housing and settlement research publications and collaborations?

RQ6 : Who is the author's network and the largest number of publications of housing and settlement research documents?

RQ7 : What are the potential topics in housing and settlement studies?

This study consists of several parts, namely: first, the literature on housing and settlement areas based on definitions, previous studies, and research objectives; second, the methodology in conducting bibliometric analysis, including how the steps are related to the use of the software through the Google Scholar, Crossref and PoP databases; third, the results of the VosViewer analysis; and fourth is the recommendations, conclusions, and limitations of the study.

2. Research Methods

A literature review is a written document that presents arguments to find a comprehensive understanding based on current knowledge of a research theme (Machi & McEvoy 2016). In this case, a literature review must be carried out using a systematic, explicit, and usable method

for finding, and synthesis (Fink 2010) this aims support your identification of a problem to research and to illustrate that there is a gap in previous research which needs to be filled (Ridley 2012).

Bibliometric research is a technique that aims to provide an understanding of the structure of networks and answer questions such as the main themes in a particular field of science, how these themes are interrelated, including the development of science (Waltman *et al*. 2010). Bibliometric research is generally used in disciplines that focus on journal articles with quantitative studies, books, or other types of written documents (Heersmink *et al*. 2011).

The research method used in this study adopts the steps that have been carried out by Fahimnia *et al*. (2015), Van Eck *et al*. (2010) and Waltman *et al*. (2010). To find and determine the theme of research keywords on housing and settlements, we carried out the folowwing steps, initial search, search results, preparation of initial data, and data analysis.

Table 1: Initial Data Search based on Google Search and Crossref

Query *Source*	**Housing and Settlement (1912-2020) Google Scholar**	**Housing and Settlement (1968-2020) Crossref**
Article	467	200
Citation	3311	903
Cites_Paper	7.09	4.52
Cites_Year	30.66	9.21
Cites_Author	2804.55	681.23
Paper_Author	368.21	118.16
Authors_Paper	1.60	1.36
h_index	24	16
g_index	51	28
hc_index	16	11
hi_index	16.46	9.14
hi_norm	21	13
AWCR	246.34	112.40
AW_indek	15.70	10.60
AWCRpA	173.06	69.44
e_index	41.38	20.12
hm_index	20.17	13.83
Query Data	12/12/2020	12/12/2020
Cites_Author_Year	25.96	6.95
Hi_Annual	0.19	0.13
h_Coverage	69.1	73.2
g_Coverage	81.3	87.9
Star_Count	4	2
Year_First	1912	1922
Year_Last	2020	2020
ECC	3311	903

2.1. *Defining the search keywords*

The literature search was carried out in December 2020, using the keywords 'housing and settlement". Data collection was done through Public or Perish (PoP) software using Google Scholar and Crossref data sources. In the early stages, we entered the search into the PoP software, using the keywords "housing and settlement" and setting the terms 'title words only', and year '0–0'. From the Google Scholar database, we obtained 467 articles from 1912 to 2020 and from the Crossref database, 200 articles from 1968-2020 were obtained.

2.2. *Initial search results*

During the initial search, we did not specify a range of years so that various housing terms and settlements could be identified. Based on the search results, the oldest journal (1912) that has relevance to the term housing and settlements was found. The following are the initial search results of Google Scholar and Crossref searches about the term housing and settlement for the period 1912-2020 and 1968-2020.

Table 2: List of Top Ten Articles Identified from PoP based on Google Scholar Data Source

Author	Tittle	Publication Year	Publication Name of Publisher
Kotsos S	*Settlement and housing during the 6th millennium BC in western Thessaloniki and the adjacent Langadas province*	1912	*A century of research in Prehistoric Macedonia*
Thompson, L	*Housing and land settlement in Vienna: illustrated*	1922	*The Town Planning Review*
H Stamer	*Structure of the vestes-Recklinghausen and the economic problems associated with housing and settlement*	1957	*JCB Mohr Postfach 2040, W*
BP Birch	*Some Characteristics of Rural housing and settlement in Southern Indiana concerning Selected Townships*	1961	*Indiana University*
P Crooke	*Rural settlement and housing trends in a developing country: An example in Nigeria*	1967	*Int'l Lab. Rev*
John C Turner	*Housing priorities, settlement patterns, and urban development in modernizing countries*	1968	*Journal of the American Institute of Planners*
William Gillespie	*Settlement in the Countryside by Ministry of Housing and Local Government*	1968	*Urban Studies*
JL Moore	*Stimulation and gaming in housing design, resource protection, and human settlement behavior*	1970	*University of Wisconsin*
R Mylius	*Health and Housing in an Urban Shanty Settlement'*	1970	*Papua and New Guinea Medical Journal*
Roger Steven Pitts	*The changing settlement patterns and housing types of the Upper Tanana Indians*	1972	*University of Alaska*

Table 3: List of Top Ten Articles Identified from PoP based on Crossref Data Source

Author/s	Title	Publication Year	Name of Publisher
Longstreth Thompson	*Housing And Land Settlement In Vienna: Illustrated*	1922	*Liverpool University Press*
William Gillespie	*Book Review: Settlement in the Countryside by Ministry of Housing and Local Government, H.M.S.O*	1967	*SAGE Publications*

Table 3 (Continued)

John C. Turner	*Housing Priorities, Settlement Patterns, and Urban Development in Modernizing Countries*	1968	*Journal of the American Institute of Planners*
Peter M. Ward	*The Squatter Settlement as Slum or Housing Solution: Evidence from Mexico city*	1976	*Land Economics*
Fred T. Smith, Kaj Blegvad Andersen	*African Traditional Architecture: A Study of the Housing and Settlement Patterns of Rural Kenya*	1978	*African Arts*
Bruce D. Smith	*Variation in Mississippian Settlement Patterns. Mississippian Settlement Patterns*	1978	*Elsevier*
P. G. Michelmore, D. J. H. Michelmore	*African traditional architecture: a study of the housing and settlement patterns of rural Kenya*	1979	*Vernacular Architecture*
Akin L. Mabogunje	*Review: African Traditional Architecture: A Study of the housing and settlement Patterns of Rural Kenya by Kaj Blegrad Anderson*	1979	*Journal of the Society of Architectural Historians*
Robert E. Tournier	*Changing Fashions In Urban Settlement: Historic Preservation And The Rediscovery Of The city*	1980	*Housing and Society*
Peter Korsching, Joseph Donnermeyer, Rabel Burdge	*Perception of Property Settlement Payments and Replacement Housing among Displaced Persons*	1980	*Human Organization*

2.3. *Refinement of search results*

In the next process, we conducted a search using the time between 2000-2020 and filtered or examined articles that did not meet the criteria and requirements. Table 4 shows the results of screening some articles that did not meet the criteria and met the requirements.

After checking the title and abstract of the article, 36 articles were obtained from the Google Scholar database and 40 articles from the Crossref database so the total number of articles was 76 articles. Based on the Scimagojr website, they came from leading journals (Q1, Q2, and Q3). Three hundred and seventy seven articles were excluded for various reasons (Table 4).

Table 4: Detailed Search Filtering Criteria Based on the Number of Articles

Screening	Number of Article	
	Google Scholar	Crossref
Unidentified/quote	11	2
Not in English	9	-
Book/Thesis/Dissertation/Chapter/Monograph	53	65
Duplication	2	-
Less than five pages	5	4
Articles from conferences	35	9
Regional/International journals not listed in Scimagojr	120	59
Q1/Q2/Q3	**36**	**40**
Total	**272**	**181**

2.4. *Compilation of preliminary data statistics*

The compilation process was carried out through the following stages: firstly, after the search results were completed, corrections were made and uploaded and stored in the Mendeley software, then the data were exported into RIS format to include all information related to the article such as title, author name, abstract, keywords and journal specifications (journal publication, year of publication, volume, issue, and page).

Secondly, we conducted data analysis by classifying articles by year, publication source, and publisher, through PoP. Based on a maximum period of 1912-2020 from the Google Scholar database, 467 articles were obtained and from 1968 to 2020 from the Crossref database, 200 articles were obtained so there were a total of 667 articles.

