University of Maribor Faculty of logistics



Bibliometric analysis with R and Matlab:

COVID-19 and Social Responsibility (Research Project)

Elaborate (preliminary study and first results of research)

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1. Introduction and conceptual framework of research

This document is dedicated to the bibliometric analysis (BA) regarding COVID-19 and Social responsibility (SR) research in the year 2020. Only some most important results are briefly stressed in this first version of the present preliminary study. The main tools to conduct the BA were R and Matlab 2020A, or more precisely: R's package Bibliometrix with Biblioshiny B&B (<u>Aria and Cuccurullo, 2017</u>), and Matlab's toolbox: Text Analytics toolbox TAT (<u>Mathworks, 2020</u>). This document includes:

- 1. Program codes in Matlab that have been written.
- 2. Results, obtained on their basis.
- 3. Results obtained using the R's package Bibliometrix with Biblioshiny B&B.

In the second version of this document, a more in-depth explanation and discussion of results will follow. Nevertheless, we believe that experienced researchers from the field will have no problems following the key elements of this document.

Figure 1 shows the conceptual framework of the entire research.

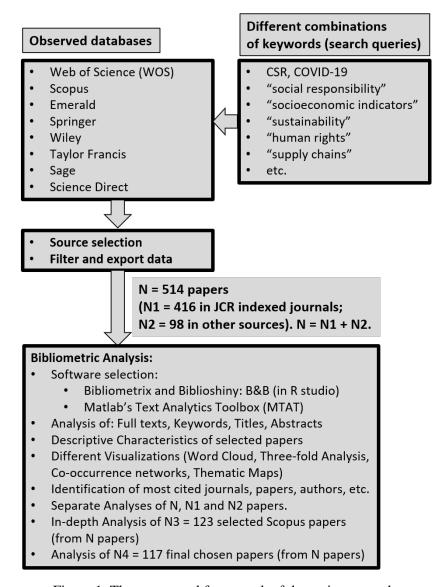


Figure 1: The conceptual framework of the entire research.

From figure 1 can be seen that particular emphasis was dedicated (by using the TAT) to N3 = 123 selected papers from the Scopus database (and N3A = 104 papers by using the B&B), since the latter has covered the most important works related to COVID-19 and SR research. N3 and N3A chosen papers were therefore also the basis to conduct the more in-depth BA by means of B&B and TAT, respectively. For analyses of the other sets of papers (N, N1, N2, N4), the TAT was applied only. From figure 1 can also be seen that the keywords that most significantly characterize the social responsibility (such as "human rights", "social responsibility", "sustainability", "socioeconomic indicators", "poverty", etc.) were used in the context of ongoing COVID-19 pandemic crisis. From the detected N = 514 papers, N1 = 416 papers were belonging to the JCR indexed (WOS database) journals, whereas N2 = 98 papers were found interesting from the other sources, mainly different technical reports, working papers, non-indexed journals, etc. The final analysis

was conducted on N4 = 117 final chosen papers, for which it was believed that they fit the best to the context of COVID-19 research related to social responsibility/irresponsibility. While doing the BA, it turned out that tourism was also an important topic discussed in the papers related to the COVID-19 and SR.

The following clusters of results were obtained:

- The BA of extended keywords and text of all articles of N3=123 Scopus journals by using TAT
- The BA of the text of the titles of all N=514 Journals by using TAT
- The BA of the text of all N=514 articles by using TAT
- The BA of the text of all articles of N4 = 117 final chosen papers
- The BA of the text of the titles of N1=416 Indexed Journals
- The BA of the text of the titles of N2=98 Non-Indexed Sources

2. Bibliometric analysis by using the TAT Matlab Toolbox

2.1. The BA of extended keywords and text of all articles of N3=123 Scopus journals by using TAT

1. run_analy.m

```
clear
clc
close all
load data.mat
disp('EXTENDED KEYWORDS ONLY FOR THE SECOND SET OF SCOPUS JOURNALS. WHEN YOU PULLED DOWN FROM THE BIBTEX SCOPUS WITH
ALL THE METADATA WITH ABSTRACTS INCLUDED')
N = input('how many words for scopus analysis of extended keywords')
if length(N) == 0
 N = size(MostFrequentWords,1)
disp('max frequency for the words for the scopus analysis of extended keywords')
T=MostFrequentWords(1:N,:)
wordcloud(T,'Words','Occurrences','HighlightColor','black');
title('cloud of the text of words of ext keywords of SCOPUS journals')
disp('TEXT OF ALL ARTICLES OF SCOPUS JOURNALS'. ')
readFcn = @extractFileText:
fds = fileDatastore('E:\0A COV 19 IN WORLD TRADE\COVID 19 SIR SEIR ITN PAPERS\CSR MULEJ IN COVID\SCOPUS IBLIOMETRIX TXT VSI
SCOPUS\*.txt','ReadFcn',readFcn)
bag = bagOfWords
while hasdata(fds)
str = read(fds);
```

```
document = tokenizedDocument(str);
bag = addDocument(bag,document);
end
newBag = removeWords(bag,stopWords)
newBag = removeShortWords(newBag,2);
newBag = removeShortWords(newBag,3);
newBag = removeShortWords(newBag,3);
newBag = removeShortWords(newBag,5)
N1 = input('how many words for txt files from folder')
if length(N1) == 0
 N1 = size(MostFrequentWords,1)
end
disp('max frequency for the words for the txt files from folder')
tbl = topkwords(newBag,N1)
wordcloud(newBag,'HighlightColor','black','MaxDisplayWords',N1)
title('cloud of the text of text documents (papers body) of SCOPUS journals')
save_figures
```

2. results run_analy.m

EXTENDED KEYWORDS LE ZA DRUGI SKLOP SCOPUSOVIH JOURNALOV. KO SI POTEGNIL DOL IZ SCOPUSA BIBTEX Z VSEMI METADATA Z ABSTRACTI VRED

.....

koliko besed za scopus analizo ext keywords

N =

N =

357

 \max frekvenca za besede za scopus analizo ext keywords

T =

357×2 table

Words	Occurrences	
"betacoronavirus"	22	
"viral disease"	17	
"covid-19"	15	
"human"	13	
"human rights"	13	
"pandemic"	13	
"coronavirus infection"	11	
"coronavirus infections"	11	

"humans"	11
"pandemics"	11
"pneumonia"	11
"viral"	11
"virus pneumonia"	11
"female"	9
"male"	9
"adult"	7
"sustainability"	7
"coronavirus disease 2019"	6
''epidemic''	6
"article"	5
"china"	5
"coronavirus"	5
"economics"	5
"respiratory disease"	5
"communicable disease control"	4
"global health"	4
"health care policy"	4
"housing"	4
"international cooperation"	4
"mental health"	4
"organization and management"	4
"psychology"	4
"tourism economics"	4
"young adult"	4
"attitude to health"	3
"disease incidence"	3
''disease spread''	3
"economic impact"	3
"education"	3
"government"	3
"health risk"	3
"health workforce"	3
"learning"	3
"public health"	3
"quarantine"	3
"questionnaire"	3

```
"racism"
                                    3
                                    3
"social media"
"socioeconomic impact"
                                    3
"spain"
                                    3
"supply chain management"
                                    3
"surveys and questionnaires"
                                    3
"sustainable development goal"
                                    3
"tourism market"
                                    3
"travel"
                                    3
"united kingdom"
                                    3
```

TEXT VSEH ČLANKOV SCOPUSOVIH JOURNALOV.

.....

max frekvenca za besede za txt files iz folderja

Count

tbl =

 357×2 table

Word

"COVID-19" 3217 "social" 2677 "health" 2535 "pandemic" 1554 "tourism" 1352 "research" 1232 "Health" 1121 "public" 1079 "Journal" 999 "crisis" 972 "global" 965 "people" 946 "economic" 842 "community" 752 "Social" **721** "countries" 720

"University"

"information"

"CrossRef"

"online"

706

657

639

702

- "management" 636
- "development" 614
- "measures" 589
- "support" 587
- "impact" 576
- "disease" 551
- "future" 517
- "coronavirus" 510
- "analysis" 509
- "Available" 507
- "change" 506
- "workers" 501
- "including" 500
- "International" 493
- "patients" 488
- "Public" 487
- "different" 474
- "response" 471
- "government" 466
- "Research" 464
- "important" 463
- "accessed" 457
- "services" 456
- "sustainable" 445
- "medical" 441
- "rights" 439
- "outbreak" 433
- "access" 431
- "Management" 428
- "mental" 423
- "However" 412
- "example" 410
- "distancing" 408
- "approach" 404
- "critical" 402
- "international" 398
- "systems" 390
- "environmental" 390

- "current" 385
- "Global" 385
- "resources" 383
- "system" 383
- "national" 381
- "society" 381
- "article" 376
- "sustainability" 370
- "issues" 370
- "responsibility" 369
- "practices" 363
- "Tourism" 361
- "Sustainability" 360
- "business" 359
- "communities" 356
- "United" 355
- "supply" 352
- "education" 349
- "political" 349
- "policy" 347
- "responses" 346
- "related" 344
- "industry" 344
- "individuals" 343
- "organizations" 342
- "spread" 340
- "groups" 336
- "process" 334
- "provide" 324
- "potential" 323
- "number" 320
- "factors" 319
- "production" 317
- "context" 316
- "strategies" 308
- "review" 307
- "Coronavirus" 306
- "significant" 304

- "studies" 304
- "Development" 303
- "positive" 296
- "practice" 295
- "products" 292
- "effects" 292
- "emergency" 292
- "economy" 291
- "European" 290
- "environment" 284
- "challenges" 282
- "possible" 281
- "employees" 279
- "security" 278
- "against" 277
- "increase" 276
- "likely" 275
- "companies" 275
- "effect" 271
- "travel" 269
- "conditions" 267
- "Covid-19" 265
- "available" 265
- "networks" 264
- "activities" 264
- "Accessed" 264
- "impacts" 262
- "governments" 261
- "policies" 261
- "safety" 261
- "sector" 260
- "psychological" 260
- "changes" 259
- "personal" 257
- "technology" 256
- "consumer" 254
- "citizens" 252
- "Review" 251

- "financial" 250
- "individual" 249
- "Sustainable" 248
- "greater" 248
- "consumption" 246
- "essential" 245
- "Figure" 244
- "experience" 242
- "increased" 242
- "members" 242
- "knowledge" 241
- "especially" 240
- "National" 239
- "States" 238
- "interventions" 238
- "epidemic" 237
- "better" 237
- "result" 235
- "behavior" 235
- "others" 234
- "values" 234
- "negative" 233
- "situation" 233
- "efforts" 231
- "American" 231
- "market" 230
- "Organization" 230

230

- "control"
- "capacity" 230
- "Business" 230
- "affected" 229
- "learning" 229
- "population" 229
- "corporate" 226
- "responsible" 226
- "around" 224
- "ensure" 223
- "become" 223

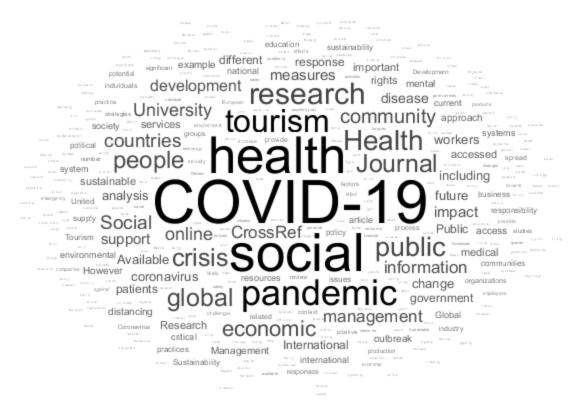
- "quality" 223
- "further" 222
- "students" 222
- "include" 221
- "country" 221
- "communication" 220
- "period" 220
- "associated" 219
- "levels" 218
- "initiatives" 218
- "benefits" 217
- "Africa" 217
- "following" 217
- "results" 215
- "general" 214
- "developed" 214
- "consumers" 211
- "Society" 211
- "considered" 210
- "theory" 210
- "Policy" 209
- "address" 209
- "states" 206
- "working" 206
- "demand" 206
- "inequality" 205
- "strategy" 205
- "Economic" 203
- "physical" 203
- "addition" 202
- "action" 202
- "interest" 202
- "reported" 202
- "reduce" 201

cloud of the text of words of ext keywords of SCOPUS journals



coronavirus disease 2019

cloud of the text of text documents (papers body) of SCOPUS journals



2.2. The BA of the text of the titles of all N=514 Journals by using TAT

```
% ANALY HARZING
clear
clc
close all
 ·
-----')
disp('TEXT OF THE TITLES OF ALL N=514 JOURNALS ')
disp≰
 -----')
load harzing_all.mat
T=HARZING2ZDRUZENOVSE;
T1 = [T(:,4:5) T(:,7:8)];
T1 = T1(1:516,:);
T1(515,:)=[];
T1(20,:)=[];
N = size(T1, 1)
%T2 = table2cell(T1);
T2 = T1;
cnt = 1;
i = 0;
k = 0;
S = struct('title_name', {}, 'cntr', []);
% loop for counting of the different journals where the corresponding papers
while 1==1
   k = k+1;
    cnt = cnt + i;
    tit ar\{k\} = T2(k,3);
    j = 0;
    1 =T2.VarName8(cnt);
   11 =cnt;
    while 1==1
      if size(T2.VarName8(cnt),1) > N-1
         sf = 1
         break
       end
       if cnt +j>N-1
           break
       if T2.VarName8(cnt+j) == 1
           j = j+1;
           %1 = 1+1;
       else
          break
       end
    end
```

```
i = j;
    S(k).cntr = j;
    S(k).title name = table2cell(T2(cnt,3));
    cnt ar\{k\} = j;
    if k == N
      break
    end
    if sf==1
      break
    end
end
S1 = [];
for i = 1:k
   S1 = [S1; [cellstr(S(i).title name{1,1}) string(S(i).cntr)]];
S1 = sortrows(S1, -2);
disp('frequency of the TEXT OF THE TITLES OF ALL N=514 JOURNALS:')
disp('-----
S1(find(S1(:,1) == "<undefined>"),:) =[]
textData = string(table2cell(T2(:,2)))
cleanedDocuments = tokenizedDocument(textData);
cleanedDocuments = addPartOfSpeechDetails(cleanedDocuments);
cleanedDocuments = removeStopWords(cleanedDocuments);
cleanedDocuments = normalizeWords(cleanedDocuments, 'Style', 'lemma');
cleanedDocuments = erasePunctuation(cleanedDocuments);
cleanedDocuments = removeShortWords(cleanedDocuments, 3);
cleanedBag = bagOfWords(cleanedDocuments)
cleanedBag = removeInfrequentWords(cleanedBag,2)
N1 = input('how many words for cloud')
if length(N1) == 0
% N1 = size(MostFrequentWords,1)
   N1 = 30;
end
% cloud - bag of words
WC=wordcloud(cleanedBag,'HighlightColor','black','MaxDisplayWords',N1)
title('cloud of the bag of words of the TEXT OF THE TITLES OF ALL N=514 JOURNALS')
figure
% cloud- text
WCl = wordcloud(cleanedDocuments, 'HighlightColor', 'black', 'MaxDisplayWords', N1)
title('cloud of the text of words of the TEXT OF THE TITLES OF ALL N=514 JOURNALS')
disp('frequency of the text of words of of the TEXT OF THE TITLES OF ALL N=514 \checkmark
JOURNALS: ')
disp('---
TT = wordCloudCounts(textData)
```

```
numTopics = 10;
words = ["international" "journal" "science" "european" "american" "asian"]
newBag = removeWords(cleanedBag,words)
rng('default');
mdl = fitlda(newBag, numTopics);
figure;
for topicIdx = 1:4
    subplot(2,2,topicIdx)
    %wordcloud(mdl,topicIdx,'HighlightColor','black','MaxDisplayWords',N1);
    wordcloud(mdl,topicIdx,'HighlightColor','black');
    title("Topic: " + topicIdx)
end
words = ["international" "journal" "science" "european" "american" "asian"]
cleanedDocuments = removeWords(cleanedDocuments, words)
f = @(s)s(1:end-1) + " " + s(2:end);
bigrams = docfun(f,cleanedDocuments);
bag2 = bagOfWords(bigrams);
figure
wordcloud(bag2, 'HighlightColor', 'black', 'MaxDisplayWords', N1);
title('Bigram Cloud - titles of scopus journals')
nKeywords = 2;
span = 2;
nCooc = 7;
mode = 'center';
COTable = createCOTable(cleanedDocuments,span, 2, nCooc, mode)
CONetwork = createCONetwork(COTable, 'MI');
figure
visualizeCO(CONetwork, 'EdgeColor', [0 0.8 0.4], 'EdgeWidth', 12, 'FontSize', 14);
bag = bagOfNgrams(cleanedDocuments,'NGramLengths',3);
figure
wordcloud(bag);
tbl = topkngrams(bag, 10)
title("Text Data: Trigrams")
save slik fuzzy
```

.....

TEXT OF THE TITLES OF ALL N=514 JOURNALS

.....

N = 514

sf = 0

sf = 1

frequency of the TEXT OF THE TITLES OF ALL N=514 JOURNALS:

S1 =

314×2 string array

- "Sustainability (Switzerland)" "9"
- "Tourism Geographies" "7"
- "Journal of Business Research" "6"
- "International Journal of Information Management" "5"
- "International journal of infectious diseases : ..." "5"
- "Tijdschrift voor Economische en Sociale Geografie" "5"
- "Agriculture and Human Values"
- "4"
- "2005.04007 Safety Science"

"Health and Human Rights"

- "4"
- "Social Sciences & Humanities Open"
- "4"

"4"

- "International Journal of Environmental Research..."
- "Industrial Marketing Management"
- "International Journal of Law and Psychiatry" "3"
- "Annals of Operations Research" "3"
- "Resources, Conservation and Recycling" "3"
- "Research in Social and Administrative Pharmacy" "3"
- "Diabetes & metabolic syndrome" "3"
- "Journal of Sustainable Finance & Investment" "3"
- "PloS one" "3"
- "British Journal of Social Psychology" "3"
- "2003.10532 arXiv" "23"
- "Geoforum" "2"
- "Journal of Humanistic Psychology" "2"
- "Child Abuse & Neglect" "2"
- "Journal of Infection" "2"
- "American Journal of Preventive Medicine" "2"
- "Trends in Food Science & Technology" "2"
- "AI & SOCIETY" "2"
- "International Journal of Contemporary Hospitali..." "2"
- "Journal of Sustainable Tourism" "2"
- "Journal of Air Transport Management" "2"
- "Health Education & Behavior" "2"
- "Human Resource Development International" "2"
- "Finance Research Letters" "2"

```
"2"
"Dialogues in Human Geography"
                                        "2"
"Global Food Security"
"The Journal of Allergy and Clinical Immunology:..." "2"
"Postdigital Science and Education"
"Transportation Research Interdisciplinary Persp..."
"International journal of environmental research..." "2"
"Sustainability"
"Administrative Theory and Praxis"
                                              "2"
"European Journal of Risk Regulation"
                                               "2"
                                             "2"
"Extractive Industries and Society"
"International Human Rights Law Review"
                                                  "2"
"International Journal of Entrepreneurial Behavi..."
"International Journal on Emerging Technologies"
"JAMA - Journal of the American Medical Associat..." "2"
                                           "2"
"Journal of Adolescent Health"
"Journal of Advanced Research in Dynamical and C..." "2"
"Journal of Behavioral Addictions"
                                             "2"
                                                   "2"
"Journal of Sustainable Finance and Investment"
"Journal of Urban Health"
                                              "2"
"Meditari Accountancy Research"
                                              "16"
"Science of The Total Environment"
                                               "13"
"2003.14102 Chaos, Solitons & Fractals"
"Accident Analysis & Prevention"
"Bulletin of Environmental Contamination and Tox..." "1"
                                      "1"
"Clinical radiology"
                                               "1"
"Educational Philosophy and Theory"
"Intereconomics"
                                               "1"
"International Journal of Nursing Studies"
                                            "1"
"Journal of Psychiatric Research"
                                          "1"
"Mathematical Biosciences"
"Nursing Outlook"
                                        "1"
"Public Health Reports"
"Science"
                                               "1"
"Journal of International Business Studies"
                                        "1"
"Preventive Medicine"
                                             "1"
"Journal of Community Health"
"The Lancet"
```

