

SMES RESILIENCES AND AGILITY DURING PANDEMIC COVID 19: A BIBLIOGRAPHY ANALYSIS AND FUTURE DIRECTIONS

by I Wayan Edi Arsawan

Submission date: 05-Oct-2021 09:16PM (UTC+0700)

Submission ID: 1665938330

File name: Cek_turnitin.docx (2.79M)

Word count: 2926

Character count: 17745

SMES RESILIENCES AND AGILITY DURING PANDEMIC COVID 19: A BIBLIOGRAPHY ANALYSIS AND FUTURE DIRECTIONS

Introduction. The Covid 19 pandemic has challenged SMEs to continue to innovate, develop and maintain sustainability. Various efforts have been made to be able to have performance and competitiveness. Covid-19 provides lessons on how SMEs must be agile and resilient to turbulence, especially the global crisis so that they can carry out risk mapping, take important lessons and build relevant strategies.

Aims and Task. This study aims to map the literature on organizational agility and organizational resilience in SMEs by conducting a bibliography analysis on 932 papers published in 2010-2021 in the Scopus bibliography.

Result. Based on the results of the network visualization, there are seven main clusters. From the results of the overlay visualization, a supply chain is the most important variable concerning organizational agility and organizational resilience in realizing sustainability. Meanwhile, in the density

visualization aspect, variables with a very high probability as future research topics such as supply management, supply chain sustainability, sustainable development goals, human resource management, chain resilience, sustainable supply chain management, agile, urban resilience, visibility, supply chain design, resilient supplier selection, and enterprise architecture.

Conclusion. The present study produces a visual trend of organizational agility and resilience in SMEs sector that can be used as a references, guidance and proposed for further researchers in exploring research topics, bridging the gap in the literature, building expertise in related topic, increasing the number of citations, and enhance international networking among authors all around the world. Research regarding organizational agility and resilience could be a strategic and essential because of every organization need to sustain their existance, minimize risk both financial and non-financial.

Keywords. Organizational resilience, organizational agility, bibliography, SMEs, Covid-19.

Introduction. Coronavirus pneumonia (Covid-19) which first spread in Wuhan, China to all parts of the world has caused a health emergency so that it was declared a pandemic by the World Health Organization (WHO) on March 11, 2020. Furthermore, in just eight months (11 November 2020), WHO reported a spike in positive cases to 62 million with 1.5 million deaths that have infected 220 countries.

In addition to interpreting the health emergency and the extraordinary impact on the economic, social, and cultural sectors, the pandemic is also a major challenge and threat to the sustainability and continuity of business processes where an important aspect of the organization's strategic capabilities becomes a trigger in building crisis resilience[1]. For this reason, the formulation of systematic efforts needs to be made to identify problems regarding research phenomena and trends in crisis management both at pre-crisis (identification, prevention and preparation), during the crisis (alternative, response and implement strategy to crisis), and after-crisis (evaluate, learning, fixing, revision and sustain).

The attention to investigating business sustainability and the ability of companies to respond to critical scenarios is especially relevant in today's global emergency. The various impacts and difficulties caused by Covid-19 are an important concern for investigating how organizations react, facing possible losses and even bankruptcy if they do not have alternative plans to deal with them [2]. Therefore, a strategic plan is needed to ensure that the organization's operational activities continue despite disruptions, to ensure business continuity in a pandemic scenario and post-pandemic recovery. Research on organizational agility has been carried out by several researchers [3];[4] associated with organizational performance [5] market orientation [6] but in the context of SMEs still needs to be explored [7] to provide a complete picture of how to be more agile in dealing with turbulence [8]. In addition to being agile, SMEs are also very important for resilience in dealing with crisis [9] so creative in facing challenges [10] have sustainability [11] have the right response [12] relevant strategy [13] in building a sustainable competitive advantage [4]. Motivated by the phenomena and research gap above, the present

study try to provide an overview of publications related to agility and resilience in the SMEs sector. This is done to provide a roadmap for researchers to develop science related to current topics based on literature mapping.

Methodology. The present study identifies articles that have passed rigorous peer review in the Scopus database - leading indexers - especially Elsevier dataset and ScienceDirect dataset analysed to get the final visualization with VOS Viewer [15]; [16]. Next, we identified the keywords "organizational agility", "organizational resilience", "SMEs" and Covid-19" so that a total of 932 articles were downloaded in the form of a research information system (*ris) and then transferred to the reference manager, Mendeley. The research data collection process was carried out for three months (June-August 2021) through identification of keyword phrases used to find related information.