Third, we verified by limiting the period to 20 years (2000-2020), and based on the search results for each of the Google Scholar and Crossref databases, 271 articles and 181 articles or a total of 453 articles were obtained.

Fourth, we classified 453 articles to find out the articles published in Scopus indexed reputable journals in the Q1, Q2, and Q3 categories based on the Scimagojr rating, and from the search results in the 2000 – 2020 time span, 36 articles were obtained from the Google Scholar database and 40 articles from the Crossref database, or a total of 76 articles. To complete the preparation of the initial statistical data, the following sections present the publication trend of articles published in Scopus indexed journals Q1, Q2, Q3, the trend of the number of publications based on journals Q1, Q2, and Q3, a list of the ten most-cited authors, and trends in the number of publications by the publisher.

3. The Trend of Housing and Settlement Research Based on The Number of Publications per Year (RQ1)

Figure 1 presents the trend of publications per year in the period of 2000-2020. Between the year 2000-2011, the number of articles tended to stagnate with an average number of two articles and less than five published articles. Then in the period of 2011-2020, the number of articles tended to increase with an average number of five articles and more than five published articles. It can be seen that from 2016 to 2020 the number of articles continued to increase and experienced a spike from 2019-2020 from six to twelve articles. Overall, it can be concluded that the number of published articles has increased from year to year (2000-2020) with an average number of four articles. The following is the trend of the number of publications based on Scopus indexed journals Q1, Q2, and Q3 in 2000-2020.
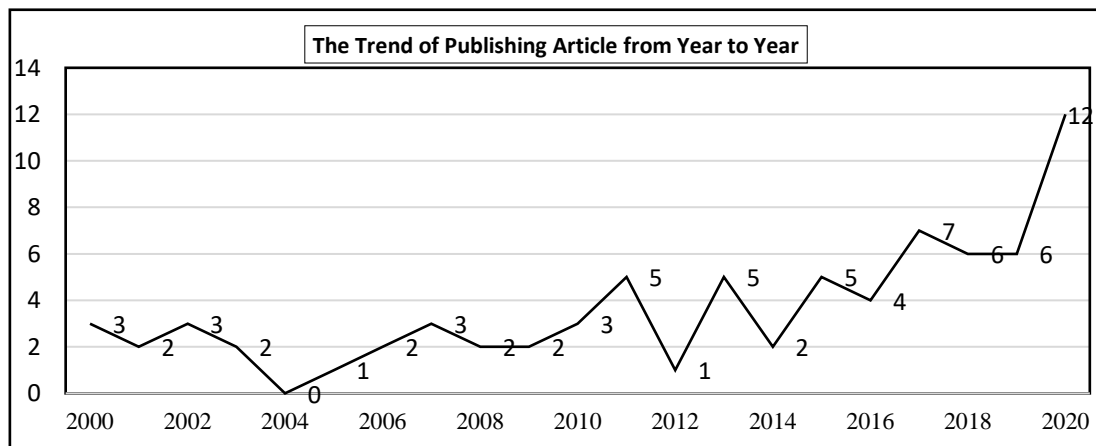

Figure 1: Trends in Article Publication per year from 2000-2020

4. Journals that have most Papers Published in the area of Housing and Settlement Research (RQ2)

Figure 2 shows the journal with the highest number of publications until 2020 with the theme of housing and settlement is the Journal of Housing Studies with 15 publications or almost 20% of the total publications. Then the journals that publish only two publications, or about 2.6% of the total number of publications, are the International Journal of Housing Policy, Journal of Housing, Theory, and Society, Journal of Sustainability, Journal of Canada Geographer, and Journal of Housing Economics. Then the journals that publish three publications, or about 8.5% of the total number of publications, are the Journal of Housing, Care and Support, the Journal of Housing Policy Debate, and the Journal of Habitat International. One Journal publishes four publications, which is the Journal of Housing and the Built Environment. Meanwhile 35 journals publish published only one publication, which are the International Journal of Urban and Regional Research, Journal of Landscape and Urban Planning, Journal of Immigrant and Refugee Studies, Journal of Computers, Environment and Urban Systems, Journal of Cities, Journal of Social Dynamics, International Journal of Disaster Resilience in The Built Environment, Journal of Place Branding and Public Diplomacy, Journal of Development Southern Africa, Journal of Pallas, Journal of Urban Forestry & Urban Greening, Journal of Geoforum, Journal of Archaeological Science, Journal of Paper in Applied Geography, Journal of Local Environment, Journal of Spatium, Journal of Lowland Technological International, The Central European Journal of Regional Development and Tourisme, Journal of The Extractive Industries and Society, Journal of The Social Science, Journal of Asian Architecture and Building Engineering, Journal of Pacific Economic Review, Journal of European Urban and Regional Studies, Journal of Israel Studies, Journal of Urban Izziv, Journal of International Dispute Settlement, Journal of Environment and Urbanization, Journal of Housing Society, Journal of Environment Monitoring and Assessment, Journal of Geo Journal, Journal of The Korean Institute of Rural Architecture, Journal of Water and Land Development, Journal of Architecture, Journal of Growth and Change, and Journal of African Renaissance.
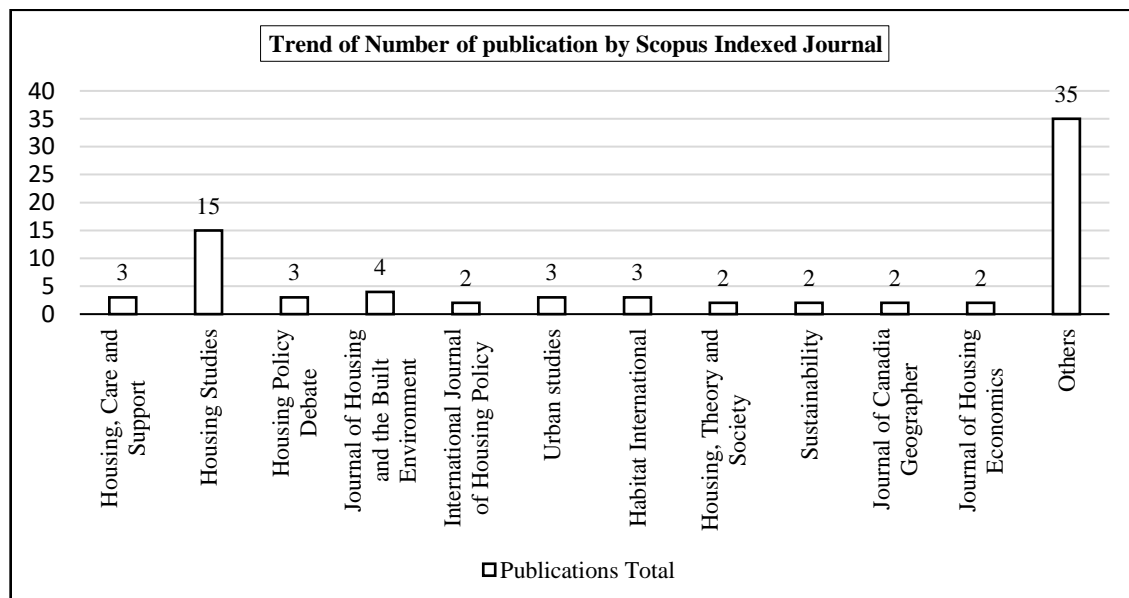

Figure 2: Trends of Number of Publications by Scopus-Indexed Journals Q1, Q2, and Q3, from 2000-2020