"International Journal of Sociology and Social P..." "1"

"1" "British Journal of Social Psychology" "1" "Journal of medical virology" "1" "Leisure Sciences" "Annals of Tourism Research" "1" "1" "Journal of Affective Disorders" "1" "Archives of Gerontology and Geriatrics" "Computer Methods and Programs in Biomedicine" "1" "Personality and Individual Differences" "1" "American journal of infection control" "1" "1" "HTS Teologiese Studies / Theological Studies" "Midwifery" "1" "Environmental pollution (Barking, Essex: 1987)" "Seminars in nephrology" "Social science & medicine (1982)" "1" "International Journal of Hospitality Management" 1111 "European Urology" "Applied Energy" "1" "1" "Physics Reports" "Journal of Industrial and Business Economics" "1" "1" "Journal Of Composition Theory" "1" "Government information quarterly" "1" "Diabetic Medicine" "Medical Journal of Indonesia" "1" "1" "The Journal of arthroplasty" "Archives of Psychiatric Nursing" "Research in developmental disabilities" "Journal of voice : official journal of the Voic..." "1" "1" "Critical Care Nursing Clinics of North America" "Environmental and Resource Economics" "1" "1" "Accounting, Auditing & Accountability Journal" "Utilities policy" "1" "Journal of Mental Health" "Global Journal of Flexible Systems Management" "1" "1" "International Journal of Global Business and Co..." "1" "Mathematical Modelling of Natural Phenomena" "1" "Journal of Xidian University" "1" "Archives of Iranian medicine"

"Advances in Life Course Research"

"1"

"1" "Human Resource Management Review" "1" "Progress in Pediatric Cardiology" "Journal of Occupational & Environmental Medicine" "Journal of PeriAnesthesia Nursing" "1" "The Journal of Headache and Pain" "1" "Renewable and Sustainable Energy Reviews" "Transportation Research Part E: Logistics and T..." "1" "Current Issues in Tourism" "Environment, Development and Sustainability" "1" "International journal of hygiene and environmen..." "1" "Journal of Sociology" "1" "Australasian Marketing Journal (AMJ)" "International Journal of Sustainability in High..." "Journal of Purchasing and Supply Management" "1" "Epilepsy & Behavior" "1" "Paediatric Respiratory Reviews" "Management Research" "1" "1" "Nurse Leader" "Journal of the American College of Radiology" "Mathematical biosciences and engineering: MBE" "1" "1" "Journal of The Royal Society Interface" "1" "International Journal of Surgery" "Expert Review of Respiratory Medicine" "1" "1" "Worldwide Hospitality and Tourism Themes" "1" "Asian journal of psychiatry" "1" "Population health management" "1" "medRxiv" "1" "Emerald Emerging Markets Case Studies" "PeerJ" "1" "Cureus" "Environment Systems and Decisions" "1" "1" "Multiple sclerosis and related disorders" "Health policy and technology" "1" "Energy Research & Social Science" "1" "Materials Today: Proceedings" "1" "Frontiers in public health" "Tadris: Jurnal Keguruan dan Ilmu Tarbiyah" "1"

"International Journal of Science and Research"

"1"

```
"International Journal of Health Policy and Mana..." "1"
"Eubios Journal of Asian and International Bioet..." "1"
                                                 "1"
"Sustainable Production and Consumption"
"Heliyon"
"She Ji: The Journal of Design, Economics, and I..." "1"
"Materials Today Chemistry"
"International journal of information technology..." "1"
"Journal of International Business Policy"
                                              "1"
"4open"
                                  "1"
                                          "1"
"The Lancet Digital Health"
                                      "1"
"Global Transitions"
"Research in Globalization"
                                         "1"
"Resources, Conservation & Recycling: X"
                                                "1"
"One Earth"
"International Journal of Financial, Accounting,..." "1"
                                             "1"
"Current Research in Food Science"
"Geography and Sustainability"
                                            "1"
                                            "1"
"Journal of Professional Nursing"
"Aalto University publication series"
                                            "1"
                                         "1"
"Acta Scientific Agriculture"
"AIJR Preprints"
                                             "1"
"American Journal of Economics"
"Archives of Business Research"
                                            "1"
                                              "1"
"Auckland University of Technology"
"BMJ"
                                  "1"
"Books"
"Books"
                                                    "1"
"Center for Customs Law and Customs Research"
"Center for Global Development"
                                          "1"
"Commonwealth Moves"
"COVID-19 Perspectives"
                                              "1"
"Economic analysis summary note"
"Economics and COVID 19"
                                            "1"
"IEEE"
                                  "1"
"Indian Journal of Practical Pediatrics"
"Indira Gandhi Institute of Development Research..." "1"
"Infectious Diseases of Poverty"
```

"INTERNATIONAL JOURNAL OF RESEARCH IN TECHNO..." "1"

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"International Journal of Business and Managemen..." "1"
"International Journal of Emerging Technology an..." "1"
"International Journal of Engineering Research A..." "1"
"International Journal of Innovative Science and..." "1"
"International Journal of Virology and AIDS"
"IOSR Journal Of Humanities And Social Science"
"JMIR Public Health and Surveillance"
                                              "1"
                                    "1"
"Mathematics"
"POLICY BRIEF COVID19 ECONOMY GROUP"
                                                         "1"
"Preventing Chronic Disease"
"Research in Social and Administrative Pharmacy"
                                                   "1"
"Revista Latinoamericana de InvestigaciÃ3n Social"
                                "1"
"RG"
"RG"
                                "1"
"RG"
                                "1"
"RG"
                                919
"RG"
                                "1"
"RG"
                                "1"
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"Exposure to Nitrogen Dioxide (NO2) from Vehicular Emission Could Increase the COVID-19 Pandemic Fatality in India: A Perspective"

"A British Society of Thoracic Imaging statement: considerations in designing local imaging diagnostic algorithms for the COVID-19 pandemic."

"Love and social distancing in the time of Covid-19: The philosophy and literature of pandemics"

"Treating ecological deficit with debt: The practical and political concerns with green bonds"

"Doomsday preppers and the architecture of dread."

"Industrial buying during the coronavirus pandemic: A cross-cultural study"

"Managing the sales force through the unexpected exogenous COVID-19 crisis"

"The Coronavirus crisis in B2B settings: Crisis uniqueness and managerial implications based on social exchange theory"

"COVID-19 Crisis: How to Avoid a â€Lost Generation'"

"Implications for COVID-19: a systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic"

"Existentialâ€'Humanistic Therapy and Disaster Response: Lessons From the COVID-19 Pandemic"

"Introduction to the COVID-19 Special Issue 1"

 $"Psychological impact of coronavirus disease (2019) (COVID-19) \ epidemic on medical staff in different posts in China: A multicenter study"\\$

 $"Mathematical \ assessment \ of \ the \ impact \ of \ non-pharmaceutical \ interventions \ on \ curtailing \ the \ 2019 \ novel \ Coronavirus"$

"Immediate Psychological Impact on Nurses working at 42 Government-Designated Hospital During COVID-19 Outbreak in China: a cross-sectional study"

''"Alert to the Necessities of the Emergencyâ€□: U.S. Nursing during the 1918 Influenza Pandemic''

"Call for transparency of COVID-19 models"

"International HRM insights for navigating the COVID-19 pandemic: Implications for future research and practice"

[&]quot;Adolescent driving behavior before and during restrictions related to COVID-19"

"A vulnerability-based approach to human-mobility reduction for countering COVID-19 transmission in London while considering local air quality"

"Air quality changes in New York City during the COVID-19 pandemic"

"COVID-19 and the environment: A critical review and research agenda"

"COVID-19 lockdown effects on air quality by NO2 in the cities of Barcelona and Madrid (Spain)"

"Critical review of social, environmental and health risk factors in the Mexican indigenous population and their capacity to respond to the COVID-19"

"Environment and Covid-19: Pollutants, impacts, dissemination, management and recommendations for facing future epidemic threats"

"First proof of the capability of wastewater surveillance for COVID-19 in India through detection of genetic material of SARS-CoV-2"

"Inter nation social lockdown versus medical care against COVID-19, a mild environmental insight with special reference to India"

"Rethinking and optimising plastic waste management under COVID-19 pandemic: Policy solutions based on redesign and reduction of single-use plastics and personal protective equipment"

"Reverse logistics network design for medical waste management in the epidemic outbreak of the novel coronavirus (COVID-19)"

"The effects of COVID-19 induced lockdown measures on maritime settings of a coastal region"

"When the fourth water and digital revolution encountered COVID-19"

"A spatio-temporal analysis for exploring the effect of temperature on COVID-19 early evolution in Spain."

"Food waste management during the COVID-19 outbreak: a holistic climate, economic and nutritional approach."

"GIS-based spatial modeling of COVID-19 incidence rate in the continental United States."

"Wastewater surveillance for population-wide Covid-19: The present and future."

"Mental Distress during the COVID-19 Pandemic among US Adults without a Pre-existing Mental Health Condition: Findings from American Trend Panel Survey"

"COVID-19 Pandemic: An Insult Over Injury for Lebanon"

"Dementia prevention, intervention, and care: 2020 report of the Lancet Commission"

"COVID-19 in Africa: socio-economic impact, policy response and opportunities"

"The contagion of mortality: A terror management health model for pandemics"

"Vulnerabilities of Syrian refugee children in Turkey and actions taken for prevention and management in terms of health and wellbeing"

"Data-informed recommendations for services providers working with vulnerable children and families during the COVID-19 pandemic"

"Case fatality rate analysis of Italian COVID-19 outbreak."

"Covid-19â€s impact on supply chain decisions: Strategic insights from NASDAQ 100 firms using Twitter data"

"I'll trade you diamonds for toilet paper: Consumer reacting, coping and adapting behaviors in the COVID-19 pandemic"

"Investigating the emerging COVID-19 research trends in the field of business and management: A bibliometric analysis approach"

"The future of business education: A commentary in the shadow of the Covid-19 pandemic."

"The impact of Covid-19 pandemic on corporate social responsibility and marketing philosophy."

"Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research"

"Adventure in the Age of COVID-19: Embracing Microadventures and Locavism in a Post-Pandemic World"

"Capacity in the time of Coronavirus"

"Mental health and capacity laws in Northern Ireland and the COVID-19 pandemic: Examining powers, procedures and protections under emergency legislation"

"The COVID-19 pandemic and the human rights of persons with mental and cognitive impairments subject to coercive powers in Australia"

"Social costs of tourism during the COVID-19 pandemic"

"SARS-CoV-2 infection, clinical features and outcome of COVID-19 in United Kingdom nursing homes"

"Snapshot PCR Surveillance for SARS-CoV-2 in Hospital Staff in England."

"Elevated depression and anxiety symptoms among pregnant individuals during the COVID-19 pandemic"

"COVID-19 Exposures and Infection Control among Home Care Agencies"

"Non Pharmaceutical Interventions for Optimal Control of COVID-19"

"Behavioral immune system linked to responses to the threat of COVID-19"

"Exploring Stress Coping Strategies of Frontline Emergency Health Workers dealing Covid-19 in Pakistan: A Qualitative Inquiry."

"Impacts of epidemic outbreaks on supply chains: mapping a research agenda amid the COVID-19 pandemic through a structured literature review"

"Quality management in humanitarian operations and disaster relief management; a review and future research directions"

"Viable supply chain model: integrating agility, resilience and sustainability perspectivesâ€'lessons from and thinking beyond the COVID-19 pandemic"

"Being human in the time of Covid-19"

"Sustaining quality midwifery care in a pandemic and beyond"

"COVID-19, digital privacy, and the social limits on data-focused public health responses"

"Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life"

"Impacts of COVID-19: A research agenda to support people in their fight"

"Inside out and outside in: How the COVID-19 pandemic affects self-disclosure on social media"

"The role of IS in the covid-19 pandemic: A liquid-modern perspective"

"The impact of COVID-19 as a necessary evil on air pollution in India during the lockdown."

"To Tweet or Not to Tweet, That Is the Question."

"The toxic effects of subjective wellbeing and potential tonics."

"COVID-19 and China's Hotel Industry: Impacts, a Disaster Management Framework, and Post-Pandemic Agenda"

"Telemedicine and Smart Working: Recommendations of the European Association of Urology"

"Security of supply, strategic storage and Covid19: Which lessons learnt for renewable and recycled carbon fuels, and their future role in decarbonizing transport?"

"COVID-19 and SARS-CoV-2. Modeling the present, looking at the future"

"Supply chain contagion and the role of industrial policy"

"Corporate Social Responsibility Practices by Indian Industries during Covid-19"

"Smart technologies for fighting pandemics: The techno- and human- driven approaches in controlling the virus transmission."

"Diabetes and COVIDâ€□19: psychosocial consequences of the COVIDâ€□19 pandemic in people with diabetes in Denmarkâ€"what characterizes people with high levels of COVIDâ€□19â€□related worries?"

"Associations Between Media Exposure and Mental Distress Among U.S. Adults at the Beginning of the COVID-19 Pandemic"

"Perceived Discrimination and Mental Distress Amid the COVID-19 Pandemic: Evidence From the Understanding America Study"

"Social responsibility of medical journal: a concern for COVID-19 pandemic"

"Humanitarian Needs: The Arthroplasty Community and the COVID-19 Pandemic."

"Psychological effects of nurses and midwives due to COVID-19 outbreak: The case of Turkey"

- "Closing the circle: an agroecological response to covid-19"
- "COVID-19 and disruptions to food systems."
- "COVID-19: fight or flight."
- "Industrial seafood systems in the immobilizing COVID-19 moment"
- "A balanced approach to decision-making in supporting people with IDD in extraordinarily challenging times."
- "Psychological Stress and Vocal Symptoms Among University Professors in Israel: Implications of the Shift to Online Synchronous Teaching During the COVID-19 Pandemic."
 - "Igniting Change Supporting the Well-Being of Academicians Who Practice and Teach Critical Care"
 - "Challenges, opportunities, and innovations for effective solid waste management during and post COVID-19 pandemic"
 - "Impact of coronavirus (COVID-19) spread-prevention actions on urban water consumption"
 - "A Brave New World: Lessons from the COVID-19 Pandemic for Transitioning to Sustainable Supply and Production."
 - "Will COVID-19 affect food supply in distribution centers of Brazilian regions affected by the pandemic?"
 - "Will the COVID-19 pandemic make us reconsider the relevance of short food supply chains and local productions?"
 - "Cross-Country Comparisons of Covid-19: Policy, Politics and the Price of Life"
 - "EXPOSED: An occupant exposure model for confined spaces to retrofit crowd models during a pandemic"
 - "Activities of employers and OHS services during the developing COVID-19 epidemic in Poland"
 - "Reflecting on the safety zoo: Developing an integrated pandemics barrier model using early lessons from the Covid-19 pandemic"
- "The scientific literature on Coronaviruses, COVID-19 and its associated safety-related research dimensions: A scientometric analysis and scoping review."
 - "The COVID-19 office in transition: cost, efficiency and the social responsibility business case"
 - "Prediction paradigm: the human price of instrumentalism"
 - "Those who do not move, do not notice their (supply) chainsâ€'inconvenient lessons from disruptions related to COVID-19"
 - "Does public ownership of utilities matter for local government water policies?"
 - "COVID-19's impact on the hospitality workforce â€' new crisis or amplification of the norm?"
 - "Hospitality, tourism, human rights and the impact of COVID-19"
 - "Social distancing versus early detection and contacts tracing in epidemic management"
 - "COVID-ABS: An agent-based model of COVID-19 epidemic to simulate health and economic effects of social distancing interventions"
 - "A hybrid multi-scale model of COVID-19 transmission dynamics to assess the potential of non-pharmaceutical interventions"
 - "A mathematical study on the spread of COVID-19 considering social distancing and rapid assessment: The case of Jakarta, Indonesia"
 - "Analysis of a mathematical model for COVID-19 population dynamics in Lagos, Nigeria"
 - "Analysis of spatiotemporal characteristics of big data on social media sentiment with COVID-19 epidemic topics"
 - "Applicability of time fractional derivative models for simulating the dynamics and mitigation scenarios of COVID-19"
 - "COVID-19 created chaos across the globe: Three novel quarantine epidemic models"
 - "Global stability and cost-effectiveness analysis of COVID-19 considering the impact of the environment: using data from Ghana"
 - "Going by the numbers: Learning and modeling COVID-19 disease dynamics"
 - "Modeling and prediction of COVID-19 in Mexico applying mathematical and computational models"
 - "Analysis of the impact of COVID-19 on the correlations between crude oil and agricultural futures."
 - "Coronavirus pandemic: A predictive analysis of the peak outbreak epidemic in South Africa, Turkey, and Brazil."
 - "COVID 19 and its mental health consequences"

- "Smart Korea: Governance for smart justice during a global pandemic"
- "The â€ewar over tourismâ€□: challenges to sustainable tourism in the tourism academy after COVID-19"
- "A SWOT analysis of China's air cargo sector in the context of COVID-19 pandemic"
- "To bargain or not to bargain: Airlines, legitimacy and nonmarket strategy in a COVID-19 world"
- "Strategies for Managing the Impacts of Disruptions During COVID-19: an Example of Toilet Paper"
- "Framework for Manufacturing in Post-COVID-19 World Order: An Indian Perspective"
- "Heterogeneous social interactions and the COVID-19 lockdown outcome in a multi-group SEIR model"
- "A Markov Model for Prediction of Corona Virus COVID-19 in India- A Statistical Study"
- "Global Incidence and Mortality Rate of COVID-19; Special Focus on Iran, Italy and China."
- "Understanding the effects of Covid-19 through a life course lens"
- "Structuring for innovative responses to human resource challenges: A skunk works approach"
- "Disruption of healthcare: Will the COVID pandemic worsen non-COVID outcomes and disease outbreaks?"
- "Commercial Transport During a Pandemic: Network Analysis to Reconcile COVID-19 Diffusion and Vital Supply Chain Resilience"
- "Role of Anesthesia Nurses in the Treatment and Management of Patients With COVID-19"
- "Moving Health Education and Behavior Upstream: Lessons From COVID-19 for Addressing Structural Drivers of Health Inequities"
- "Gender Analysis of COVID-19 Outbreak in South Korea: A Common Challenge and Call for Action"
- "Factors associated with the presence of headache in hospitalized COVID-19 patients and impact on prognosis: a retrospective cohort study"
 - "Asymptomatic patients as a source of COVID-19 infections: A systematic review and meta-analysis."
 - "Distinctive trajectories of COVID-19 epidemic by age and gender: a retrospective modeling of the epidemic in South Korea."
 - "Estimation of the probable outbreak size of novel coronavirus (COVID-19) in social gathering events and industrial activities."
 - "Iron: Innocent bystander or vicious culprit in COVID-19 pathogenesis?"
 - "Pathways to COVID-19 'community protection'."
 - "Minimising the present and future plastic waste, energy and environmental footprints related to COVID-19"
- "A decision support system for demand management in healthcare supply chains considering the epidemic outbreaks: A case study of coronavirus disease 2019 (COVID-19)"
 - "HRD research and practice after â€The Great COVID-19 Pauseâ€M: the time is now for bold, critical, research"
 - "Strategic flexibility analysis of HRD research and practice post COVID-19 pandemic"
- "Effects of tourism CSR on employee psychological capital in the COVID-19 crisis: from the perspective of conservation of resources theory"
 - "Global assessment of environment, health and economic impact of the novel coronavirus (COVID-19)"
 - "Estimation of the time-varying reproduction number of COVID-19 outbreak in China."
 - "A sociology of Covid-19"
 - "Commentary: Opportunities and challenges of technology in relationship marketing"
 - "A post COVID-19 future tourism re-imagined and re-enabled"
 - "â€eWe can't return to normalâ€□: committing to tourism equity in the post-pandemic age"
 - "Cancelling March Madness exposes opportunities for a more sustainable sports tourism economy"
 - "Human flourishing, tourism transformation and COVID-19: a conceptual touchstone"
 - "Human flourishing, tourism transformation and COVID-19: a conceptual touchstone"