The next process is to feed 932 selected articles to the VOS Viewer application and analyze the process hierarchy with the aim of analyzing the research information system (RIS*) so as to produce analytical output according to the objectives of this study. VOS Viewer was chosen because of its usefulness which is able to generate publication maps based on country groupings, number of publications, writing networks and keyword phrases [15]. In addition, the function of VOS Viewer is to perform article classification, data mining, and mapping the source of published articles [17].

Result and Discussions. The results of extracting the keywords "organizational agility", "organizational resilience", "SMEs" and Covid-19" in the Scopus database (especially Elsevier and ScienceDirect) with a period spanning 2010-2021 on review and research articles with the subject area of business, management, and accounting; social sciences; decision science; environmental science; and economics, econometrics, and finance, the resulting article is 932 relevant documents. Bibliometric analysis with VOS Viewer was carried out to make research maps based on text data, namely titles and abstracts. The analysis results were obtained in networking visualization, overlay visualization, and density visualization. Figure 1 shows the result of the

number of documents in the Scopus database in detail:

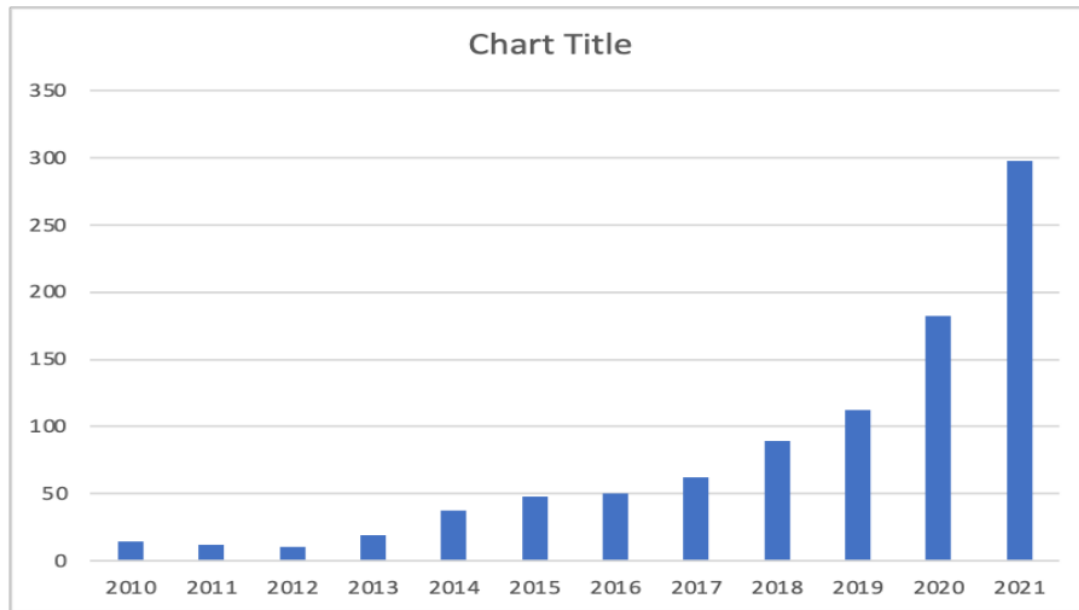


Figure 1 Years Period of Publications

In the chart above, information is presented that in general, the trend of research on agility and resilience in the SME sector is increasing. In 2010 there were 14 publications, 2011 (12), 2012 (10), 2013 (19), 2014 (37), 2015 (48), 2016 (50), 2017 (62), 2018 (89), 2019 (112), 2020 (182) and 2021 (298). The upward trend began to increase from 2019, 2020, and 2021, especially when Covid-19 hit all sectors and

businesses around the world. This upward trend in publications is an important signal that attention to agility and resilience is increasingly important. Furthermore, based on the type of publication (see Figure 2), there are 172 review articles and the remaining 860 are research papers. This means that the research trend is more about testing hypotheses or research models.