5. A Publisher that has Most Papers Published in The Area of Housing and Settlement Research (RQ3).

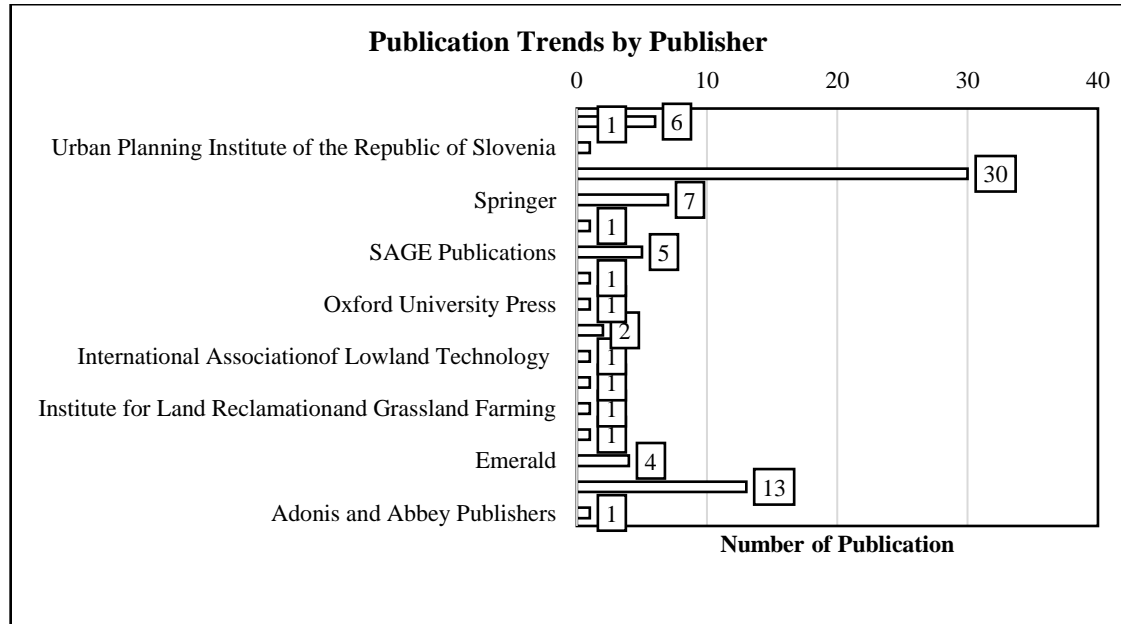**Publication Trends by Publisher**

Figure 3: Publications Trends Based on Number of Publishers

Figure 3 shows the highest number of publishers and the top was, Taylor & Francis Online with 30 publications or around 39.47% of the total number of publications, followed by Elsevier with 13 publications or 17.10%, then Springer with seven publications or 9.21%. Wiley Online Library was with six publications or 7.89%, SAGE Publication with five publications or 6.68%, Emerald with four publications or 5.26%, MDPI AG with two publications or 2.62%. Publishers with only one publication are the Adonis and Abbey Publisher, Indiana University Press, Institute for Land Reclamation Grassland Farming, Institute of Architecture and Urban Spatial Planning of Serbia, Oxford University Press, Regional Science Association of Subotica, Service Des Publication de University de Toulouse and Urban Planning Institute of The Republic of Slovenia.

6. Data Analysis

This article presents a bibliometric analysis of the term 'housing and settlement' from the Google Scholar and Crossref databases. The bibliometric analysis review in this article uses the PoP software developed by Harzing (2010). The initial search results with the maximum time through the software were carried out on December 12 2020, through the PoP software on the Google Scholar and Crossref databases, and each had 467 articles with 3,311 citations and 30.66 citations/year, and the Crossref database had 200 articles with 903 citations and 4,52 citations/year.

The refinement of the results with a period of 2000-2020 (20 years) in the Google Scholar database yielded 272 articles with 1.645 citations and 82.25 citations per year, while the purification of the Crossref database resulted in 181 with 786 citations of articles and 39.30 citations per year.

Table 5: Comparison of Data Matrix Based on Initial Search and Refinement Search

Data matrix Query	Initial search Housing and Settlement terms (2000-2020)	Refinement search Housing and Settlement terms from 2000-2020	Initial search Housing and Settlement terms (2000-2020)	Refinement search Housing and Settlement terms from 2000-2020
	Database: Google Scholar		Database: Crossref	
Article	272	36	181	40
Citation	1645	1032	786	356
Cites_Paper	6.05	28.67	4.34	8.90
Cites_Year	82.25	57.33	39.30	17.80
Cites_Author	1256.97	803.18	560.93	253.78
Paper_Author	197.95	23.37	131.91	29.28
Authors_Paper	1.78	1.97	1.56	1.83
h_index	18	14	15	10
g_index	36	32	25	18
hc_index	16	14	12	9
hi_index	11.57	9.33	8.04	5.00
hi_norm	17	14	12	9
AWCR	223.52	128.33	133.58	71.71
AW_index	14.95	11.33	11.56	8.47
AWCRpA	143.71	83.92	89.35	48.37
e_index	27.59	22.07	17.64	13.56
hm_index	16.17	16.17	11.33	8.33
Query Data	12/12/2020	12/12/2020	12/12/2020	12/12/2020
Cites_Author_Year	62.84	44.62	28.04	12.68
Hi_Annual	0.85	0.78	0.60	0.45
h_Coverage	66.0	90.0	28.04	79.8
g_Coverage	79.4	100.0	82.6	96.1
Star_Count	5	4	2	1
Year_First	2000	2000	2000	2000
Year_Last	2020	2020	2020	2020
ECC	1645	1032	786	356

Source: Publish or Perish, Processed by author 2020.

Further examination of the results was carried out to retrieve articles that had been published in Scopus indexed journals (Q1, Q2, and Q3) and the Google Scholar database had 36 articles (a decrease by 87% from 272 articles) with the number of citations per article of 28.67 (an increase of 374% from 6.05). As for the Crossref database, 40 articles were obtained (a decrease of 78% from 181 articles) with the number of article citations per year of 17.80 (an increase of 105% from 4.34).

An increase in article citations per year from both the Google Scholar and Crossref databases shows that publications in reputable Scopus Q1, Q2, and Q3 journals have the most significant effect on citations compared to non-Scopus journals. The full results of the comparison of metrics before and after search filtering are summarized in Table 5.

7. Results and Discussion

Our study shows that Scopus Journal Quartile 1 (Q1), Quartile 2 (Q2), and Quartile 3 (Q3) journals have a substantial impact on the metric data related to citations.

7.1. *Articles having the most influence based on citation measures in housing and settlement literature (RQ4)*

Table 6 presents articles and authors with a minimum number of 30 citations. An article written by Huchzermeyer (2003) is ranked first with 170 citations. This article is entitled "A legacy of

control? The capital subsidy for housing, and informal settlement intervention in South Africa", and was published in the International Journal of Urban and Regional Research by Wiley Online Library. The article that ranks second or the second-highest number of citations is by Westaway (2006), with 157 citations. This article is entitled "A longitudinal investigation of satisfaction with the personal and environmental quality of life in an informal South African housing settlement, Doornkop, Soweto", and was published in the International Habitat Journal by Elsevier.