- "Pandemics, transformations and tourism: be careful what you wish for"
- "Socialising tourism for social and ecological justice after COVID-19"
- "The COVID-19 pandemic and the growing need to train engineers aligned to the sustainable development goals"
- "Researching the future of purchasing and supply management: The purpose and potential of scenarios"
- "Epilepsy self-management during a pandemic: Experiences of people with epilepsy"
- "Consequences of physical distancing emanating from the COVID-19 pandemic: An Australian perspective"
- "Understanding employee responses to COVID-19: a behavioral corporate social responsibility perspective"
- "Rapid Validation of Clinical Competencies in a Time of Crisis"
- "Covid-19 and Optimal Portfolio Selection for Investment in Sustainable Development Goals"
- "The role of ESG performance during times of financial crisis: Evidence from COVID-19 in China"
- "Burnout and Posttraumatic Stress Disorder in the Coronavirus Disease 2019 (COVID-19) Pandemic: Intersection, Impact, and Interventions"
 - "COVID-19 information propagation dynamics in the Chinese Sina-microblog."
 - "Community pharmacy response to infection control during COVID-19. A cross-sectional survey"
- "Emergency preparedness and response (EP&R) by pharmacy professionals in India: Lessons from the COVID-19 pandemic and the way forward"
- "Structural and operational redesigning of patient-centered ambulatory care pharmacy services and its effectiveness during the COVID-19 pandemic"
 - "Comparative estimation of the reproduction number for pandemic influenza from daily case notification data"
 - "Impact of the Coronavirus (COVID-19) pandemic on surgical practice Part 2 (surgical prioritisation)"
- "Mortality in COVID-19 patients with acute respiratory distress syndrome and corticosteroids use: a systematic review and metaanalysis"
 - "Learning from sustainability practice: case examples from Accor, Scandic and Atlantica"
 - "Psychosocial impact of COVID-19."
 - "Applications of industry 4.0 to overcome the COVID-19 operational challenges"
 - "Is it the COVID-19 happy hypoxia syndrome or the COVID 19 infodemic syndrome?"
 - "The COVID-19 pandemic, personal reflections on editorial responsibility."
- "Accountability to Population Health in the COVID-19 Pandemic: Designing Health Care Delivery Within a Social Responsibility Framework."
 - "Understanding Epidemic Data and Statistics: A case study of COVID-19"
 - "Canadian banks' responses to COVID-19: a strategic positioning analysis"
 - "ESG ratings and financial performance of exchange-traded funds during the COVID-19 pandemic"
 - "Obstacles to sustainable finance and the covid19 crisis"
 - "Geographies of the COVID-19 pandemic"
 - "Necrocapitalist networks: COVID-19 and the â€dark side' of economic geography"
 - "Corona, command and capitalism"
 - "Severe airport sanitarian control could slow down the spreading of COVID-19 pandemics in Brazil"
 - "COVID-19 Trends and Forecast in the Eastern Mediterranean Region With a Particular Focus on Pakistan"
- "Trends and applications of resilience analytics in supply chain modeling: systematic literature review in the context of the COVID-19 pandemic"

- "COVID-19 pandemic: the experience of a multiple sclerosis centre in Chile."
- "All for one and one for all: Why a pandemic preparedness league of nations?"
- "Covid-19 lockdowns, income distribution, and food security: An analysis for South Africa"
- "Rising concerns over agricultural production as COVID-19 spreads: Lessons from China"
- "Clinician Wellness During the COVID-19 Pandemic: Extraordinary Times and Unusual Challenges for the Allergist/Immunologist"
- "Health and Economic Outcomes of Home Maintenance Allergen Immunotherapy in Select Patients with High Health Literacy during the COVID-19 Pandemic: A Cost-Effectiveness Analysis During Exceptional Times"
- "Rethinking the meaning of â€elandscape shocksâ€□ in energy transitions: German social representations of the Fukushima nuclear accident"
 - "Model for prediction of death rate due to COVID-19 transmission and required precautions"
 - "Transitioning Out of the Coronavirus Lockdown: A Framework for Evaluating Zone-Based Social Distancing."
 - "COVID-19 Outbreak on Environment: Profile of Islamic University Students in HOTS-AEP-COVID-19 and PEB-COVID-19"
 - "The Role of the eELMIS as a Tool of PHE Supply Chain Management"
 - "COVID-19 and Power in Global Health"
 - "COVID-19 must Push Bioethics Journals to Open Access"
 - "COVID-19 debunks the myth of socially sustainable supply chain: A case of the clothing industry in South Asian countries"
 - "Exploring COVID-19 stress and its factors in Bangladesh: A perception-based study"
 - "Design Research Education and Global Concerns,"
 - "Resilient and agile engineering solutions to address societal challenges such as coronavirus pandemic"
 - "Counting the cost of COVID-19."
 - "Evidence-based policymaking and the wicked problem of SDG 5 Gender Equality"
 - "Shooting Yourself First in the Foot, then in the Head: Normative Democracy Is Suffocating, and then the Coronavirus Came to Light"
 - "Teaching in the Age of Covid-19"
 - "COVID-19: Monitoring the propagation of the first waves of the pandemic"
 - "Effects of human mobility restrictions on the spread of COVID-19 in Shenzhen, China: a modelling study using mobile phone data"
- "A systemic approach to resilience and ecological sustainability during the COVID-19 pandemic: Human, societal, and ecological health as a system-wide emergent property in the Anthropocene"
 - "GAIA 3.0: Effects of the Coronavirus Disease 2019 (COVID-19) outbreak on sustainable development and future perspectives"
 - "Adherence to social distancing and wearing of masks within public transportation during the COVID 19 pandemic"
 - "Impact of COVID-19 on transportation in Lagos, Nigeria"
 - "The re-direction of small deposit mining: technological solutions for raw materials supply security in a whole systems context"
 - "A changing world, again. How Appreciative Inquiry can guide our growth"
 - "Conflating culture with COVID-19: Xenophobic repercussions of a global pandemic"
 - "Lives or livelihood: Insights from locked-down India due to COVID19"
 - "The socio-economic and psychosocial impact of Covid-19 pandemic on urban refugees in Uganda"
 - "Overcoming the Arrogance of Ignorance: Supply-Chain Lessons from COVID-19 for Climate Shocks"
 - "Ethical business practice and short term earning intensity during the Covid-19 crisis in Bangladesh"
 - "Perspectives from CO+RE: How COVID-19 changed our food systems and food security paradigms"
 - "COVID-19: Challenges to GIS with Big Data"

- "The Clinical Nurse Leader and COVID-19: Leadership and quality at the point of care"
- "A simple iterative map forecast of the COVID-19 pandemic"
- "Mathematical Modeling of Epidemic Diseases; A Case Study of the COVID-19 Coronavirus"
- "Critical Impact of Social Networks Infodemic on Defeating Coronavirus COVID-19 Pandemic: Twitter-Based Study and Research Directions"
- "Data-Driven Methods to Monitor, Model, Forecast and Control Covid-19 Pandemic: Leveraging Data Science, Epidemiology and Control Theory"
 - "Modeling Control, Lockdown \& Exit Strategies for COVID-19 Pandemic in India"
 - "A Parametrized Nonlinear Predictive Control Strategy for Relaxing COVID-19 Social Distancing Measures in Brazil"
 - "COVID-19 Data Analysis and Forecasting: Algeria and the World"
 - "Clustering patterns connecting COVID-19 dynamics and Human mobility using optimal transport"
 - "Global Short-Term Forecasting of Covid-19 Cases"
 - "COVID-19 incidence and R decreased on the Isle of Wight after the launch of the Test, Trace, Isolate programme"
 - "COVID-19 Induced Anxiety and Protective Behaviors During COVID-19 Outbreak: Scale Development and Validation"
 - "CoVID-19 prediction for India from the existing data and SIR(D) model study"
 - "Estimates of regional infectivity of COVID-19 in the United Kingdom following imposition of social distancing measures"
 - "FORECASTING COVID-19 PANDEMIC: A DATA-DRIVEN ANALYSIS"
 - "Impact of Social Vulnerability on COVID-19 Incidence and Outcomes in the United States"
 - "Modelling the impact of interventions on the progress of the COVID-19 outbreak including age segregation"
 - "Nayak-2020-Impact of Social Vulnerability on C.pdf"
 - "Social interventions can lower COVID-19 deaths in middle-income countries"
- "Spatial and temporal regularization to estimate COVID-19 Reproduction Number R(t): Promoting piecewise smoothness via convex optimization"
 - "Testing, tracing and isolation in compartmental models"
 - "The effect of large-scale anti-contagion policies on the coronavirus (covid-19) pandemic"
 - "The effective reproductive number (Rt) of COVID-19 and its relationship with social distancing"
 - "A model for COVID-19 transmission in Connecticut."
 - "Agile planning: Avoiding disaster in the grocery supply chain during COVID-19 crisis"
 - "Food Supply Chain Disruptions and Resilience Under the Stress of COVID-19: Evidence from Nepal"
 - "Some Areas of Damage due to COVID-19 in Haryana"
 - "A Pursuit for a â€Holistic Social Responsibility Strategic Framework'Addressing COVID-19 Pandemic Needs"
 - "COVID-19 and Change"
 - "IMPACT OF COVID-19 ON PROCUREMENT & SUPPLY CHAINS a way forward for New Zealand?"
 - "Covid-19: how to be careful with trust and expertise on social media"
 - "Law in the Time of COVID-19"
 - "Law in the Time of COVID-19_5.pdf"
 - "WCO on COVID-19: The WCO Private Sector Consultative Group outlines solutions to humanitarian and business needs"
 - "Principles for Phone-Based Assessments of Learning"
 - "Resourcing the Sustainability and Recovery of the Sport Sector during the Coronavirus Pandemic"

- "Research on COVID-19 from across the Arts, Humanities and Social Sciences at the University of Edinburgh"
- "What impact does COVID-19 have on the Congolese economy and international trade?"
- "The Discipline of Economics in a Post COVID-19 World"
- "The Role of personal Digital Twins"
- "DIagnosis of COVID 19 in Children"
- "Covid-19: Impact on the Indian Economy"
- "Transmission patterns of COVID-19 in the mainland of China and the efficacy of different control strategies: a data- and model-driven study"
- "STUDY ON THE APPLICATION OF 3D PRINTING TECHNOLOGY TO COMBAT GLOBAL SUPPLY CHAIN DISRUPTION IN HOSPITALS DURING COVID 19 PANDEMIC"
 - "Impacts of COVID 19 on supply chain operations in Nigeria"
 - "COVID-19 Global Pandemic: Impact on Management of Supply Chain"
 - "Lockdown Period and Information Sources"
- "Black-White Risk Differentials in COVID-19 (SARS-COV2) Transmission, Mortality and Case Fatality in the United States: Translational Epidemiologic Perspective and Challenges."
 - "The Place of Social Recovery in Mental Health and Related Services."
- "The Influence of Supply Chain Management on the Creative Economy Performance of the Culinary Sub-Sector During the COVID-19 Pandemic"
 - "Emerging and Re-Emerging Viral Diseases: The Case of Coronavirus Disease-19 (COVID-19)"
- "Analysis of Human Condition & Social/Economical Problems arisen due to the spread of Corona Virus (COVID-19) and Negative role of Main stream Media in India."
- "Prediction of the COVID-19 Pandemic for the Top 15 Affected Countries: Advanced Autoregressive Integrated Moving Average (ARIMA) Model"
 - "On Estimating the Number of Deaths Related to Covid-19"
 - "Forecasting the novel coronavirus COVID-19."
 - "Google searches for suicide and suicide risk factors in the early stages of the COVID-19 pandemic"
 - "Modeling strict age-targeted mitigation strategies for COVID-19"
 - "A sovereign social bond to fill a funding gap for the Covid-19 crisis response"
 - "Incorporating Geographic Information Science and Technology in Response to the COVID-19 Pandemic"
- "Research in Social and Administrative Pharmacy Resilience in the time of pandemic: The experience of community pharmacists during COVID-19"
 - "How the COVID-19 will redefine the Global Supply Chains"
 - "Dealing with COVID-19 Across Countries"
 - "Effect of COVID-19 on the Indian Economy and Supply Chain"
 - "Exiting a Covid-19 lockdown: the bumpy road ahead for many supply chains"
 - "Mixing food with politics: how COVID-19 exposed inequalities in Brazil's food supply chain"
 - "POST-COVID SUPPLY CHAINS IN AGRI-FOOD: SME CAPACITY PREPAREDNESS"
 - "The Origin, Spreading, and the Expected Global Course of COVID-19 and its Socio-Economic Consequences"
 - "Using the COVID-19 Response to Realign India's Electronics Supply Chain"
 - "A Reflective Essay on What Public Relations Is: Its Role in Strategic Communication Management in Organizations and MNCs"
 - "Managing food supply chain amid COVID-19: Insights from global efforts"

"Exiting a COVID-19 Lockdown: The Bumpy Road Ahead for Many Supply Chains"

"Lessons Learned from the COVID-19 Pandemic Exposing the Shortcomings of Current Supply Chain Operations: A Long-Term Prescriptive Offering"

"Sweden Backcasting, Now?â€'Strategic Planning for Covid-19 Mitigation in a Liberal Democracy"

"Palestine Radar Model (PRM) for Predicting the Number of Infected Cases of COVID-19 Virus in Palestine"

"â⊕rThe COVID-19 Crisisâ⊕ as an opportunity for introspection: A multilevel reflections on values, needs, trust and leadership in the future"

"The Extractive Industries and Society Socially distanced school-based nutrition program under COVID 19 in the rural Niger Delta"

"Build back better: Designing a Canadian economic system that grows well-being and quality of life"

"Chloroquine and hydroxychloroquine as potential therapies against COVID-19"

"Chloroquine and hydroxychloroquine as potential therapies against COVID-19"

"Considerations for people from minority groups in the Covid-19 pandemic"

"Corporate Social Responsibility in times of Covid-19 pandemic"

"Corporate Social Responsibility, Occupational Safety and Sustainability in the Construction Sector. Case BI Group"

"COVID 19: Managing Supply Chain Risk and Disruption"

"COVID-19"

"COVID-19 and Responsible Business Conduct"

"COVID-19 and South Asia: National Strategies and Subregional Cooperation for Accelerating Inclusive, Sustainable and Resilient Recovery"

"COVID-19 and the Global Supply Chain"

"COVID-19 crisis: A call for responsible leadership research"

"COVID-19: Trade restrictions are worst possible response to safeguard food security"

 $"COVID-19: Trade\ restrictions\ are\ worst\ possible\ response\ to\ safeguard\ food\ security\ |\ IFPRI: International\ Food\ Policy\ Research\ Institute"$

"DISRUPTIVE TECHNOLOGIES AND RESPONSIVENESS OF SUPPLY CHAINS AMID THE COVID-19 PANDEMIC: A GLOBAL PERSPECTIVE"

"Doing the most good as a scientist"

"ECONOMIC RESILIENCY IN THE FACE OF ADVERSITY"

"Economic Resiliency in the Face of Adversity"

"Economic Resiliency in the Face of Adversity"

"Economics in the Time of COVID-19"

"Estimation of exponential growth rate and basic reproduction number of the coronavirus disease 2019 (COVID-19) in Africa"

"Ethical considerations in responding to the COVID-19 pandemic"

"How can the circular economy model lead to a more sustainable fashion supply chain?"

"Identification and Estimation of the SEIRD Epidemic Model for COVID-19"

"MEMORANDUM ON THE HUMAN RIGHTS DIMENSIONS OF COVID-19 PRESENTED TO THE SENATE AD HOC COMMITTEE ON THE COVID-19 SITUATION"

"MK&C: COVID-19 â€' implications for business"

"Open Science Beyond Open Access: For and with communities"

"Open Science Beyond Open Access: For and with Communities | Leslie Chan et al. | Canadian Commission for UNESCO's IdeaLab, Ottawa, Canada, July 2020"

"Open Science Beyond Open Access: For and with Communities | Leslie Chan et al. | Canadian Commission for UNESCO's IdeaLab, Ottawa, Canada, July 2020"

"(PDF) COVID-19: Trade restrictions are worst possible response to safeguard food security"

"Practical guide for the prevention and mitigation of COVID-19 in agriculture"

"Rebuilding a More Sustainable Fashion Industry After COVID-19"

"REBUILDING TO LAST: HOW TO DESIGN AN INCLUSIVE, RESILIENT AND SUSTAINABLE GROWTH STRATEGY AFTER COVID-19"

"Recommendations On Addressing Challenges Faced by Migrant Workers during COVID-19"

"Respecting Human Rights in the Time of the COVID-19 Pandemic |"

"Statistics Brief - India Bus.pdf"

"STOP COVID-19 Monitoring Brief: The tobacco industry, its interests and allies"

"THE SOCIAL AND ECONOMIC IMPACT OF COVID-19 IN THE ASIA-PACIFIC REGION"

"THE IMPACT OF COVID-19 ON THE SUSTAINABLE DEVELOPMENT AGENDA"

"The importance of Corporate Social Responsibility in the time of Covid-19"

"The Poultry Industry and Its Supply Chain in Malaysia: Challenges from the Covid-19 Emergency"

"Understanding COVID-19: A Behavioral Corporate Social Responsibility Perspective"

"Value of treatment for COVID19"

"COVID-19 and Trade Policy: Why Turning Inward Won't Work"

"The CHHRGE Report: Building an effective cross-sector partnership to address COVID-19 among vulnerably housed populations of Chicago"

"COVID-19: THE CREATIVE FIGHTBACK"

"Global Food Industry Supply Chains in Times of Crisis Through a Sustainable Supply Chain Lens"

"Covid-19 comprehensive explainer: science, response, lessons & God"

"Ecolabelling for tourism enterprises What, why and how"

"SOCIOLOGICAL READINGS OF THE PANDEMIC IN IRELAND"

"Better Recovery, Better World: Resetting climate action in the aftermath of the COVID-19 pandemic"

"Africa trade and Covidâ€19"

"VULNERABLE: The Law, Policy and Ethics of COVID-19"

"Major structural changes in the eu policies due to the problems and risks caused by covid-19"

"Salient target populations and the subcategorization of deviants in the release of inmates during the COVID-19 pandemic"

"Sense of community responsibility at the forefront of crisis management"

"Repurchase intention and word of mouth factors in the millennial generation against various brands of Boba drinks during the Covid 19 pandemic"

"Cohesion in Distancing"

"The Brazilian Amazon in times of COVID-19: From crisis to transformation?"