Figure 2 Article Types

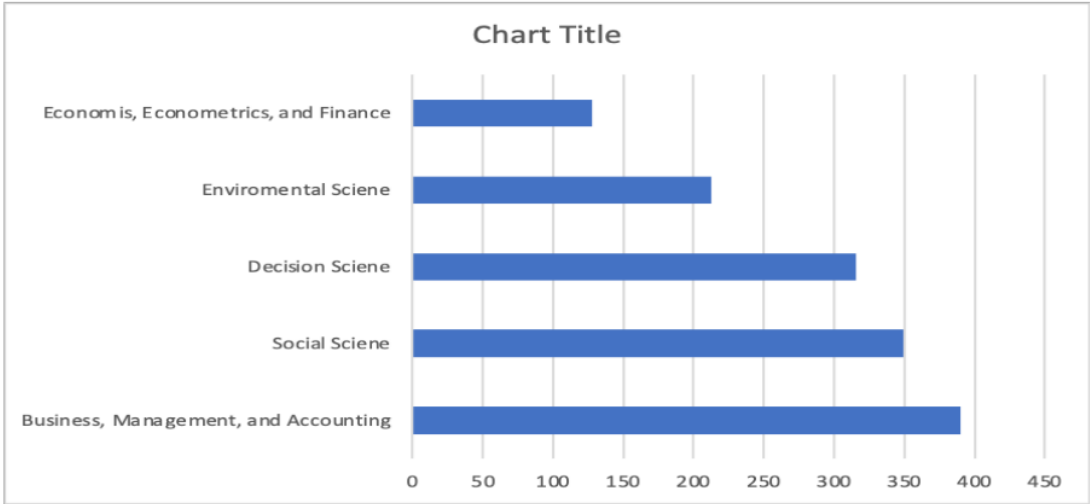


Figure 3. Subject Area of the Publish Paper

Furthermore, based on the research subject area (see Figure 3), the topic of agility and resilience consists of five main sections, namely economics, econometrics, and finance with 128 articles, environmental science 213, decision science 316, social science 349 and business, management, and accounting 390 article. The management and accounting business areas have

the most articles and the other four areas have the potential to produce more articles on this topic. The next step is to feed the results of the research information system (RIS*) into VOS Viewer so that it produces a database extraction map that is presented in three visualizations, namely, network, overlay, and finally density visualization (Figure 4-6).

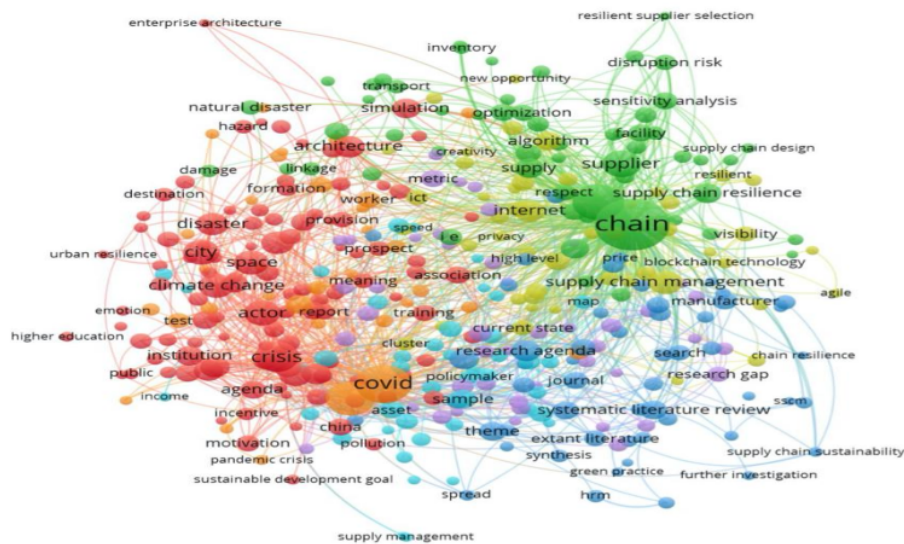


Figure 4. Network Visualization

Figure 4 shows there are 7 clusters of extracted keywords. It can be seen that “chain” is the largest item, followed by “disruption”, “covid” and “supplier” which shows a close relationship with keywords. Cluster 1 is business continuity, business leader, capital, climate change, crisis management, digital transformation, disaster resilience, diversity, engagement, entrepreneur, knowledge sharing, leadership, leverage, motivation, natural resources, post covid, preparedness, public policy, rapid change, risk assessment, social capital, sustainable development, tourism, urban resilience, value creation, viability, and transition. Cluster 2 is analytical hierarchy process, applicability, chain, competitive advantage, continuity, disruption, disturbance, dynamic nature, global supply chain, the recovery process, resilience capability, resilience strategy, resilience supplier selection, supply chain resilience, responsiveness, supplier selection, supply chain design, supply chain disruption, supply chain manager, supply chain network, supply chain performance, supply chain resilience, supply chain risk manager, and system