Table 6: List of Articles with 30 or More Citations

No	Publication	Number of Citations
1	(Huchzermeyer 2003), A legacy of control? The capital subsidy for housing, and informal settlement intervention in South Africa. *International Journal of Urban and Regional Research,* Wiley Online Library	170
2	(Westaway 2006), A longitudinal investigation of satisfaction with the personal and environmental quality of life in an informal South African housing settlement, Doornkop, Soweto. *Habitat International*, Elsevier	157
3	(Bański & Wesołowska 2010), Transformations in housing construction in rural areas of Poland's Lublin region—Influence on the spatial settlement structure and Landscape aesthetics. *Landscape and urban planning*, Elsevier	127
4	(Ward & Peters 2007), Self-help housing and informal homesteading in peri-urban America: Settlement identification using digital imagery and GIS. *Habitat International*, Elsevier	80
5	(Lee 2000), From Welfare Housing to Home Ownership: The Dilemma of China's Housing Reform. *Housing Studies*	73
6	(Teixeira 2009), New immigrant settlement in a mid-sized city: a case study of housing barriers and coping strategies in Kelowna, British Columbia. *The Canadian Geographer/Le Géographe ...*, Wiley Online Library	64
7	(Kissoon 2010), From persecution to destitution: a snapshot of asylum seekers' housing and settlement experiences in Canada and the United Kingdom. *Journal of Immigrant & Refugee Studies*, Taylor & Francis	62
8	(Carter *et al.* 2009), The role of housing and neighborhood in the re-settlement process: a case study of refugee households in Winnipeg, Jurnal *Canadian Geographer/Le ...*, Wiley Online Library	50
9	(Liu *et al.* 2016), Does formal housing encourage the settlement intention of rural migrants in Chinese cities? A structural equation model analysis. *Urban Studies, SAGE Publication*	43
10	(Netto 2011), Strangers in the city: Addressing Challenges to the protection, housing, and settlement of refugees. *International Journal of Housing Policy*, Taylor & Francis	39
11	(Kauppinen 2002), The beginning of immigrant settlement in the Helsinki metropolitan area and the role of social housing. *Journal of Housing and the Built Environment*, Springer	39
12	(Augustijn-Beckers *et al.* 2011), informal settlement growth in Dar es Salaam, Tanzania: An agent-based housing model. *Computers, Environment and Urban Systems, Elsevier*	34
13	(Borevi & Bengtsson 2015), The tension between choice and need in the housing of newcomers: A theoretical framework and an application on Scandinavian settlement policies. *Urban studies*, journals.sagepub.com	33
14	(Shortt & Hammett 2013), Housing and health in an informal settlement upgrading in Cape Town, South Africa. *Journal of housing and the built environment*, Springer	32
15	(Xie & Chen 2018), Beyond homeownership: Housing conditions, housing support and rural migrant urban settlement intentions in China. *Cities*, Elsevier	31

The third article was written by Bański and Wesołowska (2010) with 127 citations. This article is entitled "Transformations in housing construction in rural areas of Poland's Lublin region—Influence on the spatial settlement structure and Landscape aesthetics", published in

the Landscape and Urban Planning Journal by Elsevier. All articles were cited more than 30 times (complete citation information) is presented in Table 6.

The following figures shows countries that contribute to the publication of articles with the terms housing and settlement in Quartile 1 (Q1), Quartile 2 (Q2), and Quartile 3 (Q3) journals based on Google Scholar and Crossref data sources.

7.2. *Countries of the author that contribute the most to the publication in housing and settlement research and their collaboration (RQ5).*

Figure 4 illustrates the publication trend of each author based on affiliation. From 76 articles published in Scopus indexed journals, a total of 11 articles were written by authors from England, 7 articles from Canada, 6 articles from the United States and South Africa, 5 articles from China, 4 articles from Australia, 3 articles each from Poland, Netherland and Sweden, 2 articles from Germany, Ireland, Japan, South Korea, Norway and Turkey, and 1 articles from Austria, Hong Kong, Hungary, Indonesia, Italy, Namibia, New Zealand, Nigeria, France, Serbia, Switzerland, Tanzania and Zimbabwe.

The trend of author publications based on the affiliation of countries that contribute to the publication of articles with the term housing and settlement shows an even distribution. From the European continent with countries such as England, Poland, the Netherlands, and Sweden with contributions of more than two articles, the American continent is represented by the United States of America and Canada with a significant number of articles. The African continent is represented by the South African country with 6 articles and the Continent of Asia with the presence of China, South Korea and the Southeast Asian region represented by Indonesia with one article each, and the Australian continent with four articles. Thus, it can be said that the terms housing and settlement have become a global trend in Q1, Q2, and Q3 journal publications.
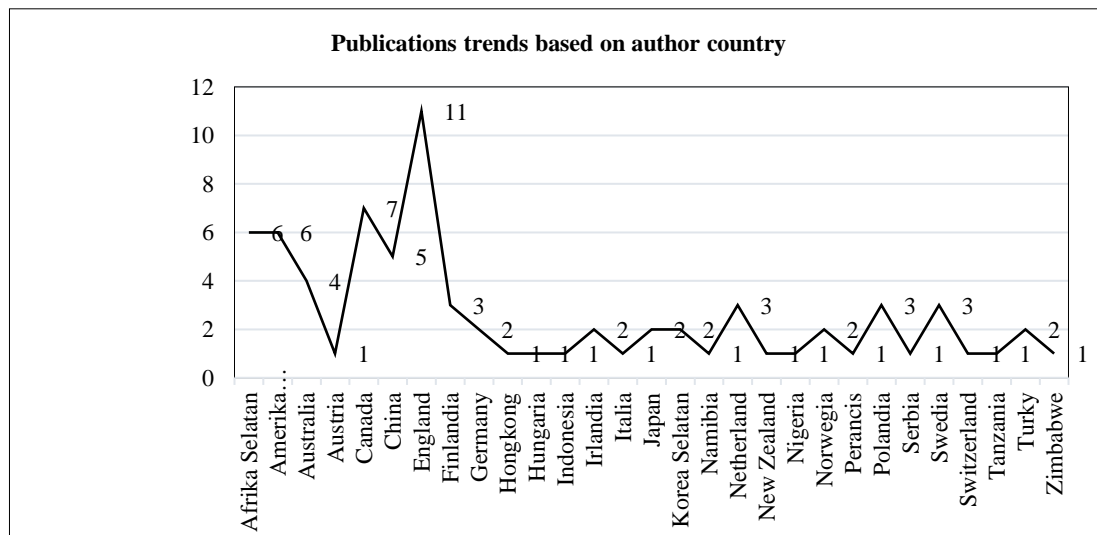

Figure 4: Publication Trends Based on Author Country

7.3. *The most author network and the number of documents publications of housing and settlement research (RQ6)*

Based on Figure 5, it can be described that there are 143 items and 73 clusters, as well as 36 articles or 49% written in collaboration between 2 to 8 authors and the remaining 37 people or 51% written by one author. The author with the highest number of collaborations and documents was Carlos Teixeira from the University of British Columbia Canada with three articles collaborating with authors Julie L Drolet and Anabel López Salinas who were in cluster 16. The rest were authors who collaborated with other authors with one article. Table 7 describes the author and cluster mapping based on articles or documents.
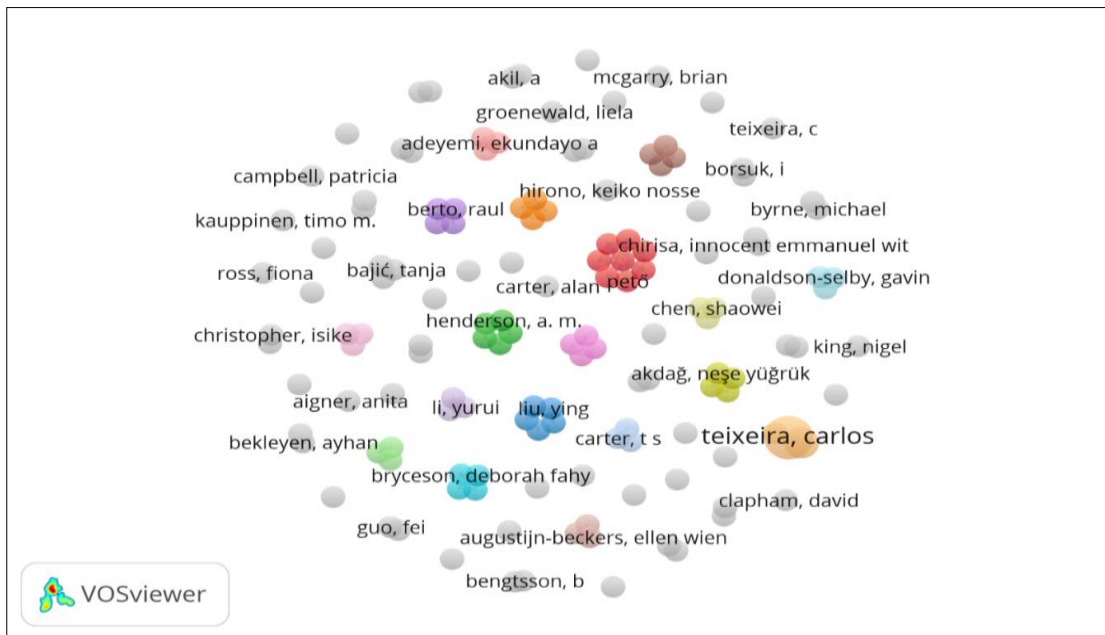
Figure 5: Visualization of the Author Network based on the Number of Document Publications