"Research on occupational health and safety of medical staff based on iso 45001"

"Positive Public Health Ethics: Toward Flourishing and Resilient Communities and Individuals"

"Concealment of potential exposure to COVID-19 and its impact on outbreak control: Lessons from the HIV response"

- "Caring for patients with pain during the COVID-19 pandemic: consensus recommendations from an international expert panel"
- "Cybersociety and university sustainability: The challenge of holistic restructuring in universities in Chile, Spain, and Peru"
- "The ups and downs of COVID-19 epidemics for orthopedic community"
- "Sharing Information on COVID-19: the ethical challenges in the Malaysian setting"
- "Crisis management, global challenges, and sustainable development from an Asian perspective"
- "Editorial: It will go awayâ \(\) \(\) pandemic crisis and business in asia"
- "An urgent call for measures to fight against increasing suicides during COVID-19 pandemic in Nepal"
- "Psychological impacts of the COVID-19 epidemic on Chinese people: Exposure, post-traumatic stress symptom, and emotion regulation"
 - "What should primary care look like after the COVID-19 pandemic?"
 - "Independent review of emergency economic stimulus measures: Global Financial Crisis and COVID-19"
 - "Tourism and the sustainable development goals in Southeast Asia"
 - "Editor responsibility and scientific integrity during the COVID-19 outbreak"
 - "A social identity perspective on COVID-19: Health risk is affected by shared group membership"
 - "Cultural orientation, power, belief in conspiracy theories, and intentions to reduce the spread of COVID-19"
 - "To punish or to assist? Divergent reactions to ingroup and outgroup members disobeying social distancing"
- "Triage of Scarce Critical Care Resources in COVID-19 An Implementation Guide for Regional Allocation: An Expert Panel Report of the Task Force for Mass Critical Care and the American College of Chest Physicians"
 - "The four horsemen of fear: An integrated model of understanding fear experiences during the COVID-19 pandemic"
 - "A publishing pandemic during the COVID-19 pandemic: How challenging can it become?"
 - "The Covid-19 pandemic in Denmark: Big lessons from a small country"
 - "How do agribusinesses thrive through complexity? The pivotal role of e-commerce capability and business agility"
- "COVID-19 Community Stabilization and Sustainability Framework: An Integration of the Maslow Hierarchy of Needs and Social Determinants of Health"
 - "Social environmental injustices against indigenous peoples: the Belo Monte dam"
 - "Accelerating an end to smoking: a call to action on the eve of the FCTC's COP9"
- "COVID-19 and medical education: Challenges and opportunities in Venezuela [COVID-19 y la educaci \tilde{A} 3n m \tilde{A} ©dica: retos y oportunidades en Venezuela]"
 - "Nestlé South Africa: leading multi-stakeholder partnership response in the COVID-19 context"
 - "A new set of tools for Ethnobiologist in the COVID-19 Pandemic"
 - "COVID-19 in Romania: transnational labour, geopolitics, and the Roma â€outsiders'"
- "The smart city as time-space cartographer in COVID-19 control: the South Korean strategy and democratic control of surveillance technology"
 - "Have a heart during the COVID-19 crisis: Making the case for cardiac rehabilitation in the face of an ongoing pandemic"
 - "Taming covid-19 by regulation: An opportunity for self-reflection"
 - "The CoviD-19 pandemic and international trade: Temporary turbulence or paradigm shift?"
- "Adapting to a new normal? 5 key operational principles for a radiology service facing the COVID-19 pandemic"
- "Invisibility and the extractive-pandemic nexus"
- "Socially distanced school-based nutrition program under COVID 19 in the rural Niger Delta"
- "Introduction: Research in the Time of Covid-19"

- "The blue economy-cultural livelihood-ecosystem conservation triangle: The African experience"
- "B Corps: A Socioeconomic Approach for the COVID-19 Post-crisis"
- "Employing a chatbot for news dissemination during crisis: Design, implementation and evaluation"
- "Can the United Nations deliver a feminist future?"
- "Navigating uncertainty, employment and womenâ€Ms safety during COVID-19: Reflections of sexual assault resistance educators"
- "COVID-19 reveals weak health systems by design: Why we must re-make global health in this historic moment"
- "When altruists cannot help: The influence of altruism on the mental health of university students during the COVID-19 pandemic"
- "Addressing the problem of severe underinvestment in mental health and well-being from a human rights perspective"
- "Anti-Roma racism is spiraling during COVID-19 pandemic"
- "Global health in the age of COVID-19: Responsive hhr_final_logo_alone.indd 1 health systems through a right to health fund"
- "Public money creation to maintain fundamental human rights during the COVID-19 pandemic"
- "12 Lessons learned from the management of the coronavirus pandemic"
- "Publishing in the time of pandemic: Editorial policy of a dermatology journal during COVID-19"
- "A response to the persistent digital divide: Critical components of a community network ecosystem"
- "â€Put on your own oxygen mask before helping others': mitigating health care worker risk from COVID-19"
- "Do Civil Liberties Really Matter during Pandemics?"
- "Statement on the Covid-19 Pandemic and Economic, Social and Cultural Rights"
- "Donâ€Mt Uncover that Face! Covid-19 Masks and the Niqab: Ironic Transfigurations of the ECtHRâ€Ms Intercultural Blindness"
- "A comprehensive overview on the implications of financial stability and key policies that will mitigate the impacts of COVID-19"
- "Coronavirus disease (COVID-19) and sport entrepreneurship"
- "The economics of COVID-19: initial empirical evidence on how family firms in five European countries cope with the corona crisis"
- "Modeling impact of word of mouth and E-government on online social presence during COVID-19 outbreak: A multi-mediation approach"
- "Sex and careers of university students in educational practices as factors of individual differences in learning environment and psychological factors during covid-19"
 - "The impact of covid-19 on tourist satisfaction with b&b in zhejiang, china: An importance†performance analysis"
- "The need for the right socio-economic and cultural fit in the COVID-19 response in sub-Saharan Africa: Examining demographic, economic political, health, and socio-cultural differentials in COVID-19 morbidity and mortality"
 - "Indonesian-religious and digital pluralism: Covid-19 impact"
 - "How the COVID-19 pandemic effected economic, social, political, and cultural factors: A lesson from Iran"
 - "Coronavirus (covid-19) and social value co-creation"
 - "Constitutionality and legality of corona virus (COVID-19) in India: Limits of sanction and extent of liberation"
 - "Role of artificial intelligence in transforming the justice delivery system in COVID 19 pandemic"
- "Bios, mythoi and women entrepreneurs: A Wynterian analysis of the intersectional impacts of the COVID-19 pandemic on self-employed women and women-owned businesses"
- "Globalisation and social work education in the Republic of Ireland: Towards informed transnational social work for transnational problems such as COVID-19"
 - "COVID-19 and Dexamethasone: A Potential Strategy to Avoid Steroid-Related Strongyloides Hyperinfection"
 - "Personal Risk and Societal Obligation Amidst COVID-19"

"Attitudes and Psychological Factors Associated with News Monitoring, Social Distancing, Disinfecting, and Hoarding Behaviors among US Adolescents during the Coronavirus Disease 2019 Pandemic"

"Adolescents' Motivations to Engage in Social Distancing During the COVID-19 Pandemic: Associations With Mental and Social Health"

"Risk and Protective Factors for Adolescent and Young Adult Mental Health Within the Context of COVID-19: A Perspective From Nepal"

"Psychological factors associated with quality of life during the coronavirus disease (Covid-19) pandemic: A sem analysis in an context employee"

"Transformational leadership, communication quality influences to perceived organization effectiveness and employee engagement and employee retention during the covid-19 pandemic"

"Information on corona virus disease-19: Between the public's right and state's interests"

"Problematic online gaming and the COVID-19 pandemic"

"Stepping up and stepping out of COVID-19: New challenges for environmental sustainability policies in the global airline industry"

"Coronavirus disease (COVID-19): Spread, awareness and strategic containment"

"Visualising global pandemic: A content analysis of infographics on COVID - 19"

"Coronavirus and value pluralism: A robust ethical perspective on a pandemic"

"Diagnosed With COVID-19, Nope Just Cabin Fever: The Fundamentals of Staying at Home"

"Coronavirus (Covid-19) and the entrepreneurship education community"

"Factors influencing Muslim and non-Muslim consumers' consumption behavior: A case study on halal food"

"We Canâ⊕Mt Just Wash Our Hands: a Primary Care Physicianâ⊕Ms Thoughts on COVID-19 and Her Community"

"Unintended Consequence: Influenza plunges with public health response to COVID-19 in Singapore"

"Corona Crisis and Inequality: Why Management Research Needs a Societal Turn"

"Coronavirus in the era of digital connectivity: Opportunities and challenges"

"Re: Neglected major causes of death much deadlier than COVID-19"

"Survival at the expense of the weakest? Managing modern slavery risks in supply chains during COVID-19"

"Challenges in the Practice of Sexual Medicine in the Time of COVID-19 in the United States"

"Coronavirus (covid-19) and entrepreneurship: changing life and work landscape"

"Canadian banks' responses to COVID-19: a strategic positioning analysis"

"ESG ratings and financial performance of exchange-traded funds during the COVID-19 pandemic"

"Social Work and the Future in a Post-Covid 19 World: A Foresight Lens and a Call to Action for the Profession"

"Ethics in the Time of Coronavirus: Recommendations in the COVID-19 Pandemic"

"Guns, germs, and public history: A conversation with Jennifer Tucker"

"Anatomising failure: there should be a statutory public inquiry into the UK Government's handling of COVID-19"

"An early assessment of the impact of COVID-19 on air transport: Just another crisis or the end of aviation as we know it?"

"Responding to COVID-19: What's the Problem?"

"Slum Health: Arresting COVID-19 and Improving Well-Being in Urban Informal Settlements"

"Corona-associated suicide â€' Observations made in the autopsy room"

"Collective Sensemaking Around COVID-19: Experiences, Concerns, and Agendas for our Rapidly Changing Organizational Lives"

"From SARS to COVID-19: the Singapore journey"

"The Covid-19 pandemic: Provoking thought and encouraging change"

"Rebuilding trust: sustainability and non-financial reporting and the European Union regulation"

"Using the International Integrated Reporting Framework to comply with EU Directive 2014/95/EU: can we afford another reporting faÃsade?"

"Keeping governments accountable: the COVID-19 Assessment Scorecard (COVID-SCORE)"

"Conducting research during the COVID-19 pandemic: How scientific community should be prepared?"

"Good Deeds and Cheap Marketing: The Food Industry in the Time of COVID-19"

"Corporate communication, public relations and reputational risk management in the days of covid-19 [Comunicación corporativa, relaciones pðblicas y gestión del riesgo reputacional en tiempos del covid-19]"

"SDG 4 and the COVID-19 emergency: Textbooks, tutoring, and teachers"

"Cyber Security Responsibilization: An Evaluation of the Intervention Approaches Adopted by the Five Eyes Countries and China"

"COVID-19, health rights of prison staff, and the bridge between prison and public health in Africa"

"Online Book Shopping in Vietnam: The Impact of the COVID-19 Pandemic Situation"

"Trade credit research before and after the global financial crisis of 2008 â€' A bibliometric overview"

"Anesthesia and coronavirus: Solidarity issues [Coronavirus y anestesia: Consideraciones en torno a la solidaridad]"

"Important aspects of prevention of health personnel in hospitals during the epidemic novel coronavirus 2019 [Aspectos importantes de prevención del personal sanitario en los hospitales durante la epidemia del nuevo coronavirus 2019]"

"Digital society: Organizational management after COVID-19 [Sociedad digital: Gestión organizacional tras el covid-19]"

"Restoring dignity with open hiring: Greyston bakery and the recognition of value"

"Against pandemic research exceptionalism"

"Coronavirus-related opportunities for promoting occupational health and safety"

"The Rise of the Data Poor: The COVID-19 Pandemic Seen From the Margins"

"Global health diplomacy amid the COVID-19 pandemic: A strategic opportunity for improving health, peace, and well-being in the CARICOM region-A systematic review"

"Thinking outside the â€box': a discussion of sports fans, teams, and the environment in the context of COVID-19"

"Addressing inequality: The first step beyond COVID-19 and towards sustainability"

"Artificial intelligence in the agri-food system: Rethinking sustainable business models in the COVID-19 scenario"

"Changes in sustainability priorities in organisations due to the COVID-19 outbreak: Averting environmental rebound effects on society"

"Impact of the SARS-CoV-2 on the Italian agri-food sector: An analysis of the quarter of pandemic lockdown and clues for a socio-economic and territorial restart"

"Social innovation and food provisioning during Covid-19: The case of urban-rural initiatives in the Province Of Naples"

"Social justice, food loss, and the sustainable development goals in the era of COVID-19"

"Technology-enhanced auditing in voluntary sustainability standards: The impact of COVID-19"

"The tipping point in the status of socially responsible consumer behavior research? A bibliometric analysis"

"Ignored and invisible: internally displaced persons (IDPs) in the face of COVID-19 pandemic"

"AI governance in the public sector: Three tales from the frontiers of automated decision-making in democratic settings"

"Covid-19: How to be careful with trust and expertise on social media"

"COVID-19: time to plan for prompt universal access to diagnostics and treatments"

"COVID-19: health literacy is an underestimated problem"

"Towards a better world after COVID-19"

"How Can We Quarantine Without a Home? Responses of Activism and Urban Social Movements in Times of COVID-19 Pandemic Crisis in Lisbon"

"Contextualising coronavirus geographically"

"Pandemic Risk Management in Operations and Finance"

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frequency of the text of words of of the TEXT OF THE TITLES OF ALL N=514 JOURNALS:

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"pandemic"	138
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"health"	43
"response"	43
"Coronavirus"	40
"supply"	40
"model"	37
"Chain"	34
"management"	32
"sustainable"	31
"TM"	30
"research"	27
"analysis"	26
"crisis"	26
"time"	26
"Global"	24
"challenges"	21
"food"	20
"outbreak"	20
"effects"	19

[&]quot;Coronavirus and international business: An entrepreneurial ecosystem perspective"

[&]quot;Beyond Coronativism: The Need For Agape"

[&]quot;Biogeopolitics of COVID-19: Asylum-Related Migrants at the European Union Borderlands"

[&]quot;COVID-19 and Alternative Conceptualisations of Value and Risk in GPN Research"

[&]quot;Creative Production of â€COVID-19 Social Distancing' Narratives on Social Media"

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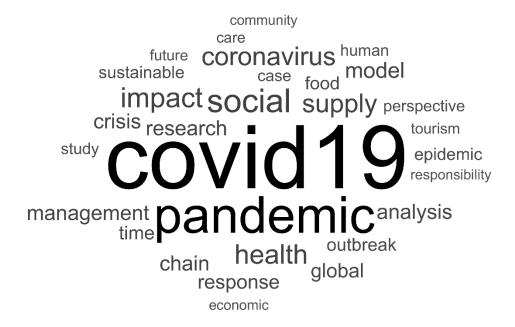
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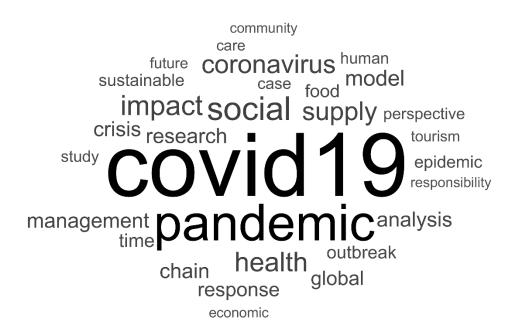
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"novel"	"coronavirus	" "covid19"	4	3
"amid"	"covid19"	"pandemic"	4	3
"food"	"supply"	"chain"	4	3
"lessons"	"covid19"	"pandemic"	3	3
"corona"	"virus"	"covid19"	3	3
"sustainable"	''developm	ent'' ''goal''	3	3

cloud of the bag of words of the TEXT OF THE TITLES OF ALL N=514 JOURNALS



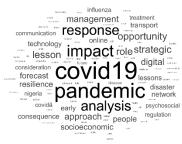
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recommendation protective business corporate responsibility cost factor marketing indian risk SOCIAL time local affect learn COVID 19 personal sector m service pandemic trust suicide challenges perspective framework distancing transition production medium understanding transnational

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postpandemic structural --pharmacy university influence region setting policy environmental experience work care future medical safety covid19 post water ireland change research practice panel ethical against challenge staff therapy hospital hospital implication population student operational support report

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fatality agrifood fatality agrifood special emergency fight fight respond mortality intervention country information city india united surveillance analysis cope strategy Controlvirus prediction integrated rate COVID 19 sarscov2 scenario corona model potential optimal presential and the corona model potential optimal present smart and the corona model potential present smart and the present exposure lockdown exit infection outcomes transmission capacity preparedness incidence prevention vulnerability

Bigram Cloud - titles of scopus journals

social medium response covid19

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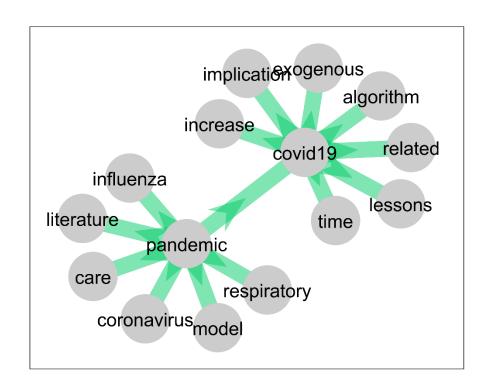
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Text Data: Trigrams

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                                                                                                 supply chain operation
                               transformation covid19 conceptual
                                                                     coronavirus covid19 social
                                                case study covid19 flourishing tourism transformation chan canadian commission
                                      lockdown bumpy road
                                                              supply chain management
                    hydroxychloroquine potential therapy socially distance schoolbased social responsibility time
                                                                     therapy against covid19
                                   canadian commission unescoâ
                                                                   chloroquine hydroxychloroquine potential
```

2.3. The BA of the text of all N=514 articles by using TAT

"pandemic"

```
% run_analy1
clear
clc
close all
disp('TEXT VSEH ?LANKOV VSEH VIROV. ')
disp('--
readFcn = @extractFileText;
fds = fileDatastore('E:\0A COV 19 IN WORLD TRADE\COVID 19 SIR SEIR ITN PAPERS\CSR MULEJ IN COVID\TEKST VSEH VIROV SCOPUS TER
DRUGIH INDEKS IN NEINDEKS\*.txt','ReadFcn',readFcn)
bag = bagOfWords
while hasdata(fds)
str = read(fds);
document = tokenizedDocument(str);
bag = addDocument(bag,document);
end
newBag = removeWords(bag,stopWords)
newBag = removeShortWords(newBag,2);
newBag = removeShortWords(newBag,3);
newBag = removeShortWords(newBag,3);
newBag = removeShortWords(newBag,5)
N1 = input('koliko besed za txt files iz folderja')
if length(N1) == 0
 N1 = size(MostFrequentWords,1)
end
disp('max frekvenca za besede za txt files iz folderja')
tbl = topkwords(newBag,N1)
figure
wordcloud(newBag,'HighlightColor','black','MaxDisplayWords',N1)
title('cloud of the text of text documents (papers body) of all sources')
save_slik_fuzzy
TEXT VSEH ČLANKOV VSEH VIROV.
max frekvenca za besede za txt files iz folderja
tbl =
 100×2 table
     Word
                Count
  "COVID-19"
                    14602
  "health"
                 8275
  "social"
                 7358
```

- "people" 5035
- "public" 4075
- "countries" 4071
- "crisis" 3854
- "Health" 3768
- "supply" 3733
- "research" 3573
- "global" 3386
- "economic" 3184
- "Journal" 2840
- "impact" 2703
- "online" 2650
- "number" 2648
- "measures" 2604
- "support" 2503
- "disease" 2393
- "policy" 2360
- "coronavirus" 2283
- "government" 2277
- "University" 2258
- "including" 2252
- "different" 2248
- "information" 2245
- "workers" 2231
- "Research" 2148
- "response" 2061
- "tourism" 2000
- "services" 1978
- "International" 1963
- "management" 1955
- "important" 1937
- "Social" 1894
- "system" 1890
- "example" 1846
- "patients" 1837
- "outbreak" 1814

"future" 1810

"medical" 1804

"development" 1803

"analysis" 1788

"change" 1748

"population" 1699

"community" 1691

"spread" 1690

"However" 1642

"Covid-19" 1639

"business" 1614

"companies" 1599

"individuals" 1597

"current" 1590

"production" 1587

"economy" 1564

"access" 1549

"available" 1541

"demand" 1525

"mental" 1513

"provide" 1486

"epidemic" 1481

"approach" 1472

"Figure" 1449

"policies" 1441

"United" 1431

"effects" 1431

"Canada" 1423

"lockdown" 1405

"Coronavirus" 1404

"financial" 1389

"Management" 1386

"country" 1377

"Global" 1376

"resources" 1373

"likely" 1370

"international" 1368

"reported" 1366

"Public" 1366

"systems" 1363

"related" 1362

"industry" 1360

"national" 1341

"control" 1332

"sustainable" 1325

"increase" 1318

"environmental" 1315

"market" 1313

"critical" 1309

"governments" 1304

"rights" 1301

"deaths" 1299

"distancing" 1280

"Available" 1269

"review" 1254

"potential" 1250

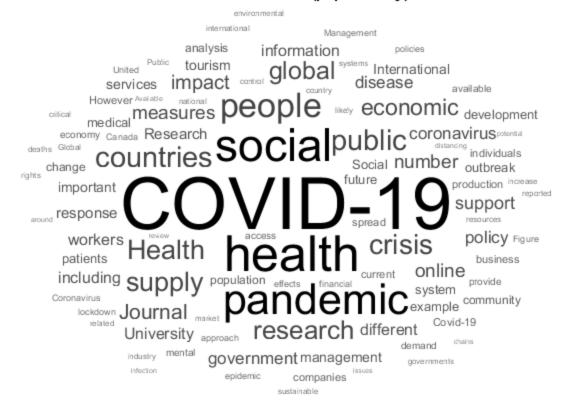
"around" 1241

"chains" 1241

"issues" 1240

"infection" 1222

cloud of the text of text documents (papers body) of all sources



2.4. The BA of the text of all articles of N4 = 117 final chosen papers