resilience. Cluster 3 is chain resilience, environmental performance, green practice, human resource management, interrelationship, organizational resilience, profitability, strategic agility, supply chain risk, and supply chain sustainability. Cluster 4 is agile, artificial intelligence, blockchain, business process, cloud computing, communication technology, connectivity, creativity, cyber-physical system, information sharing, resilience, smart city, traceability, supply chain network, and visibility. Cluster 5 is adaptability, big data analytic, competition, dynamic capability, finance, firm performance, firm resilience, information technology, intensity, operational flexibility, operational performance, organizational agility, organizational performance, and service quality. Cluster 6 is the circular economy, digital platform, digitalization, disaster management, medium enterprise, and supply management. Cluster 7 is cooperating social responsibility, covid, crucial role, economic growth, globalization, mitigation, and social sustainability.

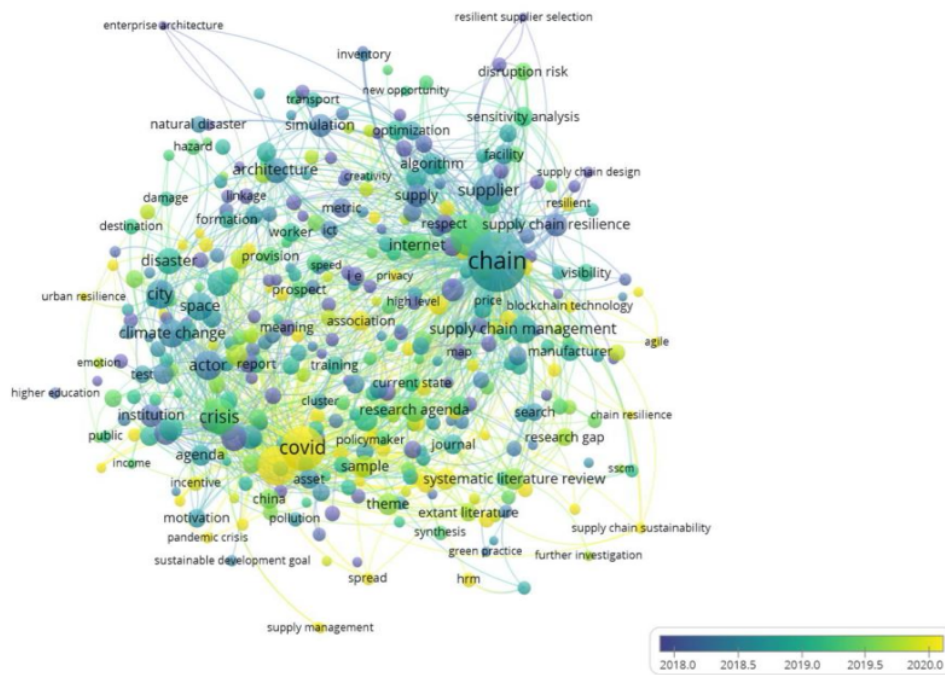


Figure 5: Overlay Visualization

Figure 5 shows the historical track of research from year to year related to organizational agility and organizational resilience. From the analysis results, it can be seen that research on organizational agility and organizational resilience was published starting in 2018. In 2018 there were more studies on resilient supplier selection, enterprise architecture, natural disaster suppliers, chain, supply chain, supply chain design, supply chain resilience, supply chain management, climate change, higher education. The year 2019 is about damage, disaster, visibility, disruption risk, new opportunity, crisis, and hazard. While the latest research in 2020 is

with the brightest color focusing on human resource management, supply management, supply chain sustainability, chain resilience, agile, pandemic crisis, incentive, covid, blockchain technology, urban resilience, and resilience. Analysis on "organizational agility and organizational resilience" to realize "sustainability" is to look at the determinants of organizational agility and organizational resilience and related variables. Figure 5 shows that the supply chain has the great opportunity related to research of organizational agility and organizational resilience in order to enhance performance and sustainability.

management, chain resilience, agile, and urban resilience. These variables can be used as research variables because the level of novelty of the network item has a limited link, the level of renewal is the most updated, and the level of density is still very rarely studied.