Table 7: Mapping Cluster Author (143 Items) and 73 Clusters

Cluster dan Item	Authors Name
Cluster 1 (8 items)	1). J. Niebieszczańskia, 2).M. Jaegerb, 3).Á. Petőc, 4)I. Hildebrandt–Radked, 5).G. Kulcsáre, 6). R. Staniukf, 7)N. Taylor f, 8).J. Czebreszuk
Cluster 2 (5 items)	1). Johnston, Ron 2)J.Trlin, A. D, 3). Henderson, A. M, 4). North, N. H, 5). Skinner, M. J.
Cluster 3 (5 items)	1). Wang, Yuqu. 2). Wang, Zhong, 3). Zhou, Chunshan, 4). Liu, Ying, 5). Liu, Song
Cluster 4 (4 items)	1). Akdağ, Neşe Yüğrük. 2).Gedik, Gülay Zorer, 3).Kiraz, Fatih, 4).Şener, Bekir
Cluster 5 (4 items)	1). Berto, Raul, 2).Cechet, Giovanni, 3).Stival, Carlo Antonio, 4).Rosato, Paolo
Cluster 6 (4 items)	1). Jønsson, Jesper Boss3, 2). Bryceson, Deborah Fahy, 3). Kanebo, Crispin, 4). Shand, Mike
Cluster 7 (4 items)	1).Chen, Mengkai, 2).Wu, Yidong, 3).Liu, Guiwen, 4).Wang, Xianzhu
Cluster 8 (4 items)	1). Delgado, Guillermo, 2). Muller, Anna, 3). Mabakeng, Royal, 4). Namupala, Martin
Cluster 9 (4 items)	1).Jordhus-Lier, David, 2).Saaghus, Andreas, 3).Scott, Dianne, 4)Ziervogel, Gina
Cluster 10 (3 items)	1). Opoko, Akunnaya P, 2).Ibem, Eziyi O, 3).Adeyemi, Ekundayo A
Cluster 11 (3 items)	1). Skobba, Kimberly, 2). Bruin, Marilyn J, 3). Carswell, Andrew
Cluster 12 (3 items)	1). Carter, Thomas, 2). Polevyck, Chesa, 3). Osborne, John
Cluster 13 (3 items)	1). Liu, Zhilin. 2).Wang, Yujun. 3).Chen, Shaowei

Table 7 (*Continued*)

Cluster 14 (3 items)	1). Wang, Qianyi. 2). Cheong, Kee Cheok. 3). Li, Yurui
Cluster 15 (3 items)	1). Donaldson-Selby, Gavin. 2). Hill, Trevor. 3). Korbel, Jan
Cluster 16 (3 items)	1). Drolet, Julie L, 2).Anabel Lo´pez Salinas, 3).Teixeira, Carlos
Cluster 17 (3 items)	1). Augustijn-Beckers, Ellen Wien. 2).Flacke, Johannes, 3).Retsios, Bas
Cluster 18 (3 items)	1). Zang, Bo, 2). Lv, Ping, 3). Warren, Clive M J
Cluster 19 (3 items)	1). Bajić, Tanja, 2).Petrić, Jasna, 3).Nikolić, Teodora
Cluster 20 (2 items)	1). Akil, A, 2). Osman, W W
Cluster 21 (2 items)	1). Bański, Jerzy, 2).Wesołowska, Monika
Cluster 22 (2 items)	1). Borevi, K, 2).Bengtsson, B
Cluster 23 (2 items)	1). Michael Byrne, 2).Michelle Norris
Cluster 24 (2 items)	1). Chirisa, Innocent Emmanuel Witfield, 2). Mumbai, Kizito
Cluster 25 (2 items)	1). Borsuk, I, 2). Eroglu, E
Cluster 26 (2 items)	1). Gunsoo Shin, 2).Inha Jung
Cluster 27 (2 items)	1).Bekleyen, Ayhan, 2).Korkmaz, Nail Mahir
Cluster 28 (2 item)	1). Adele N. Norris, 2). Gauri Nandedkar
Cluster 29 (2 items)	1). Primrose, Sabela, 2). Christopher, Mike
Cluster 30 (2 items)	1). Weerasinghe, W K, 2). Shigemura, T
Cluster 31 (2 items)	1). Shortt, Niamh K, 2). Hammett, Daniel
Cluster 32 (2 items)	1). Singleton, Helen, 2).McKenzie, Fiona Haslam
Cluster 33 (2 items)	1).2Trezib, Joachim, 2).Sonder, Ines
Cluster 34 (2 items)	1). Peter M. Warda, 2). Paul A. Peters
Cluster 35 (2 items)	1). Xie, Shenghua, 2). Chen, Juan
Cluster 36 (2 items)	1). Yang, Sisi, 2). Guo, Fei
Cluster 37 (2 items)	Aigner, Anita
Cluster 38 (2 items)	Barenstein, Jennifer Erica
Cluster 39 (1 item)	Bálint, Csaba
Cluster 40 (1 item)	Campbell, Patricia
Cluster 41 (1 item)	Carter, Alan
Cluster 42 (1 item)	Clapham, David
Cluster 43 (1 item)	Clarke, Jackie
Cluster 44 (1 item)	Colburn, Greg
Cluster 45 (1 item)	Collins, J Michael
Cluster 46 (1 item)	Czischke, Darinka
Cluster 47 (1 item)	Dalal, Ayham
Cluster 48 (1 item)	Ferrari, Ed
Cluster 49 (1 item)	Gorter, Tamlin
Cluster 50 (1 item)	Groenewald, Liela
Cluster 51 (1 item)	Hanlon, James
Cluster 52 (1 item)	Hirono, Keiko Nosse
Cluster 53 (1 item)	Huchzermeyer, Marie
Cluster 54 (1 item)	Kauppinen, Timo M
Cluster 55 (1 item)	Kim, Jinyhup
Cluster 56 (1 item)	Nigel, King
Cluster 57 (1 item)	Kissoon, Priya
Cluster 58 (1 item)	Lang, Franziska
Cluster 59 (1 item)	Lee, James
Cluster 60 (1 item)	Leishman, Chris
Cluster 61 (1 item)	Maciejewska, E
Cluster 62 (1 item)	Mcgarry, Brian
Cluster 63 (1 item)	Netto, Gina
Cluster 64 (1 item)	Neutze, Max
Cluster 65 (1 item)	Nordvik, Viggo
Cluster 66 (1 item)	Paris, C Muir J
Cluster 67 (1 item)	Park, C S
Cluster 68 (1 item)	Pojani, Dorina
Cluster 69 (1 item)	Ross, Fiona
Cluster 70 (1 item)	Ruonavaara, Hannu
Cluster 71 (1 item)	Teixeira, Carlos
Cluster 72 (1 item)	Westaway, Margaret
Cluster 73 (1 item)	Öst, Ceccilia Enstrom

7.4. *Bibliometric network and housing and settlement research trends*

The next step was doing a bibliometric analysis by making network, overlay, and density visualizations using Vos Viewer software to find out the bibliometric network between articles from the downloaded metadata. This software shows bibliometric mapping on three different visualizations namely network visualization (Figure 6), overlay visualization (Figure 7), and density visualization (Figure 8).

7.5. *Potential topics and housing and settlement field (RQ7)*

Based on the visualization shown in Figure 6, it can be seen that each circle represents a word or term that often appears in the article title and abstract. Based on the results of the extract from the title and abstract of the article, 2260 terms and 62 items met the threshold with the minimum number of terms that appeared frequently being five. From 62 terms that emerged, we conducted a screening process for some common and less relevant words, such as papers, studies, processes, research, analysis, data, contexts, articles, cases, surveys, interests, case studies, forms, differences, literature, South Africa, Canada, China, and the concept so that there were only 42 terms.