```
% run analy1
%
clear
clc
close all
disp('TEXT VSEH ?LANKOV VSEH KON?NIH REDUCIRANIH IZBRANIH "VKLJU?!" VIROV (VSI IZBRANI VIRI - TAKO WOS, SCOPUS, ITN, DO
NEINDEKSIRANIH). ')
disp('-----
readFcn = @extractFileText;
fds = fileDatastore('E:\0A COV 19 IN WORLD TRADE\COVID 19 SIR SEIR ITN PAPERS\CSR MULEJ IN COVID\GLAVNI VIRI ZA ?LANEK\TXT ZA
MATLAB\*.txt','ReadFcn',readFcn)
bag = bagOfWords
while hasdata(fds)
str = read(fds);
document = tokenizedDocument(str);
bag = addDocument(bag,document);
end
newBag = removeWords(bag,stopWords)
newBag = removeShortWords(newBag,2);
newBag = removeShortWords(newBag,3);
newBag = removeShortWords(newBag,3);
newBag = removeShortWords(newBag,5)
```

```
N1 = 100;N2 = 1000;N3 = 30;
disp('max frekvenca za besede za txt files iz folderja')
tbl = topkwords(newBag,N2)
wordcloud(newBag,'HighlightColor','black','MaxDisplayWords',N1)
title('cloud of the text of TEXT VSEH ?LANKOV VSEH KON?NIH REDUCIRANIH IZBRANIH "VKLJU?I" VIROV (VSI IZBRANI VIRI - TAKO WOS,
SCOPUS, ITN, DO NEINDEKSIRANIH')
disp('frequency of the words of TEXT VSEH ?LANKOV VSEH KON?NIH REDUCIRANIH IZBRANIH "VKLJU?!" VIROV (VSI IZBRANI VIRI - TAKO
WOS, SCOPUS, ITN, DO NEINDEKSIRANIH:')
disp('---
textData = document:
cleanedDocuments = tokenizedDocument(textData);
cleanedDocuments = addPartOfSpeechDetails(cleanedDocuments);
cleanedDocuments = removeStopWords(cleanedDocuments);
cleanedDocuments = normalizeWords(cleanedDocuments, 'Style', 'lemma');
cleanedDocuments = erasePunctuation(cleanedDocuments);
cleanedDocuments = removeShortWords(cleanedDocuments,4);
cleanedBag = bagOfWords(cleanedDocuments)
cleanedBag = removeInfrequentWords(cleanedBag,2)
figure
WC=wordcloud(cleanedBag,'HighlightColor','black','MaxDisplayWords',N1)
title('cloud of the bag of words of the TEXT VSEH ?LANKOV VSEH KON?NIH REDUCIRANIH IZBRANIH "VKLJU?I" VIROV (VSI IZBRANI VIRI -
TAKO WOS, SCOPUS, ITN, DO NEINDEKSIRANIH')
figure
% cloud- text
WC1 = wordcloud(cleanedDocuments, 'HighlightColor', 'black', 'MaxDisplayWords', N1)
title('cloud of the text of words of TEXT VSEH ?LANKOV VSEH KON?NIH REDUCIRANIH IZBRANIH "VKLJU?!" VIROV (VSI IZBRANI VIRI - TAKO
WOS, SCOPUS, ITN, DO NEINDEKSIRANIH')
% disp('frequency of the text of words of the papers titles:')
% disp('--
% TT = wordCloudCounts(textData)
numTopics = 3;
words = ["international" "journal" "science" "european" "american" "asian"]
newBag = removeWords(cleanedBag,words)
rng('default');
disp('--
disp('frequency of the words of DIGRAMS - TEXT VSEH ?LANKOV VSEH KON?NIH REDUCIRANIH IZBRANIH "VKLJU?!" VIROV (VSI IZBRANI VIRI
- TAKO WOS, SCOPUS, ITN, DO NEINDEKSIRANIH:')
disp('-----
words = ["international" "journal" "science" "european" "american" "asian"]
cleanedDocuments = removeWords(cleanedDocuments,words)
f = @(s)s(1:end-1) + " " + s(2:end);
bigrams = docfun(f,cleanedDocuments);
bag_a = bagOfNgrams(cleanedDocuments,'NGramLengths',2);
bag2 = bagOfWords(bigrams);
tbl = topkngrams(bag_a,20)
wordcloud(bag2, 'HighlightColor', 'black', 'MaxDisplayWords', N3);
title('Bigram Cloud - TEXT VSEH ?LANKOV VSEH KON?NIH REDUCIRANIH IZBRANIH "VKLJU?I" VIROV (VSI IZBRANI VIRI - TAKO WOS, SCOPUS,
ITN, DO NEINDEKSIRANIH')
disp('-----')
```

disp('frequency of the words of TRIGRAMS OF TEXT VSEH ?LANKOV VSEH KON?NIH REDUCIRANIH IZBRANIH "VKLJU?I" VIROV (VSI IZBRANI VIRI - TAKO WOS, SCOPUS, ITN, DO NEINDEKSIRANIH:') disp('---bag = bagOfNgrams(cleanedDocuments,'NGramLengths',3); figure wordcloud(bag,'HighlightColor','black','MaxDisplayWords',N3); tbl = topkngrams(bag,20) title('Text Data: Trigrams TEXT VSEH ?LANKOV VSEH KON?NIH REDUCIRANIH IZBRANIH VKLJU?I VIROV (VSI IZBRANI VIRI - TAKO WOS, SCOPUS, ITN, DO NEINDEKSIRANIH') save_slik_fuzzy TEXT VSEH ČLANKOV VSEH KONČNIH REDUCIRANIH IZBRANIH "VKLJUČI" VIROV (VSI IZBRANI VIRI - TAKO WOS, SCOPUS, ITN, DO NEINDEKSIRANIH). max frekvenca za besede za txt files iz folderja tbl = 1000×2 table Word Count "COVID-19" 3233 "social" 2066 "supply" 1708 "tourism" 1575 "pandemic" 1527 "health" 1509 "Journal" 1329 "research" 1278 "public" 957 "Research" 953 "crisis" 909

"analysis"

"people"

"global"

"resilience"

"impact"

"Health"

"economic"

"coronavirus"

882

847

832

730

725

704

703

- "management" 650
- "International" 623
- "outbreak" 622
- "epidemic" 587
- "online" 584
- "information" 583
- "disease" 582
- "measures" 576
- "countries" 570
- "companies" 566
- "CrossRef" 557
- "University" 551
- "Social" 537
- "different" 536
- "disruption" 520
- "Management" 517
- "business" 508
- "future" 502
- "demand" 498
- "rights" 491
- "response" 486
- "Ivanov" 481
- "industry" 480
- "effect" 479
- "Tourism" 474
- "support" 458
- "approach" 456
- "factors" 455
- "government" 452
- "effects" 450
- "change" 441
- "important" 440
- "available" 440
- "including" 431
- "chains" 430
- "system" 415

- "number" 399
- "Business" 398
- "development" 390
- "environmental" 390
- "Supply" 389
- "travel" 381
- "performance" 370
- "society" 369
- "consumers" 368
- "positive" 362
- "However" 359
- "example" 356
- "learning" 354
- "related" 354
- "systems" 351
- "sustainable" 348
- "review" 342
- "community" 341
- "impacts" 340
- "disruptions" 339
- "strategies" 336
- "responsibility" 335
- "literature" 333
- "control" 332
- "consumer" 332
- "potential" 331
- "network" 329
- "international" 327
- "services" 327
- "issues" 327
- "corporate" 323
- "accessed" 321
- "access" 320
- "population" 319
- "article" 317
- "employees" 317

"Public" 312 "spread" 311 "resources" 311 "patients" 308 "likely" 308 "policy" 307 "significant" 306 "European" 305 "sustainability" 301 "responses" **300** "workers" 297 "current" 297 "Review" 295 "models" 294 "governments" 292 "United" **290** "studies" **290** "Global" 289 "Coronavirus" 288 "production" 287 "psychological" 286 "practices" 283 "individuals" 280 "changes" 279 "results" 277 "recovery" 276 "national" 275 "Retrieved" 274 "Covid-19" 271 "market" 271 "policies" **270** "Figure" 268 "medical" 265 "challenges" 265 "levels" 264

"context"

"distancing" 263 "outbreaks" 262 "reported" 262 "individual" 262 "office" 262 "lockdown" 260 "Sustainability" 259 "become" 259 "security" 259 "capacity" 257 "Science" 255 "behaviors" 255 "authors" 251 "increase" 251 "groups" 249 "period" 248 "communities" 248 "networks" 248 "provide" 247 "environment" 246 "Production" 245 "Available" 244 "distribution" 244 "activities" 244 "knowledge" 241 "associated" 241 "organizations" 239 "behavior" 239 "consumption" 239 "economy" 237 "affected" 236 "Chinese" 236 "critical" 235 "products" 235 "increased" 235

"initiatives"

"theory" 228 "family" 227 "perspective" 227 "suppliers" 227 "process" 226 "result" 225 "emergency" 224 "physical" 224 "further" 224 "events" 224 "conditions" 223 "possible" 221 "States" 220 "higher" 220 "students" 220 "infection" 219 "responsible" 219 "businesses" 218 "design" 217 "situation" 217 "financial" 217 "negative" 216 "country" 216 "Rights" 216 "greater" 215 "markets" 215 "considered" 213 "long-term" 212 "variables" 211 "framework" 211 "supplier" 209 "digital" 207 "political" 207 "include" 206 "specific" 206

"service"

"operations"	205
"efforts"	204
"technologies"	203
"around"	203
"technology"	201

frequency of the words of TEXT VSEH ČLANKOV VSEH KONČNIH REDUCIRANIH IZBRANIH "VKLJUČI" VIROV (VSI IZBRANI VIRI - TAKO WOS, SCOPUS, ITN, DO NEINDEKSIRANIH:

frequency of the words of DIGRAMS - TEXT VSEH ČLANKOV VSEH KONČNIH REDUCIRANIH IZBRANIH "VKLJUČI" VIROV (VSI IZBRANI VIRI - TAKO WOS, SCOPUS, ITN, DO NEINDEKSIRANIH:

tbl =

 20×3 table

Ngram Co	ount Ngr	amLength
"supply" "chain"	1548	2
"covid19" "pandemic"	533	2
"public" "health"	450	2
"human" "right"	417	2
"epidemic" "outbreak"	313	2
"social" "responsibility	"" 306	2
"corporate" "social"	233	2
"social" "distancing"	211	2
"united" "states"	172	2
"available" "online"	171	2
"infectious" "disease"	166	2
"ripple" "effect"	158	2
"covid19" "outbreak"	144	2
"production" "research"	142	2
"social" "medium"	137	2
"tourism" "research"	130	2
"future" "research"	127	2
"ivanov" "dolgui"	123	2
"access" "april"	122	2
"chain" "disruption"	122	2

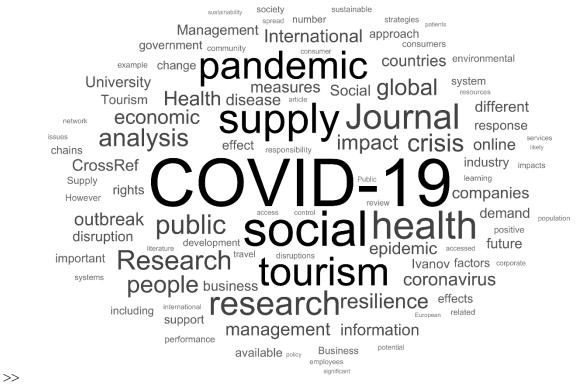
frequency of the words of TRIGRAMS OF TEXT VSEH ČLANKOV VSEH KONČNIH REDUCIRANIH IZBRANIH "VKLJUČI" VIROV (VSI IZBRANI VIRI - TAKO WOS, SCOPUS, ITN, DO NEINDEKSIRANIH:

tbl =

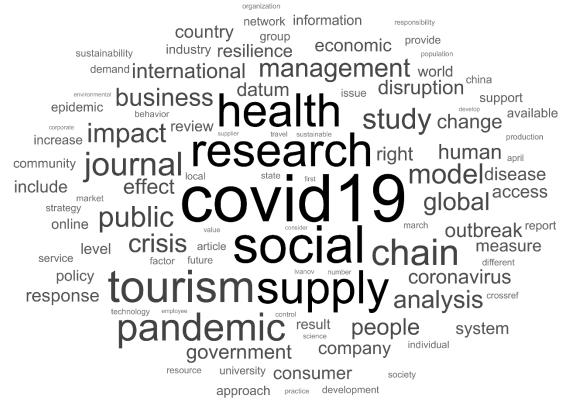
 20×3 table

I	Ngram	Count	NgramL	ength
"corporate"	"social"	"responsibility	" 203	3
"supply"	"chain"	"disruption"	121	3
"supply"	"chain"	"management"	117	3
"supply"	"chain"	"resilience"	106	3
"annals"	"operations"	"research"	101	3
"world"	"health"	"organization"	95	3
''global''	"supply"	"chain"	90	3
"coronavirus"	' ''disease''	"covid19"	80	3
"corporate"	"covid19"	"response"	79	3
"satisfaction"	"corporate"	"covid19"	77	3
"online"	"social"	"presence"	72	3
"covid19"	"resource"	"centre"	68	3
"annals"	"tourism"	"research"	57	3
"severe"	"acute"	"respiratory"	55	3
''impact''	"epidemic"	"outbreak"	53	3
"acute"	"respiratory"	"syndrome"	51	3
"expert"	"systems"	"applications"	48	3
"resilient"	"supply"	"chain"	44	3
"ivanov"	"expert"	"systems"	40	3
"systems"	"applications	s" "113649"	40	3

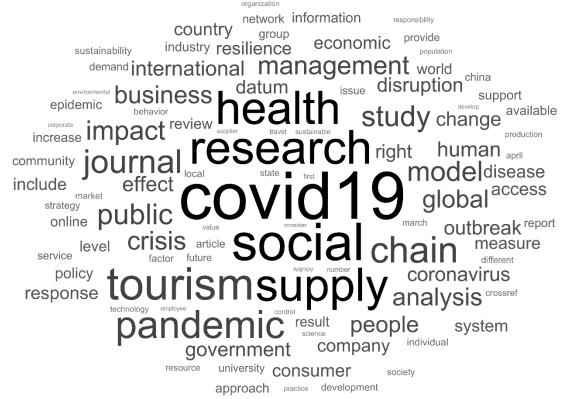
:H KONČNIH REDUCIRANIH IZBRANIH "VKLJUČI" VIROV (VSI IZBRANI VIRI - TA



DV VSEH KONČNIH REDUCIRANIH IZBRANIH "VKLJUČI" VIROV (VSI IZBRANI VII



VSEH KONČNIH REDUCIRANIH IZBRANIH "VKLJUČI" VIROV (VSI IZBRANI VIRI



KONČNIH REDUCIRANIH IZBRANIH "VKLJUČI" VIROV (VSI IZBRANI VIRI - TAKI

business research social responsibility
future research epidemic outbreak social medium
operations research tourism research
climate change covid19 pandemic ivanov dolgui impact covid19
infectious disease social distancing
world health united states chain disruption public hoalth

available online public health access april ripple effect human right cyber security covid 19 response

corporate social chain management

covid19 outbreak sustainable development

SEH KONČNIH REDUCIRANIH IZBRANIH VKLJUČI VIROV (VSI IZBRANI VIRI - TAI

download https://www.cambridge.org/core university impact epidemic outbreak

satisfaction corporate covid19

coronavirus disease covid19

resilient supply chain global supply chain

ivanov expert systems

covid19 evidence nepal

resilience stress covid19 annals operations research

chain disruption resilience

supply chain management covid19 resource centre

corporate social responsibility

hosseini ivanov expert

annals tourism research supply chain disruption 6

expert systems applications

online social presence supply chain resilience

ce acute respiratory syndrome

world health organization

systems applications 113649

https://www.cambridge.org/core university maribor

corporate covid19 response

severe acute respiratory

Text Data: Trigrams

eurasian geography economics

emerging markets case emerald emerging markets

extractive industry society

sustainable finance investment

research public health environmental research public

research social administrative

social administrative pharmacy

british social psychology

sociology social policy

markets case studies

2.5. The BA of the text of the titles of N1=416 Indexed Journals

```
% ANALY HARZING1
clear
clc
close all
disp('NASLOVOVI paperjev VSEH VIROV V GENERALNI BAZI. ')
disp('-
load harzing_all.mat
T=HARZING2ZDRUZENOVSE;
T1 = [T(:,4:5) T(:,7:9)];
T1 = T1(1:516,:);
T1(515,:)=[];
T1(20,:)=[];
N = size(T1,1)
%T2 = table2cell(T1);
T2 = T1;
chflag = input('vsi viri-1, le indeksirani-2, neodvisni-3')
S = struct('title_name',{},'cntr',[]);
k = 0;
for i = 1:N
  if chflag == 1
    k= k+1;
    %S{k} = table2cell(T2(i,2));
   S(k).title_name = table2cell(T2(i,2));
   S(k).cntr = k;
   chstr = 'VSI VIRI';
  elseif chflag == 2
   if cell2mat(table2cell(T2(i,5))) == 1
      k= k+1;
      S(k).title_name = table2cell(T2(i,2));
      S(k).cntr = k;
      chstr = 'INDEKSIRANI VIRI';
      continue
   end
  else
   if cell2mat(table2cell(T2(i,5))) == 0
     k= k+1;
      S(k).title_name = table2cell(T2(i,2));
      S(k).cntr = k;
      chstr = 'NEODVISNI VIRI';
   else
      continue
   end
  end
end
disp('--
chstr = chstr
disp('?tevilo virov:')
Nvirov = k
disp('----
S1 = [];
for i = 1:k
  S1 = [S1;[cellstr(S(i).title_name{1,1}) string(S(i).cntr)]];
%S1 = horzcat(S{:})
disp('frequency of the words of papers titles:')
disp('-----
```

```
textData = $1;
cleanedDocuments = tokenizedDocument(textData);
cleanedDocuments = addPartOfSpeechDetails(cleanedDocuments);
cleanedDocuments = removeStopWords(cleanedDocuments);
cleanedDocuments = normalizeWords(cleanedDocuments,'Style','lemma');
cleanedDocuments = erasePunctuation(cleanedDocuments);
cleanedDocuments = removeShortWords(cleanedDocuments,3);
cleanedBag = bagOfWords(cleanedDocuments)
cleanedBag = removeInfrequentWords(cleanedBag,2)
N1 = input('koliko besed za cloud')
if length(N1) == 0
% N1 = size(MostFrequentWords,1)
 N1 = 30;
end
% cloud - bag of words
WC=wordcloud(cleanedBag,'HighlightColor','black','MaxDisplayWords',N1)
title('cloud of the bag of words of the papers titles')
figure
% cloud- text
WC1 = wordcloud(cleanedDocuments, 'HighlightColor', 'black', 'MaxDisplayWords', N1)
title('cloud of the text of words of papers titles')
disp('frequency of the text of words of the papers titles:')
disp('---
TT = wordCloudCounts(textData)
numTopics = 10;
words = ["international" "journal" "science" "european" "american" "asian"]
newBag = removeWords(cleanedBag,words)
rng('default');
mdl = fitlda(newBag,numTopics);
figure;
for topicIdx = 1:4
  subplot(2,2,topicIdx)
 %wordcloud(mdl,topicIdx,'HighlightColor','black','MaxDisplayWords',N1);
 wordcloud(mdl,topicIdx,'HighlightColor','black');
 title("Topic: " + topicIdx)
end
words = ["international" "journal" "science" "european" "american" "asian"]
cleanedDocuments = removeWords(cleanedDocuments,words)
f = @(s)s(1:end-1) + " " + s(2:end);
bigrams = docfun(f,cleanedDocuments);
bag2 = bagOfWords(bigrams);
figure
wordcloud(bag2,'HighlightColor','black','MaxDisplayWords',N1);
title('Bigram Cloud - titles of scopus journals')
nKeywords = 20;
span = 6;
nCooc = 10;
mode = 'center';
COTable = createCOTable(cleanedDocuments,span, 2, nCooc, mode)
CONetwork = createCONetwork(COTable,'MI');
figure
%visualizeCO(CONetwork, 'NodeColor', [0.8 0.5 0.8], 'FontSize', 9, 'MarkerSize', 24);
visualizeCO(CONetwork, 'EdgeColor', [0 0.8 0.4], 'EdgeWidth', 12, 'FontSize', 14);
```