Second, the results of the bibliometric analysis as a whole show that the topic of organizational agility and organizational resilience is still rarely done and can still be developed more specifically because the analysis results show the emergence of new variables such as urban resilience, resilience capability, resilience strategy, resilience supplier selection, resilience supply chains. Third, that the supply chain resilience variable is potentially connected ¹¹ the supply chain in various topics such as supply chain design, supply chain disruption, supply chain manager, supply chain network, supply chain performance, supply chain risk manager, and supply chain sustainability. Fourth, for researchers, the potential and gaps in the literature generated in this study are opportunities in building international networking so that they can contribute to increasing global understanding and insight regarding organization agility and organizational resilience.

¹¹
Conclusion. This present study aims to highlight and measure the visual trends of organizational agility and resilience in SMEs. The findings of this literature review provide scientific evidence that the topic of agility and resilience has received serious attention from several researchers. For this reason, we have identified and identified several opportunities for further research. However, this study also has limitations, namely, firstly, it only highlights the visual trends of agility and resilience in the SME sector but does not analyze the contribution, number of citations and impact of the research. Second, the data extracted is only data from the Scopus database so that future research can add to it from the Web of Science or Google Scholar.

Acknowledgment

Thank you to the National Board for Disaster Management (BNPB) and Ministry of Education and Cultural of the Republic of Indonesia, Directorate of Research and Community Service (DRPM) for the year of 2021 research grant No. 2394/E4/AK.04/2021; 322/E4.1/AK.04.PT/2021; 2386/PL8.PG/2021, and Politeknik Negeri Bali, Universitas Udayana and Universitas Mahasaraswati Denpasar for providing excellent research collaboration.

REFERENCES

1. Margherita, A., & Heikkilä, M. (2021). Business Continuity in the COVID-19 Emergency: A Framework of Actions Undertaken by World-Leading Companies. *Business Horizons*.
2. Fani, S. V., & Subriadi, A. P. (2019). Business continuity plan: examining the multi-usable framework. *Procedia Computer Science*, 161, 275-282.
3. Walter, A. T. (2021). Organizational agility: ill-defined and somewhat confusing? A systematic literature review and conceptualization. *Management Review Quarterly*, 71(2), 343-391.
4. Deng, C. P., Wang, T., Teo, T. S., & Song, Q. (2021). Organizational agility through outsourcing: Roles of IT alignment, cloud computing, and knowledge transfer. *International Journal of Information Management*, 60, 102385.
5. Rafi, N., Ahmed, A., Shafique, I., & Kalyar, M. N. (2021). Knowledge management capabilities and organizational agility as liaisons of business performance. *South Asian Journal of Business Studies*.
6. Manurung, A. H., & Kurniawan, R. (2021). Organizational agility: do agile project management and networking capability require market orientation?. *International Journal of Managing Projects in Business*.
7. Rozak, H. A., Adhiatma, A., Fachrunnisa, O., & Rahayu, T. (2021). Social Media Engagement, Organizational Agility, and Digitalization Strategic Plan to Improve SMEs' Performance. *IEEE Transactions on Engineering Management*.
8. Troise, C., Corvello, V., Ghobadian, A., & O'Regan, N. (2022). How can SMEs successfully navigate the VUCA environment: The role of agility in the digital transformation era. *Technological Forecasting and Social Change*, 174, 121227.
9. Acevedo-Duque, Á., Gonzalez-Diaz, R., Vargas, E. C., Paz-Marciano, A., Muller-Pérez, S., Salazar-Sepúlveda, G., ... & D'Adamo, I. (2021). Resilience, leadership and female entrepreneurship within the context of smes: Evidence from latin america. *Sustainability*, 13(15), 8129.
10. Zutshi, A., Mendy, J., Sharma, G. D., Thomas, A., & Sarker, T. (2021). From Challenges to Creativity: Enhancing SMEs' Resilience in the Context of COVID-19. *Sustainability*, 13(12), 6542.
11. García-Contreras, R., Valle-Cruz, D., & Canales-García, R. A. (2021). Organizational selection: SMEs resilience and performance in COVID-19 age. *Estudios Gerenciales*, 37(158), 73-84.
12. Aidoo, S. O., Agyapong, A., Acquah, M., & Akomea, S. Y. (2021). The performance implications of strategic responses of SMEs to the covid-19 pandemic: Evidence from an African economy. *Africa Journal of Management*, 7(1), 74-103.