The first red cluster to the right of Figure 6 consists of 15 items, dominated by terms such as a city (24 occurrences), policy (18 occurrences), and country (13 occurrences). The second green cluster (left side of Figure 6) has 14 items that identify several dominant words such as area (17 occurrences), change (15 occurrences), development (13 occurrences), and the third cluster has 13 items dominated by housing terms (53 events), relationships (12 events), and housing policies (12 events). In detail, we present clusters based on frequently occurring keywords in Table 7.

Figure 6: Mapping of Network Visualization of Housing and Settlement Terms

Table 8: Clustering Based on Keywords that Often Appear Alphabetically

Cluster	Keywords that appear frequently	Keywords
Cluster 1 (15 Items)	*City (24 occurrences); policy (18 occurrences); country (13 occurrences);*	*Access; affordable housing; city; country; group; housing experience; housing market; immigrant; impact; migrant; need; policy; refugee; social housing; urban area.*
Cluster 2 (14 items)	*Area (17 occurences); change (15 occurences); development (13 occurences);*	*Approach; area; attention; basis; building; change; development; effect; importance; issue; quality; role; settlement; transformation.*
Cluster 3 (13 items)	*Housing (53 occurrences); relationship (12 occurrences); housing policy (12 occurrences)*	*Community; experience; focus; government; home; house; housing; housing policy; informal settlement; place; problem; relationship; resident;*

Based on Table 8, it can be explained that each cluster shows research trends on the term housing and settlements or in other words each word or term often appeared in the title and abstract of the article representing research housing and settlements. The dominant research trends on the terms housing and settlements are housing, cities, housing policies, regions, change, countries, development, and relationships.

Based on Figure 7 above, it can be seen the mapping of research trends based on the year of publication of articles on housing and settlement research from 2000-2020. The results of the metadata analysis imported into the Vos Viewer generated an overlay visualization where the color of the nodes represented the keywords and the year the article was published.

The dark color of the nodes indicates the length of time the theme has been discussed in the study it can be further argued that topics related to informal settlements, housing experiences, and immigrants were the research themes discussed in early 2000-2005. Then the research themes such as transformation, settlements, housing policy, and the government became the themes discussed in 2006-2010.
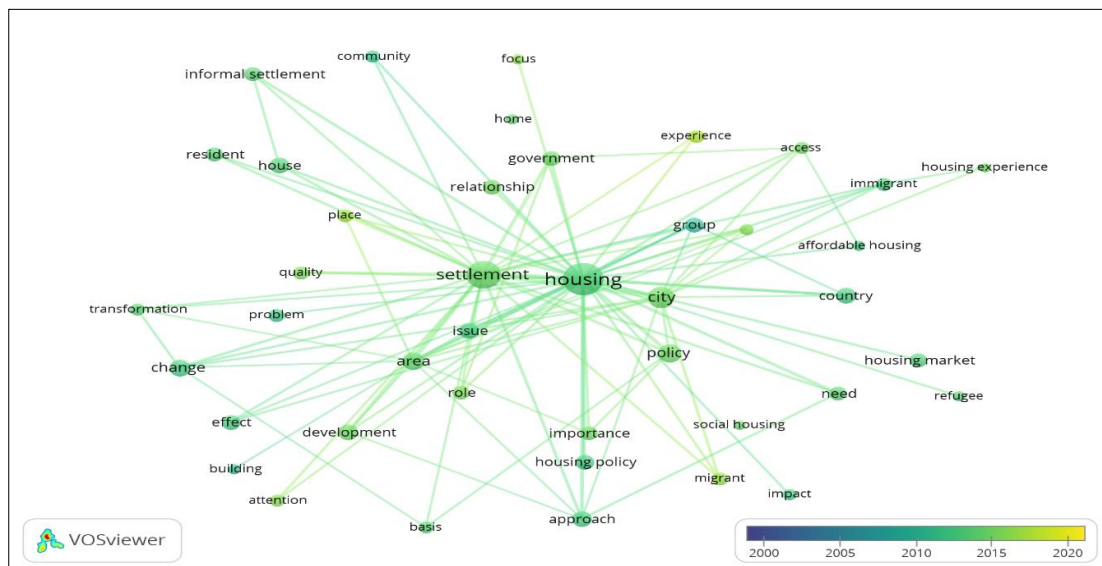

Figure 7: Overlay Visualization of Housing and Settlement using Vosviewer

Furthermore, themes such as housing, affordable housing, the housing market, urban areas, social housing became interesting themes to be discussed in the 2011-2015 period. Themes such as migrants, urban areas, locations were discussed and become research trends in 2016-2020.

7.6. *The potential topics in the area of housing and settlement research for future study (RQ8)*

The use of the basic colors of red, green, and blue becomes the instrument of the Vos Viewer in producing each visualization. From the results of density visualization, as shown in Figure 8, it can be identified that dense areas are shown from the number of nodes that are close to each other between nodes. In addition, the level of saturation is indicated by the number of keywords that often appear with yellow marks around the housing, settlement, city, issue, policy, area, role, and housing policy label. In other words, these areas are research themes that have been intensively researched. Meanwhile, the research themes in the green circle are themes that have not been studied much, such as informal settlement, community, impact, building, resident, access, base, refugee, and housing experience. This indicates that there is a research gap on housing and settlement to be explored further in the future.

8. Conclusion

This study conducted a literature review of 76 articles from reputable journals indexed by Scopus in the categories Q1, Q2, and Q3 with themes related to housing and settlement. Article collection was through the Google Scholar database using the PoP software. The 76 articles were the result of extracts and examinations from the initial number of articles, namely 467 articles from Google Scholar 200 articles from Crossref (indefinite period), 272 articles from Google Scholar and 181 from Crossref (in 2000–2020).

Figure 8. Density Visualization of the Density of Housing and Settlement Research

Our research findings conclude that articles published in reputable journals indexed by Scopus with categories Q1, Q2, and Q3 have a significant impact compared to articles published in non-Scopus journals, especially on the number of citations per article. In the Google Scholar database, although there was a decrease in the number of articles from 272 to 36 articles or a decrease by 87%, there was an increase in the number of citations from 6.05 to 28.67 or by 374%. In the Crossref database, although there was a decrease in the number of articles from 181 to 40 or a decrease of 78%, there was an increase in the number of citations from 4.34 to 17.80 or 105%.

An increase in article citations per year from both the Google Scholar and Crossref databases shows that publications in reputable journals with the Scopus Q1, Q2, and Q3 have the most significant effect on citations compared to non-Scopus journals. However, there was a decrease in the h index for articles from the two databases, from 18 to 14 for the Google Scholar database and 15 to 10 for the Crossref database.

The trend of the research with the theme of housing and settlement, in general, has increased with special attention to themes such as in*formal settlement, community, impact, building, resident, access, basis, refugee,* and *housing experience* as an agenda for future research collaborations involving authors from various countries.

The data processed in this study used PoP software, Vos Viewer, Mendeley, and Microsoft Excel. Objectively there were still limitations, especially in limited access to databases (Google Scholar and Crossref) as article indexers so that the sample size used was still subjective and not representative, therefore, future research with the use of an unlimited database and a large sample size is recommended

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References

Aigner A. 2019. Housing entry pathways of refugees in Vienna, a city of social housing. *Housing Studies* **34**(5): 779–803.

Akdağ N.Y., Gedik G.Z., Kiraz F. & Şener B. 2017. Effect of mass housing settlement type on the comfortable open areas in terms of noise. *Environmental Monitoring and Assessment* **189**(10): 1-12.

Akil A., & Osman W.W. 2017. Bugis local wisdom in the housing and settlement form: An architectural anthropology study. *Lowland Technology International* **19**(1): 77–86.

Augustijn-Beckers E.W., Flacke J. & Retsios B. 2011. Simulating informal settlement growth in Dar es Salaam, Tanzania: An agent-based housing model. *Computers, Environment and Urban Systems* **35**(2): 93–103.