```
bag = bagOfNgrams(cleanedDocuments,'NGramLengths',3);
figure
wordcloud(bag,'HighlightColor','black');
tbl = topkngrams(bag,10)
title("Text Data: Trigrams")
save_slik_fuzzy
NASLOVOVI paperjev VSEH VIROV V GENERALNI BAZI.
N =
 514
vsi viri-1, le indeksirani-2, neodvisni-32
chflag =
  2
chstr =
 'INDEKSIRANI VIRI'
število virov:
Nvirov =
 416
_____
frequency of the words of papers titles:
frequency of the text of words of the papers titles:
-----
TT =
 1379×2 table
      Word
                 Count
  "COVID-19"
                     312
  "pandemic"
                    122
  "social"
                  51
  "health"
                   43
  "impact"
                   38
  "Coronavirus"
                     36
  "management"
                      30
```

"model" **30** "response" 29 "analysis" 25 "TM" 24 "supply" 23 "sustainable" 23 "crisis" 22 "research" 22 "challenges" 19 "outbreak" 19 "care" 18 "time" 18 "Chain" **17** "epidemic" **17** "Global" 16 "effects" 16 "Lessons" 15 "perspective" 15 "â" 15 "case" 14 "community" 14 "future" 14 "study" 14 "tourism" 14 "distancing" 13 "human" 13 "Mental" 12 "factors" 12 "food" 12 "practice" 12 "public" 12 "risk" 12 "disease" 11 "economic" 11 "industry" 11

"review"

"s" 11 "systems" 11 "China" 10 "India" **10** "approach" 10 "changes" 10 "data" 10 "role" 10 "work" 10 "Psychological" 9 "behavior" 9 "business" 9 "control" 9 "development" 9 "education" 9 "lockdown" 9 9 "opportunities" "policies" 9 "rights" "strategic" 9 "COVID" 8 "New" 8 "emergency" 8 "interventions" 8 "quality" 8 "related" 8 "Africa" 7 "Corona" 7 "Critical" 7 7 "Estimation" "Hospital" 7 "Information" 7 "Prediction" 7 "South" 7 7 "Strategies" "World" 7

- "associated" 7
- "context" 7
- "digital" 7
- "environment" 7
- "integrated" 7
- "media" 7
- "novel" 7
- "people" 7
- "problem" 7
- "rate" 7
- "resilience" 7
- "spread" 7
- "transformation" 7
- "transmission" 7
- "university" 7
- "Exposure" 6
- "Framework" 6
- "Needs" 6
- "Nurses" 6
- "Stress"
- "United" 6
- "air" 6
- "among" 6
- "assessment" 6
- "countries" 6
- "design" 6
- "due" 6
- "environmental" 6
- "experiences" 6
- "financial" 6
- "implications" 6
- "international" 6
- "medical" 6
- "number" 6
- "operational" 6
- "patients" 6

"personal" 6

"settings" 6

COTable =

20×7 table

Word (Counts	COWord	COCo	ount C	OCountAll	T	MI
"covid19"	315	"pandemic"	23	121	-0.74188	8.0183	
"covid19"	315	"social"	10	48	-0.48918 8.	1506	
"covid19"	315	"outbreak"	9	19	-0.46408	9.3356	
"covid19"	315	"health"	8	43	-0.43754 7.	9874	
"covid19"	315	"impact"	7	35	-0.40928 8	3.0917	
"covid19"	315	"coronavirus"	5	36	-0.3459	7.5656	
"covid19"	315	"analysis"	5	25	-0.3459 8.	0917	
"covid19"	315	"disease"	5	11	-0.3459 9.	2761	
"covid19"	315	"response"	4	18	-0.30938	8.2437	
"covid19"	315	"spread"	4	6	-0.30938 9.	8287	
"pandemic"	121	"covid19"	27	315	2.8914	6.8693	
"pandemic"	121	"impact"	4	35	1.1129	7.2843	
"pandemic"	121	"health"	3	43	0.9638 6	5.5723	
"pandemic"	121	''coronavirus	s'' 3	36	0.9638	6.8287	
"pandemic"	121	"amid"	3	3	0.9638 1	0.414	
"pandemic"	121	"analysis"	3	25	0.9638	7.3547	
"pandemic"	121	"mental"	2	12	0.78694	7.8287	
"pandemic"	121	''psychosocia	l'' 2	3	0.78694	9.8287	
"pandemic"	121	"distress"	2	4	0.78694	0.4136	
"pandemic"	121	"distancing"	2	11	0.78694	7.9542	

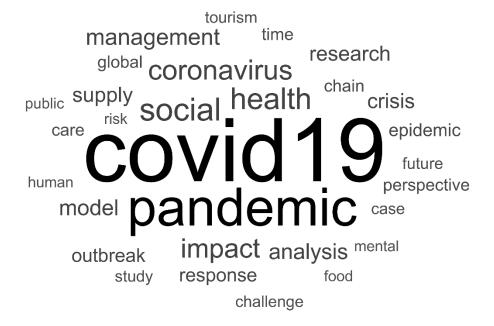
tbl =

10×3 table

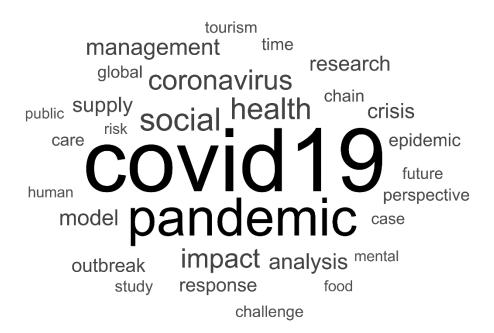
1	Ngram	Count	Ngram	Length
''coronavirus	" "disease"	"2019"	5	3
"impact"	"covid19"	"pandemic"	5	3
"disease"	"2019"	"covid19"	4	3
"novel"	"coronavirus	" "covid19"	4	3
"lessons"	"covid19"	"pandemic"	3	3

"corporate"	" "social" "responsibility		3	3	
"amid"	"covid19"	"pandemic"	3	3	
"corona"	"virus"	"covid19"	3	3	
"sustainable"	' ''developn	nent'' ''goal''	3	3	
"coronavirus	" "disease"	"covid19"	3	3	

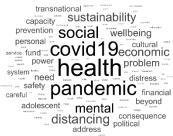
cloud of the bag of words of the papers titles



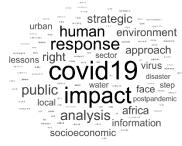
cloud of the text of words of papers titles



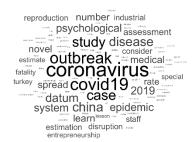




Topic: 2



Topic: 3



Topic: 4



Bigram Cloud - titles of scopus journals

management covid19

social medium

systematic review coronavirus disease