13. Ali, M. H., Suleiman, N., Khalid, N., Tan, K. H., Tseng, M. L., & Kumar, M. (2021). Supply chain resilience reactive strategies for food SMEs in coping to COVID-19 crisis. *Trends in Food Science & Technology*.
14. Arsawan, I. W. E., Koval, V., Rajiani, I., Rustiarini, N. W., Supartha, W. G., & Suryantini, N. P. S. (2020). Leveraging knowledge sharing and innovation culture into SMEs sustainable competitive advantage. *International Journal of Productivity and Performance Management*.
15. Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *scientometrics*, 84(2), 523-538.
16. Suryantini, N. P. S., Arsawan, I. W. E., Darmayanti, N. P. A., Moskalenko, S., & Gorokhova, T. (2021). Circular economy: barrier and opportunities for SMEs. In *E3S Web of Conferences* (Vol. 255, p. 01017). EDP Sciences.
17. Xie, L., Chen, Z., Wang, H., Zheng, C., & Jiang, J. (2020). Bibliometric and visualized analysis of scientific publications on atlantoaxial spine surgery based on Web of Science and VOSviewer. *World neurosurgery*, 137, 435-442.
18. Arsawan, I. W. E., Prayustika, P. A., Gede, I. G. K., Kariati, N. M., Sunu, P. W., & Indrayana, I. N. E. (2021, April). Leveraging Knowledge Sharing and Innovation Towards Resilient Competitive Advantage. In *International Conference on Applied Science and Technology on Social Science (ICAST-SS 2020)* (pp. 396-399). Atlantis Press.
19. Arsawan, I. W. E. (2019). Intellectual capital and innovation culture: evidence from SMEs performance in Indonesia. *Economics. Ecology. Socium*, 3(4), 10-18.
20. Trachenko, L., Lazorenko, L., Maslennikov, Y., Hrinchenko, Y., Arsawan, I. W. E., & Koval, V. (2021). OPTIMIZATION MODELING OF BUSINESS PROCESSES OF ENGINEERING SERVICE ENTERPRISES IN THE NATIONAL ECONOMY. *Natsional'nyi Hirnychiy Universytet. Naukovyi Visnyk*, (4)

SMES RESILIENCES AND AGILITY DURING PANDEMIC COVID 19: A BIBLIOGRAPHY ANALYSIS AND FUTURE DIRECTIONS

ORIGINALITY REPORT

7%

SIMILARITY INDEX

6%

INTERNET SOURCES

6%

PUBLICATIONS

2%

STUDENT PAPERS

PRIMARY SOURCES

1

www.supplychain247.com

Internet Source

1%

2

www.e3s-conferences.org

Internet Source

1%

3

Alessandro MARGHERITA, Marikka HEIKKILÄ.
"Business Continuity in the COVID-19
Emergency: A Framework of Actions
Undertaken by World-Leading Companies",
Business Horizons, 2021

Publication

1%

4

www.sec.gov

Internet Source

1%

5

Anna M. Olszewska. "Research issues
undertaken within quality management – the
overview of selected literature", Engineering
Management in Production and Services,
2017

Publication

1%

6

annalsofrscb.ro

Internet Source

1%

7	books.google.com Internet Source	<1 %
8	turcomat.org Internet Source	<1 %
9	issi2013.org Internet Source	<1 %
10	www.vspv.si Internet Source	<1 %
11	Ni Putu Santi Suryantini, I Wayan Edi Arsawan, Ni Putu Ayu Darmayanti, Svitlana Moskalenko, Tetiana Gorokhova. "Circular economy: barrier and opportunities for SMEs", E3S Web of Conferences, 2021 Publication	<1 %

Exclude quotes On

Exclude matches Off

Exclude bibliography On