Bajić T., Petrić J. & Nikolić T. 2016. Fuel poverty and perception on housing and environmental quality in Belgrade's informal settlement Kaluderica. *Spatium* **1**(35): 1-9.

Bálint C. 2018. Assessment of the interrelations between health and housing conditions in a Hungarian Roma settlement. *Deturope* **10**(2): 91–111.

Bański J. & Wesołowska M. 2010. Transformations in housing construction in rural areas of Poland's Lublin region—Influence on the spatial settlement structure and landscape aesthetics. *Landscape and Urban Planning* **94**(2): 116–126.

Barenstein J.E.D. 2015. Continuity and change in housing and settlement patterns in post earthquake Gujarat, India. *International Journal of Disaster Resilience in the Built Environment* **6**(2): 140–155.

Bekleyen A. & Korkmaz N.M. 2013. An evaluation of Akabe mass housing settlement in Sanliurfa, Turkey. *Journal of Housing and the Built Environment* **28**(2): 293–309.

Berto R., Cechet G., Stival C.A. & Rosato P. 2020. Affordable housing vs. urban land rent in widespread settlement areas. *Sustainability* **12**(8): 3129.

Borevi K. & Bengtsson B. 2015. The tension between choice and need in the housing of newcomers: A theoretical framework and an application on Scandinavian settlement policies. *Urban Studies* **52**(14): 2599-2615.

Borsuk I. & Eroglu E. 2020. Displacement and asset transformation from inner-city squatter settlement into peripheral mass housing. *European Urban and Regional Studies* **27**(2): 142–155.

Bowen W.M. & Gleeson R.E. 2018. *The Evolution of Human Settlements: From Pleistocene Origins to Anthropocene Prospects*. Cham: Springer.

Brzezicka J. 2020. Towards a typology of housing price bubbles: A literature review. *Housing, Theory and Society* **38**(3): 320–342.

Byrne M. & Norris M. 2018. Procyclical social housing and the crisis of Irish housing policy: Marketization, social housing, and the property boom and bust. *Housing Policy Debate* **28**(1): 50–63.

Campbell P. 2013. The illegal city: Space, law and gender in a Delhi squatter settlement. *Housing Studies* **29**(1): 173-175.

Carter A. 2001. Pathways to accessible housing : Assessing the need for wheelchair-accessible housing. *Housing, Care and Support* **4**(2): 28–31.

Carter T.S., Polevychok C. & Osborne J. 2009. The role of housing and neighbourhood in the re-settlement process: a case study of refugee households in Winnipeg. *The Canadian Geographer/Le Géographe canadien* **53**(3): 305–332.

Chen M., Wu Y., Liu G. & Wang X. 2020. City economic development, housing availability, and migrants' settlement intentions: Evidence from China. *Growth and Change* **51**(3): 1239–1258.

Chirisa I.E.W. & Muhomba K. 2013. Constraints to managing urban and housing land in the context of poverty: a case of Epworth settlement in Zimbabwe. *Local Environment* **18**(8): 950–964.

Clapham D. 2018. Housing theory, housing research and housing policy. *Housing, Theory and Society* **35**(2): 163–177.

Clarke J. 2000. Developing housing and support standards in supported housing: How in practice can organisations providing supported housing assess 'best value'?. *Housing, Care and Support* **3**(2): 23–27.

Colburn G. 2019. The use of markets in housing policy: A comparative analysis of housing subsidy programs. *Housing Studies* **36**(1): 46–79.

Collins J.M. 2011. How good is the GFE? How truthful is the TILA? Comparing mortgage loan disclosures to settlement documents. *Housing Policy Debate* **21**(4): 565–583.

Czischke D. 2018. Collaborative housing and housing providers: towards an analytical framework of multi-stakeholder collaboration in housing co-production. *International Journal of Housing Policy* **18**(1): 55–81.

Dalal A. 2020. The refugee camp as urban housing. *Housing Studies* **37**(2): 189–211.

De Paris S.R. & Lopes C.N.L. 2018. Housing flexibility problem: Review of recent limitations and solutions. *Frontiers of Architectural Research* **7**(1): 80-91.

Delgado G., Muller A., Mabakeng R. & Namupala M. 2020. Co-producing land for housing through informal settlement upgrading: lessons from a Namibian municipality. *Environment and Urbanization* **32**(1): 175–194.

Demir E., Akmeşe F., Erbay H., Taylan-Özkan A. & Mumcuoğlu K.Y. 2020. Bibliometric analysis of publications on house dust mites during 1980–2018. *Allergologia et Immunopathologia* **48**(4): 374–383.

Donaldson-Selby G., Hill T. & Korrubel J. 2007. Photorealistic visualisation of urban greening in a low-cost high-density housing settlement, Durban, South Africa. *Urban Forestry & Urban Greening* **6**(1): 3-14.

Drolet J.L. & Teixeira C. 2020. Fostering immigrant settlement and housing in small cities: Voices of settlement practitioners and service providers in British Columbia, Canada. *The Social Science Journal* **59**(3): 485-499.

Fahimnia B., Sarkis J. & Davarzani H. 2015. Green supply chain management: A review and bibliometric analysis. *International Journal of Production Economics* **162**: 101-114.

Ferrari E. 2011. Conceptualising social housing within the wider housing market: A vacancy chain model. *Housing Studies* **26**(1): 95–116.

Fink A. 2010. *Conducting Research Literature Reviews: From the Internet to Paper*. 3rd Ed. Thousand Oaks, CA: Sage Publication.

Gorter T. 2017. Migration, settlement and the concepts of house and home. *Housing Studies* **32**(8): 1178–1179.

Groenewald L. 2011. Progress towards Millennium Development Goals? Strategies for housing and informal settlement in Gauteng, South Africa. *Development Southern Africa* **28**(5): 641–651.

Hanlon J. 2015. Fair housing policy and the abandonment of public housing desegregation. *Housing Studies* **30**(1): 78–99.

Harzing A.W. 2010. *The Publish or Perish Book: Your Guide to Effective and Responsible Citation Analysis*. Melbourne: Tarma Software Research Pty Limited.

Heersmink R., van den Hoven J., van Eck N.J. & van den Berg J. 2011. Bibliometric mapping of computer and information ethics. *Ethics and Information Technology* **13**(3): 241–249.

Hirono K.N. 2010. Housing policy for utilization of existing housing. *Pacific Economic Review* **15**(5): 697–707.

Huchzermeyer M. 2003. A legacy of control? The capital subsidy for housing, and informal settlement intervention in South Africa. *International Journal of Urban and Regional Research* **27**(3): 591-612.

Hwang S.W., Fuller-Thomson E., Hulchanski J.D., Bryant T., Habib Y. & Regoeczi W. 1999. Housing and population health: A review of the literature. *Sociology & Criminology Faculty Publications.* **126**.

Johnston R.J., Trlin A.D., Henderson A.M., North N.H. & Skinner M.J. 2005. Housing experience and settlement satisfaction: Recent Chinese, Indian and South African skilled immigrants to New Zealand. *Housing Studies* **20**(3): 401–421.

Jønsson J.B., Bryceson D.F., Kinabo C. & Shand M. 2019. Getting grounded? Miners' migration, housing and urban settlement in Tanzania, 1980–2012. *Extractive Industries and Society* **6**(3): 948–959.

Jordhus-Lier D., Saaghus A., Scott D. & Ziervogel G. 2019. Adaptation to flooding, pathway to housing or 'wasteful expenditure'? Governance configurations and local policy subversion in a flood-prone informal settlement in Cape Town. *Geoforum* **98**: 55–65.

Kauppinen T.M. 2002. The beginning of immigrant settlement in the Helsinki metropolitan area and the role of social housing. *Journal of Housing and the Built Environment* **17**(2): 173–197.

Kemeny J. 2001. Comparative housing and welfare: Theorising the relationship. *Journal of Housing and the Built Environment* **16**(1): 53–70.

Kim J. 2020. Housing accessibility for seniors with mobility and grasping disabilities: Lessons from the American Housing Survey. *Housing Studies* **36**(5): 758-783.