covid19 outbreak model covid19

sustainable development

covid19 crisis

coronavirus pandemic

novel coronavirus impact covid 19

2019 covid19

covid19 epidemic

research practice

coronavirus covid19

mental health supply chain social responsibility disease 2019

lessons covid19 social distancing time covid19

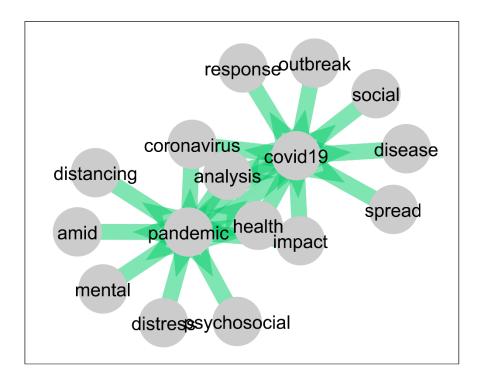
waste management

response covid19 human right

covid19 transmission

public health

covid19 lockdown



Text Data: Trigrams

performance exchangetraded fund financial performance exchangetraded systematic review metaanalysis model covid19 transmission covid19 conceptual touchstone covid19 pandemic human tourism transformation covid19 transformation covid19 conceptual coronavirus disease covid19 rio 19 conceptual food supply chain COrona virus covid19 psychosocial impact covid19 rating financial performance corporate social responsibility expertise social medium covid19 strategic position novel coronavirus covid19 supply chain management trust expertise social disease 2019 covid19 covid19 united kingdom careful trust expertise coronavirus disease 2019 covid19 careful trust impact covid19 pandemic global financial crisis virus covid19 india lessons covid19 pandemic coronavirus covid19 social canadian banksâ response amid covid19 pandemic post covid19 pandemic human flourishing tourism sustainable development goal fund covid19 pandemic covid19 outbreak china public health response face covid19 pandemic waste management covid19 flourishing tourism transformation bankså response covid19 occupational health safety impact coronavirus covid19 context covid19 pandemic response covid19 strategic exchangetraded fund covid19

strategic position analysis coronavirus covid19 entrepreneurship

2.6. The BA of the text of the titles of N2=98 Non-Indexed Sources

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514		
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chflag =		
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chstr =		
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število virov:		
Nvirov =		
98		
frequency of the wo		
		ds of the papers titles:
TT =		······································
372×2 table		
Word	Count	
"COVID-19"	69	
"Supply"	17	
"chain"	17	
"pandemic"	16	
"Social"	15	
"Responsibility"	14	
"Impact"	9	
"Global"	8	

- "Sustainable" 8
- "Time" 8
- "food" 8
- "Economics" 7
- "Model" 7
- "Open" 6
- "Resiliency" 6
- "Science" 6
- "Trade" 6
- "TM" 6
- "COVID" 5
- "Industry" 5
- "Research" 5
- "Case" 4
- "Communities" 4
- "Control" 4
- "Coronavirus" 4
- "Corporate" 4
- "Face" 4
- "Forecasting" 4
- "Human" 4
- "Policy" 4
- "Strategies" 4
- "Vulnerability" 4
- "crisis" 4
- "pdf" 4
- "s" 4
- "Access" 3
- "Addressing" 3
- "Adversity" 3
- "Better" 3
- "Beyond" 3
- "Canadian" 3
- "DISRUPTION" 3
- "Distancing" 3
- "Group" 3

''Law''	3
"Lockdown"	3
"Recovery"	3
"Sector"	3
"Study"	3
"World"	3
"business"	3
"economy"	3
"effective"	3
"needs"	3
"possible"	3
"restrictions"	3
"safeguard"	3
"security"	3
"worst"	3

COTable =

20×7 table

Word	Counts	COWord	COC	Count	COCountAll	T	MI
"covid19"	70	"pandemic"	5	16	-0.28852	6.5981	
"covid19"	70	"social"	4	14	-0.25806 6	5.4688	
"covid19"	70	"impact"	3	9	-0.22349	6.6912	
"covid19"	70	"global"	3	8	-0.22349 6	.8611	
"covid19"	70	"control"	2	4	-0.18248	7.2761	
"covid19"	70	"supply"	2	17	-0.18248	5.1887	
"covid19"	70	"number"	2	2	-0.18248	8.2761	
"covid19"	70	"human"	2	3	-0.18248	7.6912	
"covid19"	70	"address"	2	2	-0.18248	8.2761	
"covid19"	70	"amid"	2	2	-0.18248 8	3.2761	
"supply"	17	"chain"	3	12	1.2571 6.	2761	
"supply"	17	"chains"	3	5	1.2571 7.	5392	
"supply"	17	"global"	2	8	1.0264 6.2	2761	
"supply"	17	"times"	2	1	1.0264 9.2	2761	
"supply"	17	"avoid"	1	1	0.72581 8.	2761	
"supply"	17	"impact"	1	9	0.72581 5	5.1062	

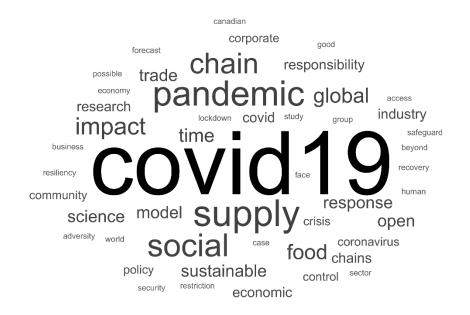
"supply"	17	"technology"	1	1	0.72581 8.2761
"supply"	17	"disruptive"	1	1	0.72581 8.2761
"supply"	17	"disaster"	1	1	0.72581 8.2761
"supply"	17	"covid19"	1	70	0.72581 2.1468
tbl =					
10×3 table					

Count NgramLength

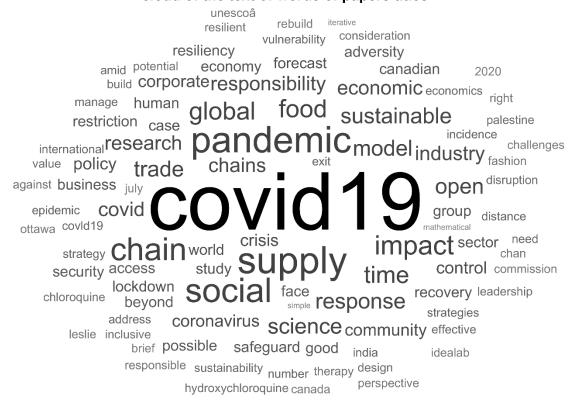
"corporate"	"social"	"responsibility"	4	3
"covid19"	"trade"	"restriction"	3	3