King N. 2001. Models of very sheltered housing : Rethinking housing for older people. *Housing Care and Support, August* **4**(3): 22–25.

Kissoon P. 2010. From persecution to destitution: A snapshot of asylum seekers' housing and settlement experiences in Canada and the United Kingdom. *Journal of Immigrant and Refugee Studies* **8**(1): 4–31.

Lang F. 2002. Housing and settlement in archaic Greece. *Pallas* **58**: 13–32.

Lee J. 2000. From welfare housing to home ownership: The dilemma of China's housing reform. *Housing Studies* **15**(1): 61–76.

Leishman C. 2015. Housing supply and suppliers: are the microeconomics of housing developers important?. *Housing Studies* **30**(4): 580–600.

Leung C. 2004. Macroeconomics and housing: A review of the literature. *Journal of Housing Economics* **13**(4): 249–267.

Liu Z., Wang Y. & Chen S. 2016. Does formal housing encourage settlement intention of rural migrants in Chinese cities? A structural equation model. *Urban Studies* **54**(8): 1834–1850.

López Salinas A. & Teixeira C. 2020. Settlement and housing experiences of recent Mexican immigrants in Vancouver suburbs. *GeoJournal* **87**: 377-402.

Machi L.A. & McEvoy B.T. 2016. *The Literature Review, Six Steps to Success.* 3rd Ed. Thousand Oaks, CA: Corwin.

Maciejewska E. 2020. Living in flood plains in Warsaw–former settlement and a case study of two contemporary housing estates. *Journal of Water and Land Development* **45**: 70-75.

McGarry B. 2016. The development of custom in territorial dispute settlement. *Journal of International Dispute Settlement* **8**(2): 339-365.

Nazir F.A., Edwards D.J., Shelbourn M., Martek I., Thwala W.D.D. & El-Gohary H. 2020. Comparison of modular and traditional UK housing construction: A bibliometric analysis. *Journal of Engineering, Design and Technology* **19**(1): 164-186.

Netto G. 2011. Strangers in the city: Addressing challenges to the protection, housing and settlement of refugees. *International Journal of Housing Policy* **11**(3): 285–303.

Neutze M. 2000. Housing for indigenous Australians. *Housing Studies* **15**(4): 485–504.

Niebieszczański J., Jaeger M., Pető Á., Hildebrandt–Radke I., Kulcsár G., Staniuk R., Taylor N. & Czebreszuk J. 2019. Revealing the internal organization of a Middle Bronze Age fortified settlement in Kakucs-Turján through geoarchaeological means: Magnetometric survey and sedimentological verification of a housing structure. *Journal of Archaeological Science: Reports* **25**: 409–419.

Nordvik V. 2006. Selective housing policy in local housing markets and the supply of housing. *Journal of Housing Economics* **15**(4): 279–292.

Norris A.N. & Nandedkar G. 2020. Ethnicity, racism and housing: Discourse analysis of New Zealand housing research. *Housing Studies* **37**(8): 1331–1349.

Opoko A.P., Ibem E.O. & Adeyemi E.A. 2015. Housing aspiration in an informal urban settlement: A case study. *Urbani izziv* **26**(2): 117–131.

Öst C.E. 2014. Economic incentives, housing allowance, and housing consumption: An unintended consequence of a shift in housing policy. *Journal of Housing Economics* **23**: 17–27.

Paris C.M.J. 2002. After housing policy: Housing and the UK general election 2001. *Housing Studies* **17**(1): 151–164.

Park C.S. 2007. Transformation and housing spatial form of the port settlement of rivershore in Nakdong River-Focused on Sangbu Village of Samrangjin, Milyang city. *Journal of the Korean Institute of Rural Architecture* **9**(3): 121–128.

Pojani D. 2013. From squatter settlement to suburb: The transformation of Bathore, Albania. *Housing Studies* **28**(6): 805–821.

Primrose S. & Christopher I. 2018. Appraising the effectiveness of South Africa's low-cost housing delivery approach for beneficiaries in uMhlathuze village and Slovos settlement. *African Renaissance* **15**(2): 9–31.

Ridley D. 2012. *The Literature Review: A Step-by Step Guide for Students*. 2nd Ed. London: SAGE Publications.

Ross F. 2003. Dependents and dependence: A case study of housing and heuristics in an informal settlement in the Western Cape. *Social Dynamics* **29**(2): 132–152.

Ruonavaara H. 2018. Theory of housing, from housing, about housing. *Housing, Theory and Society* **35**(2): 178–192.

Shin G. & Jung I. 2019. Socialising rural space in North Korea: Settlement planning, housing, and service networks. *The Journal of Architecture* **24**(1): 3–26.

Shortt N.K. & Hammett D. 2013. Housing and health in an informal settlement upgrade in Cape Town, South Africa. *Journal of Housing and the Built Environment* **28**(4): 615–627.

Singleton H. & McKenzie F.H. 2008. The re-branding imperative for the Western Australian Pilbara region: Status quo to transformative cultural interpretations of local housing and settlement for a competitive geo-regional identity. *Place Branding and Public Diplomacy* **4**(1): 8–28.

Skobba K., Bruin M.J. & Carswell A. 2013. Housing careers of families with housing choice vouchers: Interpretation with the housing adjustment theory. *Housing and Society* **40**(2): 170–192.

Teixeira C. 2009. New immigrant settlement in a mid-sized city: a case study of housing barriers and coping strategies in Kelowna, British Columbia. *The Canadian Geographer/Le Géographe Canadian* **53**(3): 323-339.

Trezib J. & Sonder I. 2019. The Rassco and the settlement of the Fifth Aliyah: Pre-state and early state middle class settlement and its relevance for public housing in Eretz-Israel. *Israel Studies* **24**(1): 1–23.

Valsson T., Ulfarsson G.F. & Gardarsson S.M. 2013. A theory of the evolution of settlement structures based on identification and use of patterns: Iceland as a case study. *Futures* **54**: 19–32.

Van Eck N.J., Waltman L., Dekker R. & Van Den Berg J. 2010. A comparison of two techniques for bibliometric mapping: Multidimensional scaling and VOS. *Journal of the American Society for Information Science and Technology* **61**(12): 2405–2416.

Waltman L., van Eck N.J. & Noyons E.C. 2010. A unified approach to mapping and clustering of bibliometric networks. *Journal of Informetrics* **4**(4): 629–635.

Wang Q., Cheong K.C. & Li Y. 2020. Who benefits from development? Analyzing the stakeholder contestations in a traditional settlement of Malaysia. *Housing Policy Debate* **30**(5): 861–877.

Wang Y., Wang Z., Zhou C., Liu Y. & Liu S. 2020. On the settlement of the floating population in the Pearl River Delta: Understanding the factors of permanent settlement intention versus housing purchase actions. *Sustainability* **12**(22): 9771.

Ward P.M. & Peters P.A. 2007. Self-help housing and informal homesteading in peri-urban America: Settlement identification using digital imagery and GIS. *Habitat International* **31**(2): 205–218.

Weerasinghe W.K. & Shigemura T. 2008. A study on transformation of living environment and domestic spatial arrangements: Focused on a western coastal housing settlement of Sri Lanka after Sumatra earthquake and tsunami 2004. *Journal of Asian Architecture and building engineering* **7**(2): 285-292.

Westaway M.S. 2006. A longitudinal investigation of satisfaction with personal and environmental quality of life in an informal South African housing settlement, Doornkop, Soweto. *Habitat International* **30**(1): 175–189.

Xie S. & Chen J. 2018. Beyond homeownership: Housing conditions, housing support and rural migrant urban settlement intentions in China. *Cities* **78**: 76–86.

Yang S. & Guo F. 2018. Breaking the barriers: How urban housing ownership has changed migrants' settlement intentions in China. *Urban Studies* **55**(16): 3689–3707.

Zang B., Lv P. & Warren C.M.J. 2015. Housing prices, rural–urban migrants' settlement decisions and their regional differences in China. *Habitat International* **50**: 149–159.

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