'trade''	"restriction"	"possible"	3	3
restriction"	"possible"	"response"	3	3
'possible''	"response"	"safeguard"	3	3
response"	"safeguard"	"food"	3	3
safeguard''	"food"	"security"	3	3
economic"	"resiliency"	"face"	3	3
resiliency''	"face"	"adversity"	3	3
open''	"beyond"	"open"	3	3

Ngram

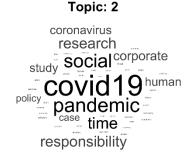
cloud of the bag of words of the papers titles

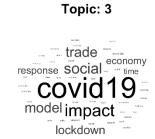


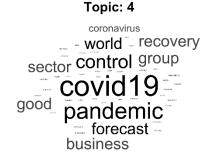
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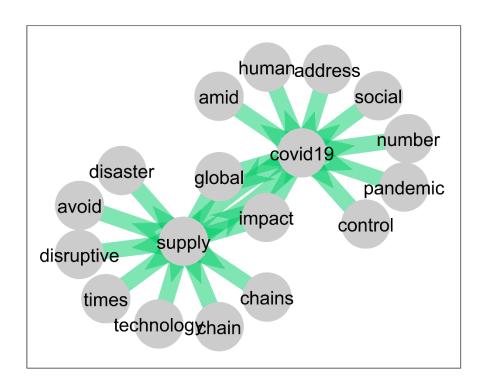






Bigram Cloud - titles of scopus journals





Text Data: Trigrams

open access community

resiliency face adversity

chan canadian commission

ettawa care

me covid19 ottawa canada july responsibility time covid19 social responsibility time safeguard food security coronavirus covid19 pandemic possible response safeguard global supply chain food supply chain trade restriction possible time covid19 pandemic canada july 2020 corporate social responsibility therapy against covid19 covid19 trade restriction unescoâ idealab ottawa community leslie chan restriction possible response hydroxychloroquine potential therapy access community leslie response safeguard food potential therapy against economic resiliency face canadian commission unescoâ open beyond open leslie chan canadian commission unescoâ idealab beyond open access

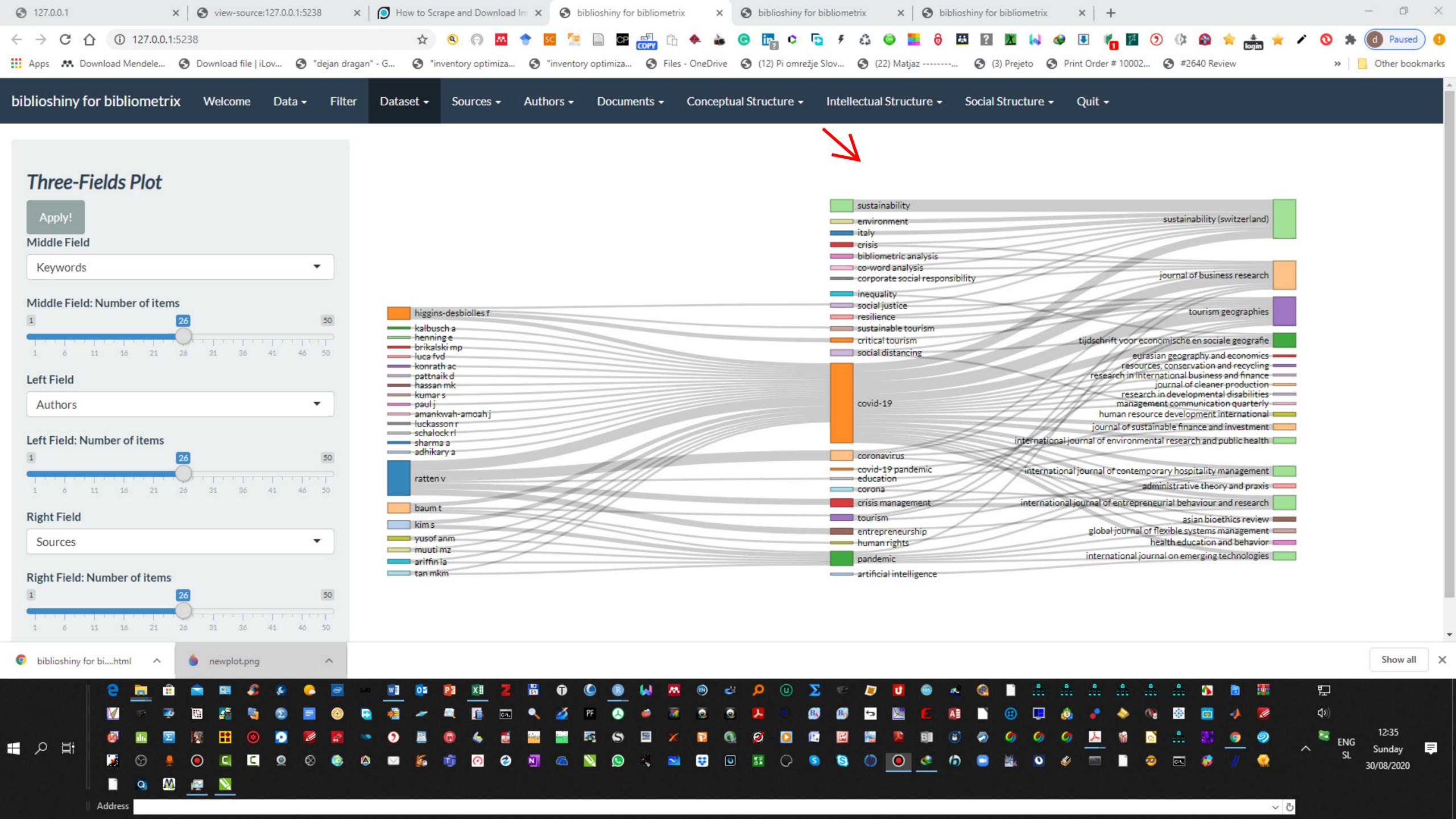
chloroquine hydroxychloroquine potential

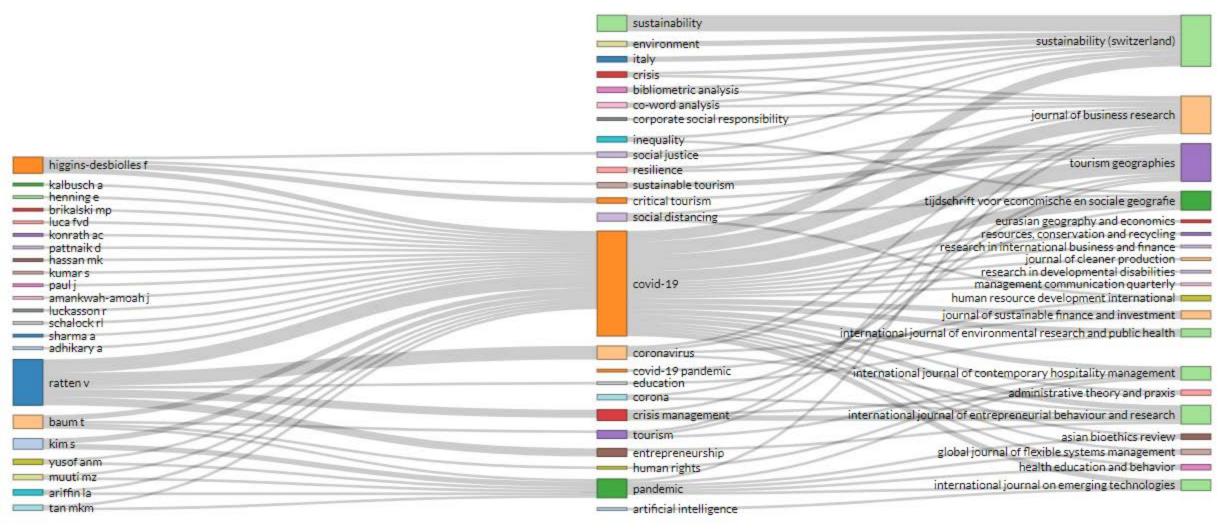
3. Literature

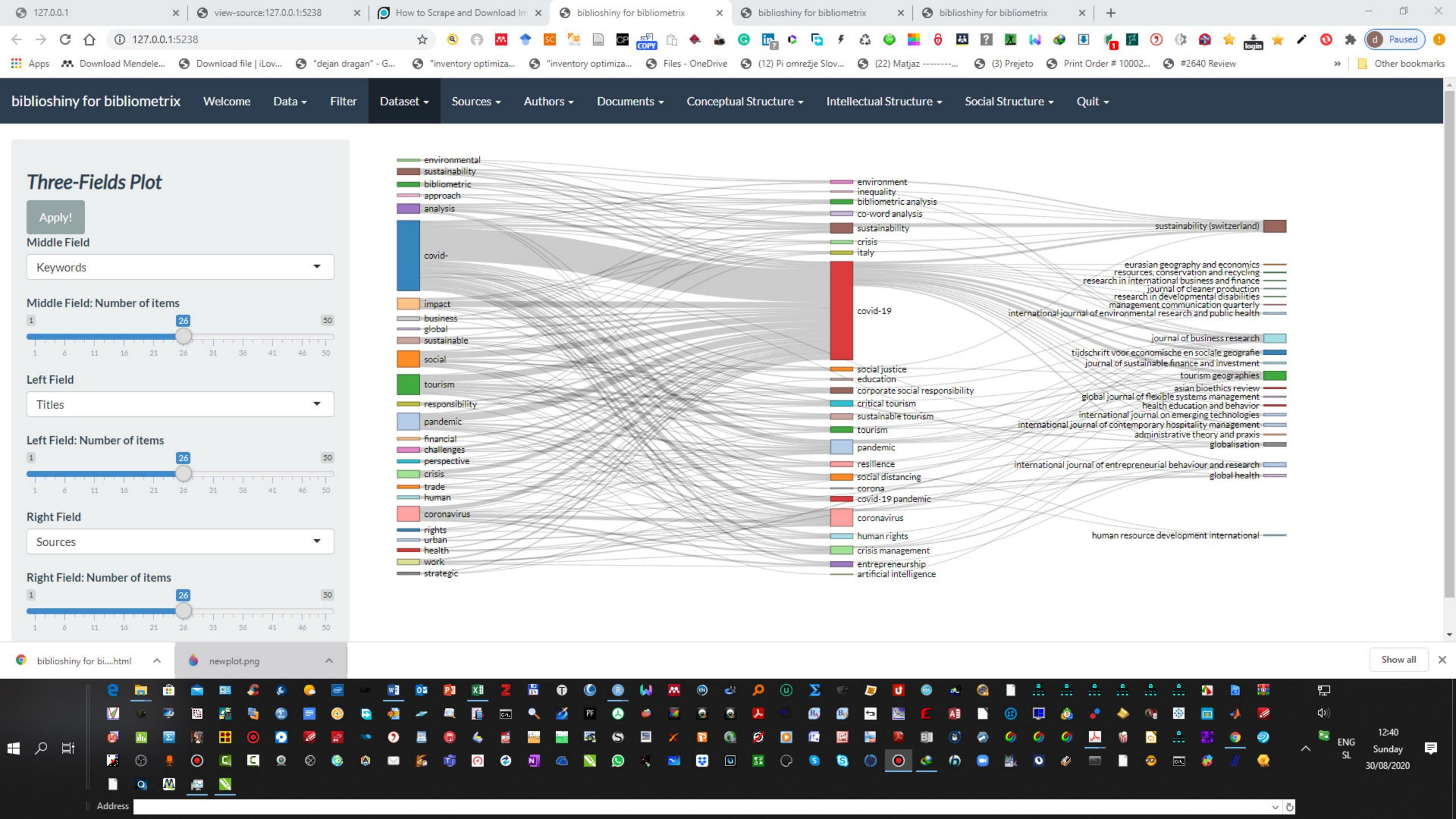
Aria, M., Cuccurullo, C. 2017. bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, **11(4)**: 959-975. doi:10.1016/j.joi.2017.08.007

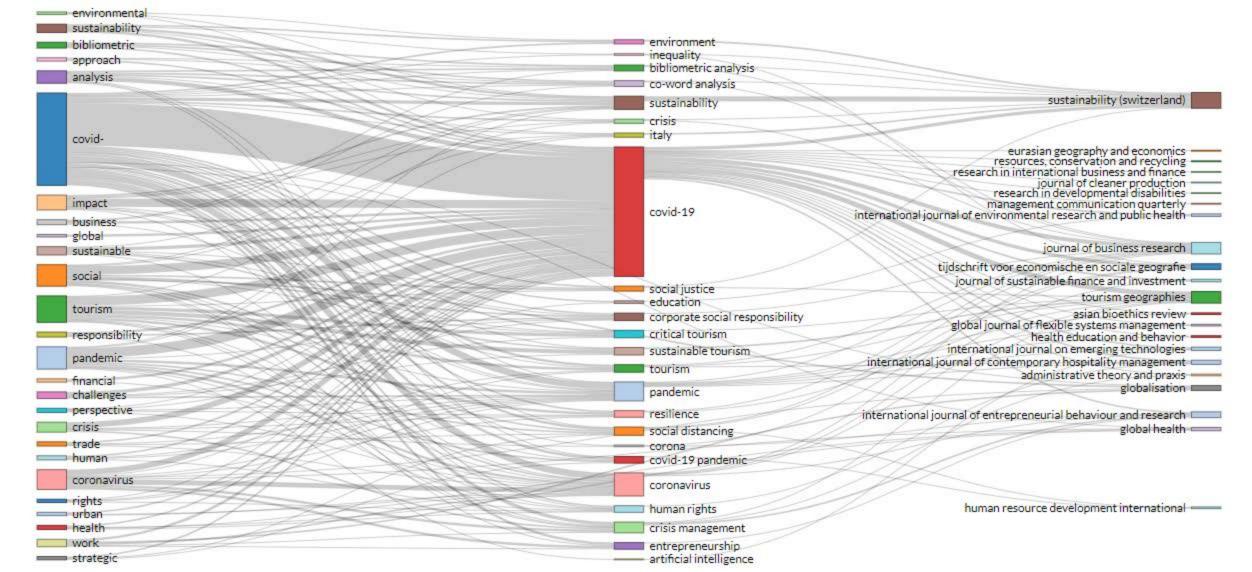
Mathworks. 2020. *Matlab's Text Analytics Toolbox™: User guide*. Natick: Mathworks.

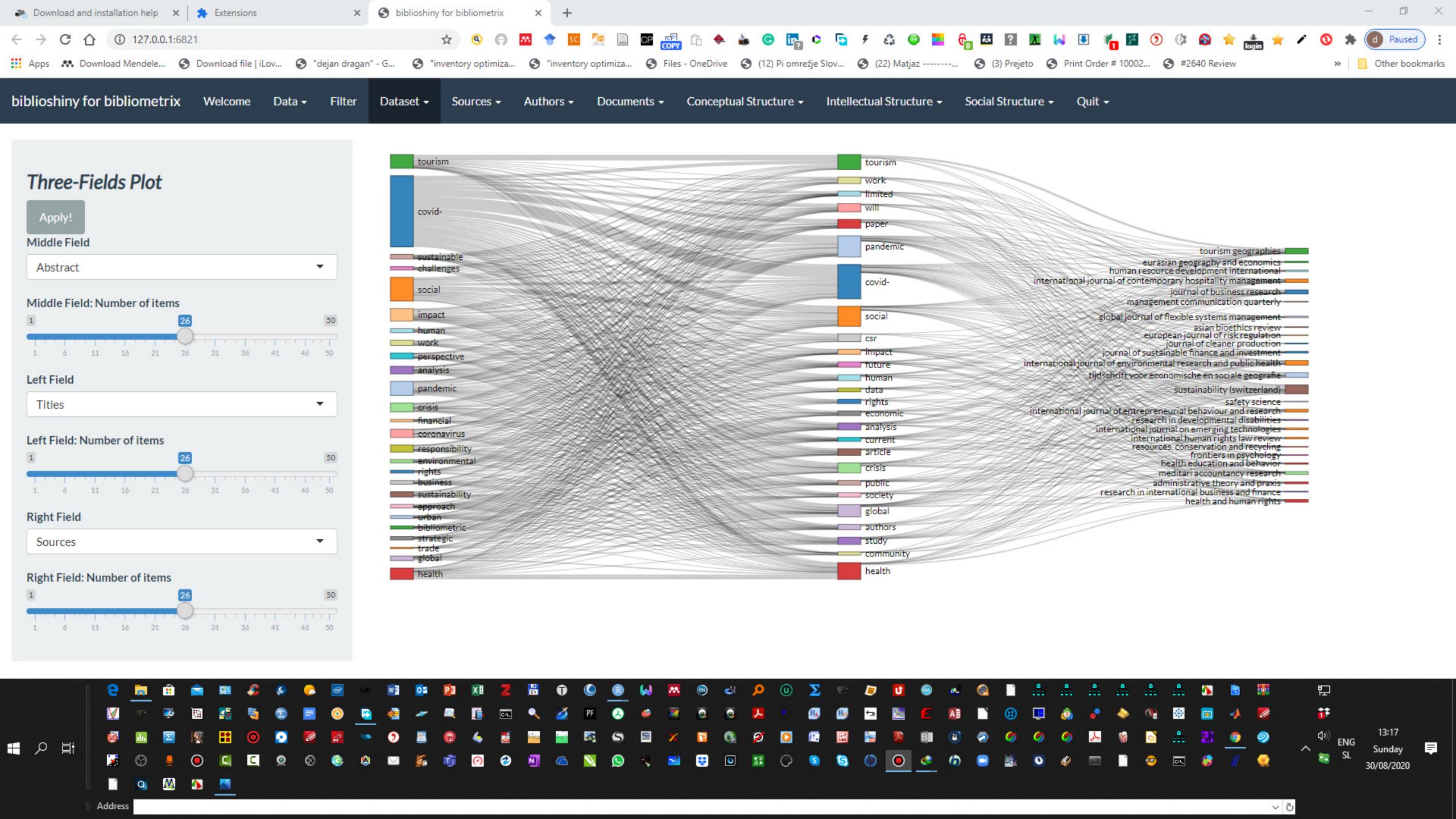
4. Appendix – Excerpt of results obtained by R package Bibliometrix&Biblioshiny

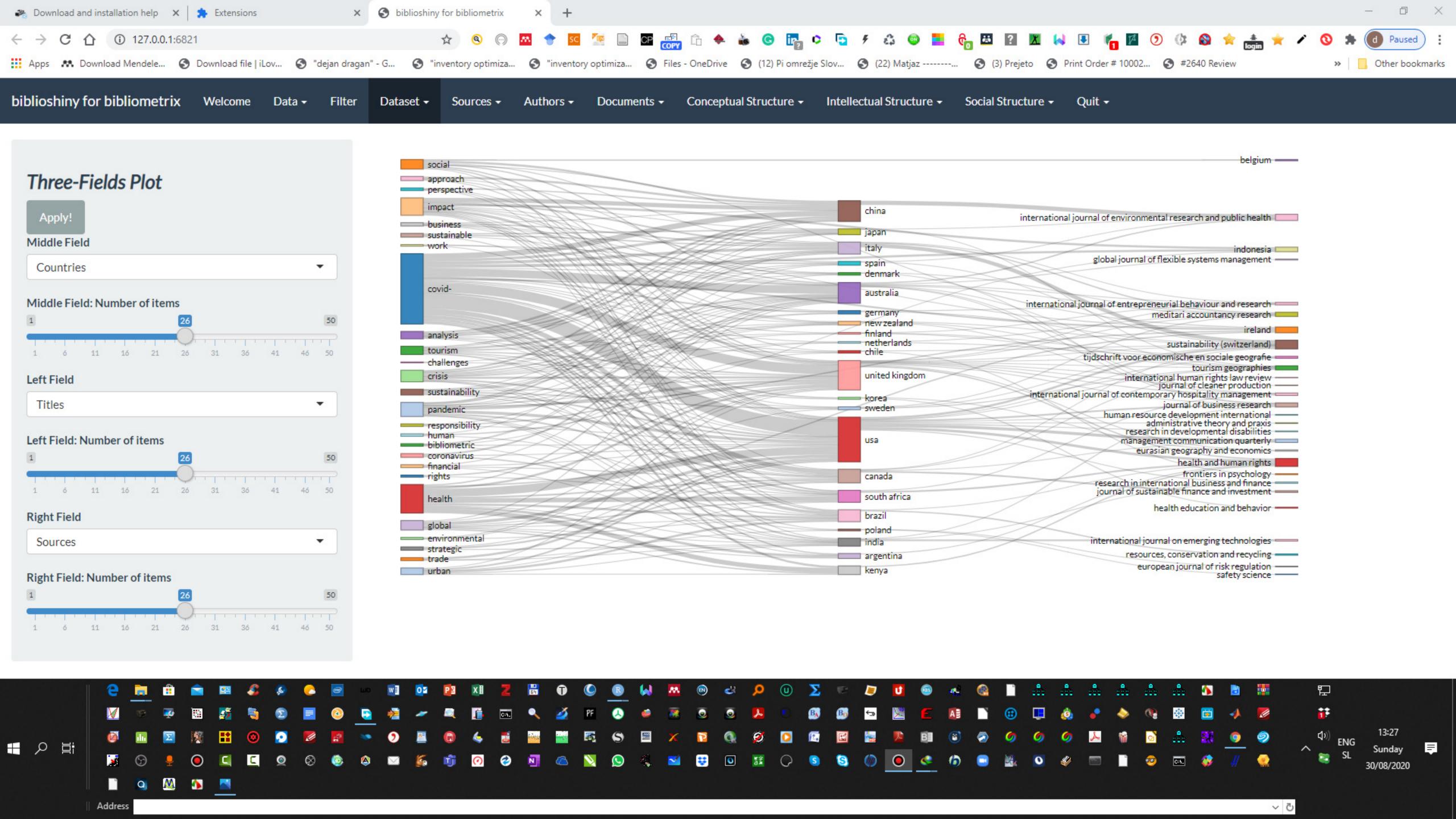




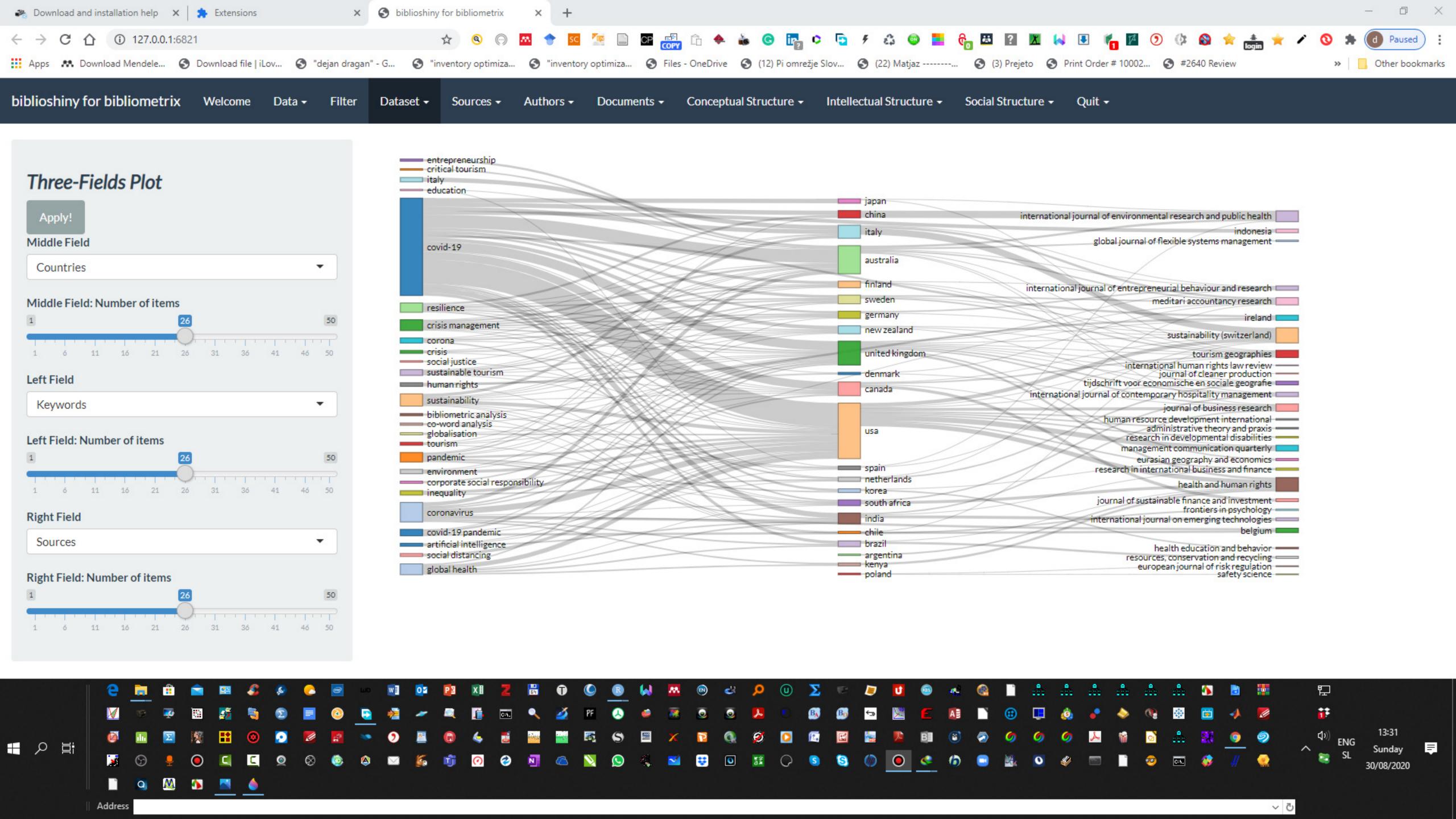


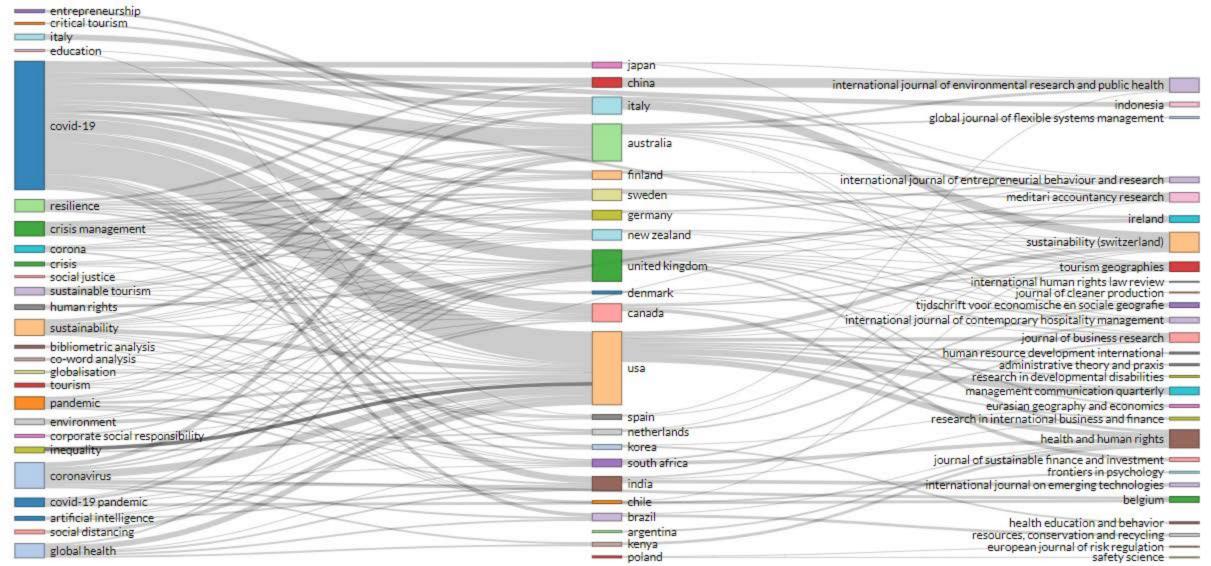




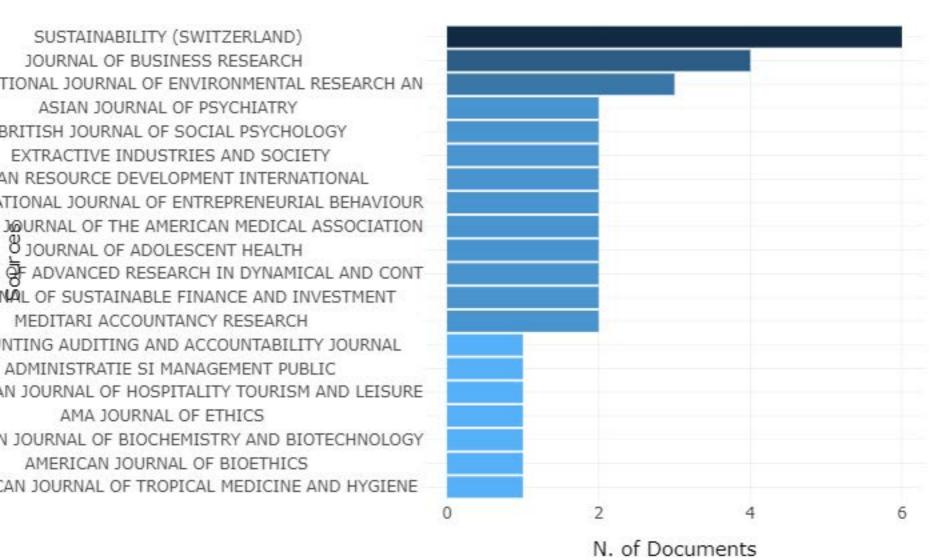


belgium —		social
		approach
		perspective
	china	impact
international journal of environmental research and public health		business
	japan	■ sustainable
indonesia	italy	work
global journal of flexible systems management	spain	
	denmark	
	australia	covid-
international journal of entrepreneurial behaviour and research		
meditari accountancy research	germany	
ireland	new zealand	
	finland netherlands	analysis
sustainability (switzerland)	chile	tourism
tijdschrift voor economische en sociale geografie	Cime	challenges
tourism geographies	united kingdom	crisis
international human rights law review journal of cleaner production	direct kingdom	
international journal of contemporary hospitality management	korea	sustainability
journal of business research	sweden	pandemic
human resource development international		
administrative theory and praxis research in developmental disabilities		responsibility human
management communication quarterly	usa	■ bibliometric
eurasian geography and economics		coronavirus
health and human rights		financial
frontiers in psychology research in international business and finance	canada	= rights
journal of sustainable finance and investment		
	south africa	health
health education and behavior	brazil	
	poland	global
international journal on emerging technologies	india	= environmental
resources, conservation and recycling	argentina	■ strategic ■ trade
european journal of risk regulation —— safety science	kenya	urban

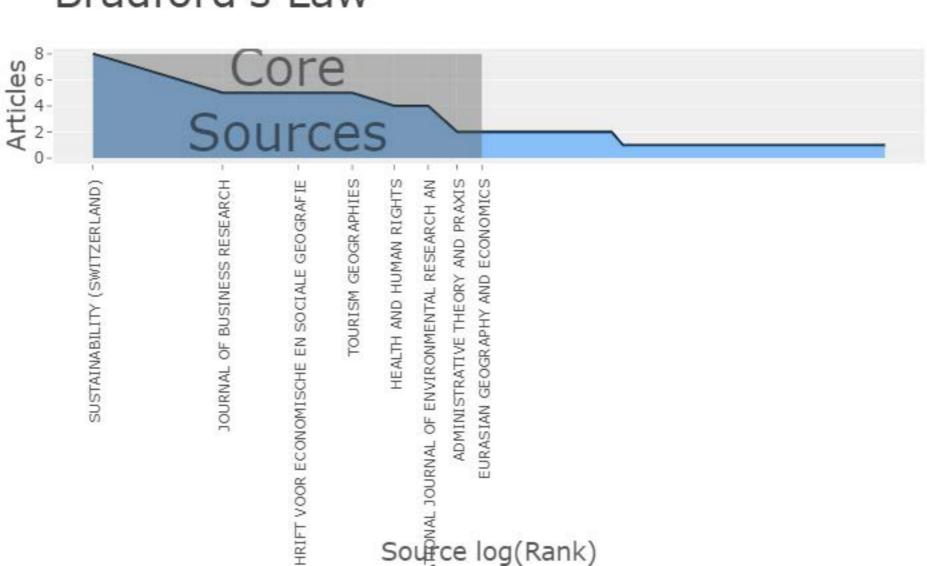


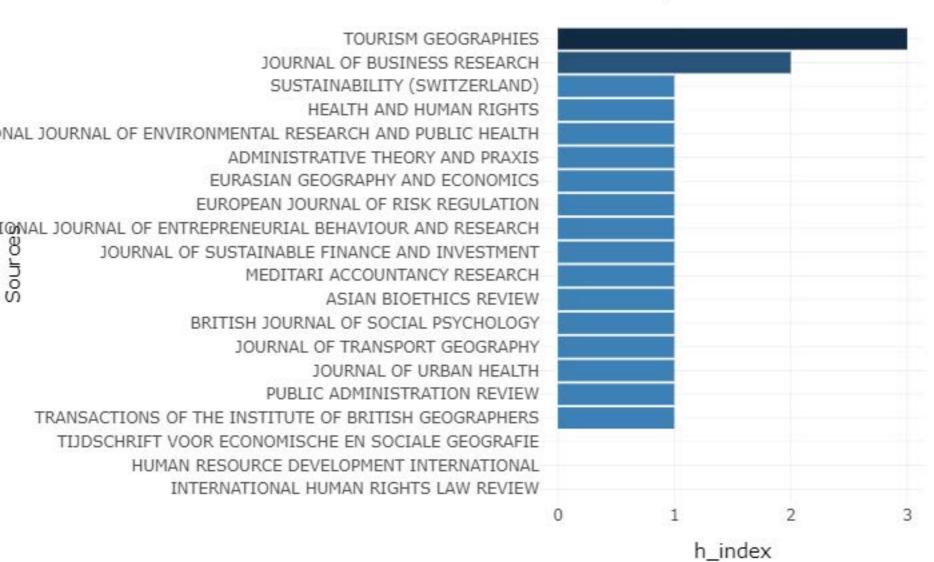


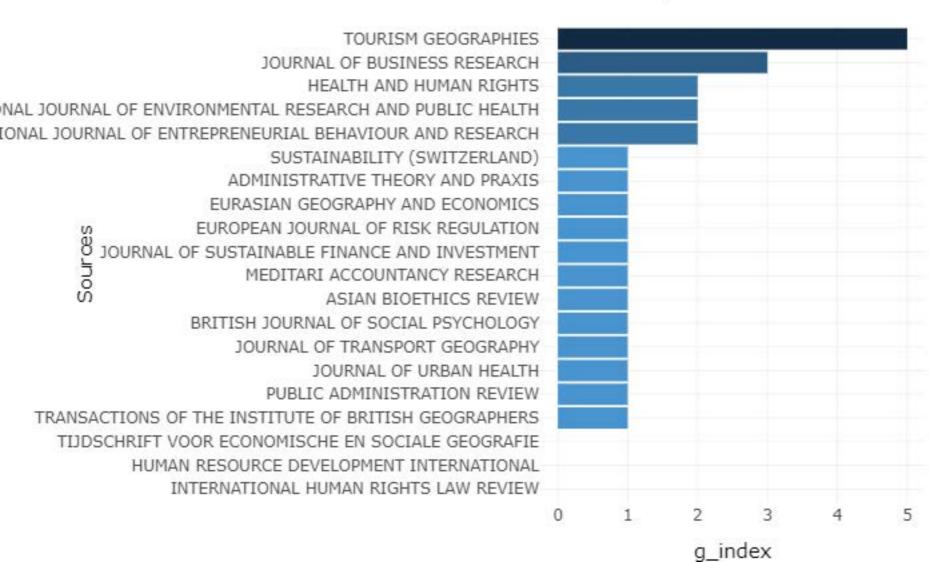
Most Relevant Sources

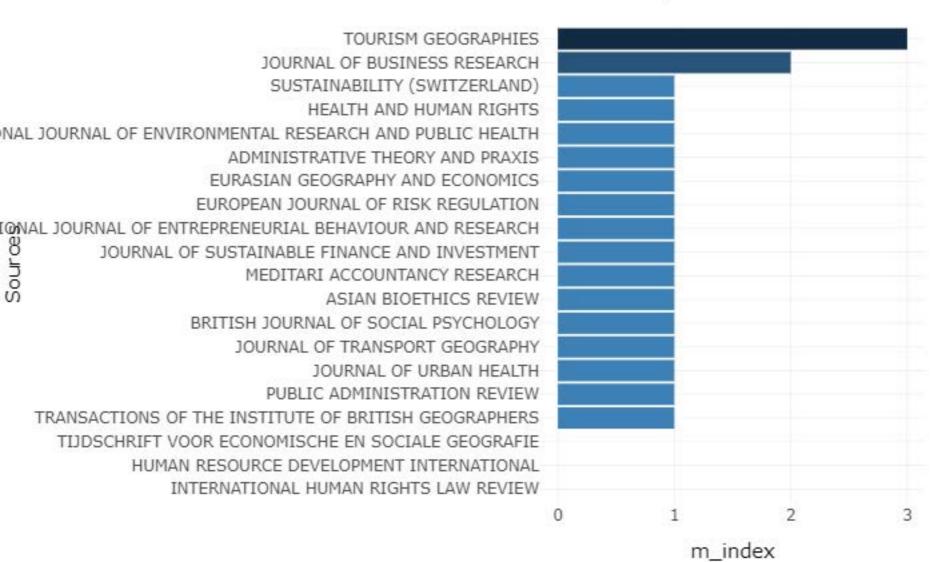


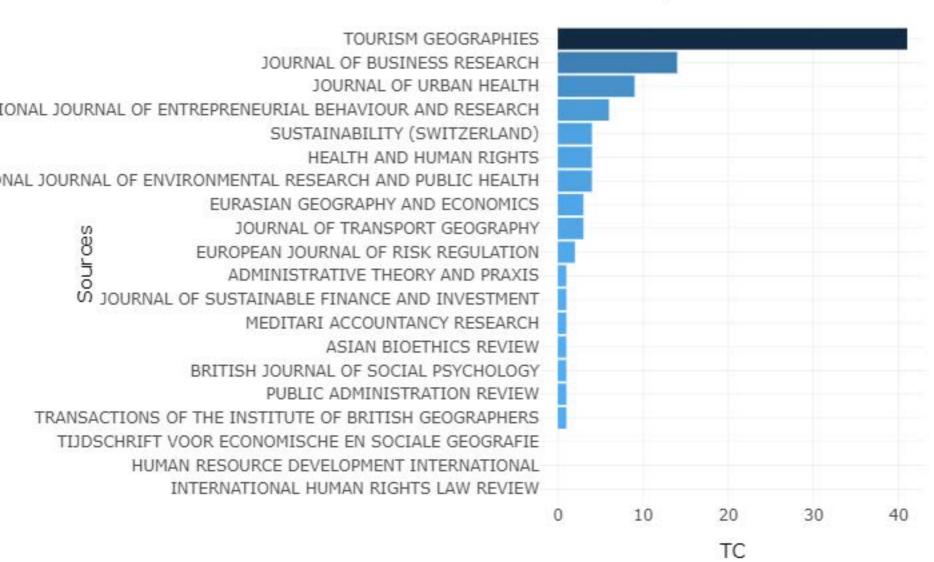
Bradford's Law



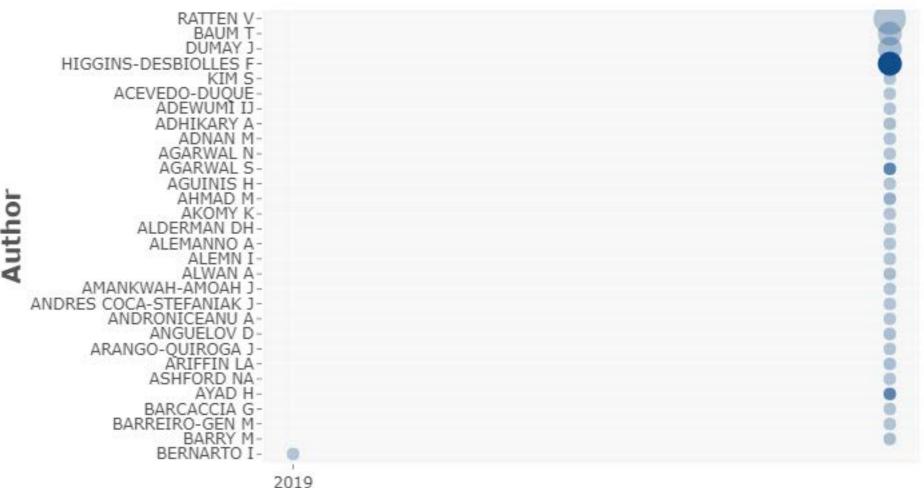






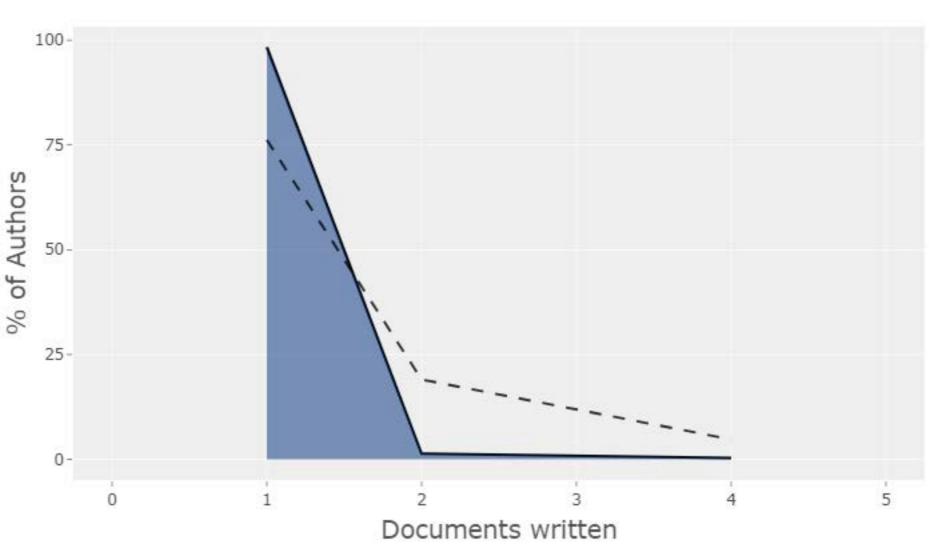


Top-Authors' Production over the

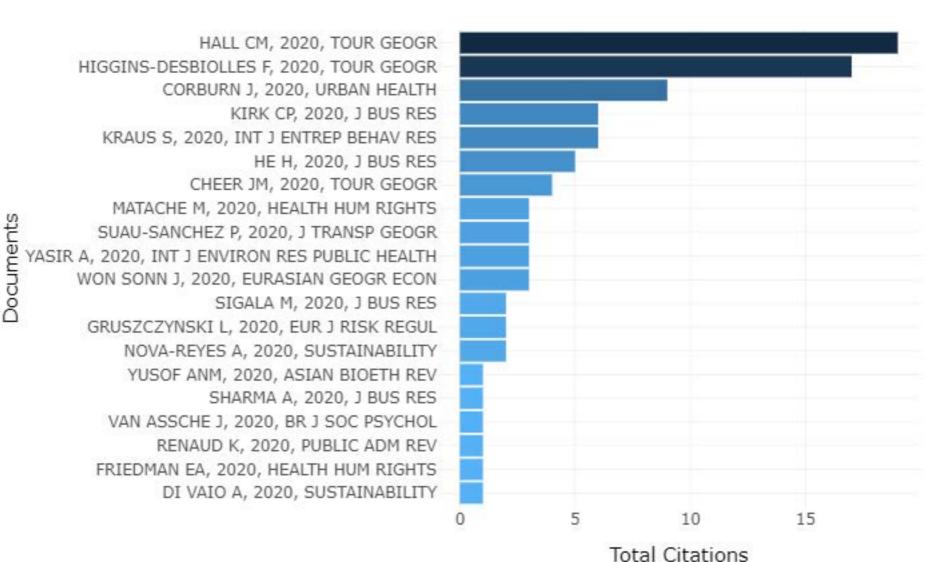


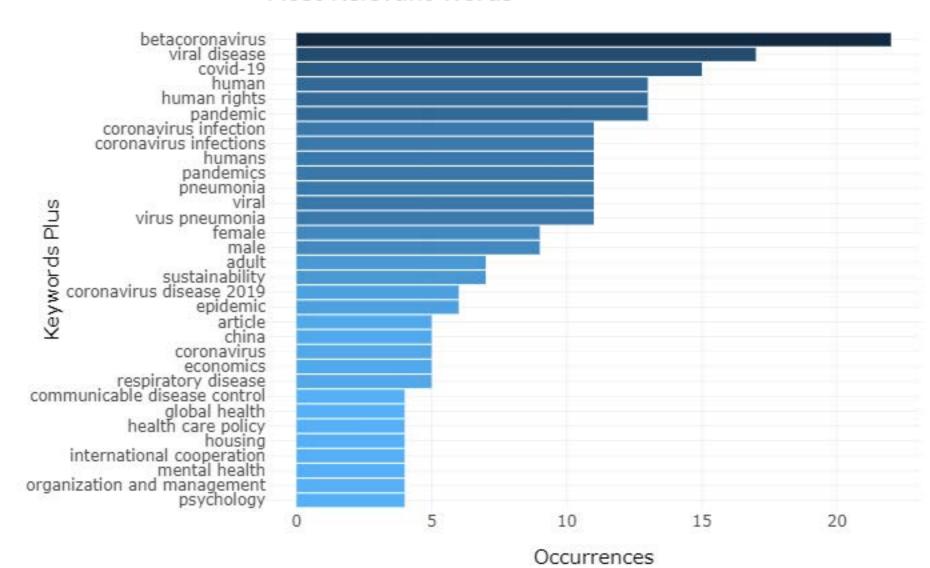
Year

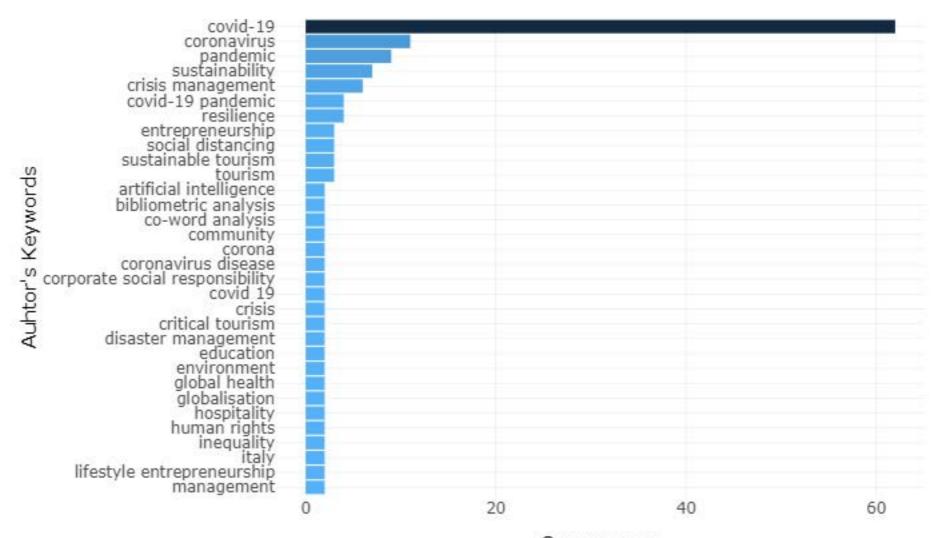
The Frequency Distribution of Scientific



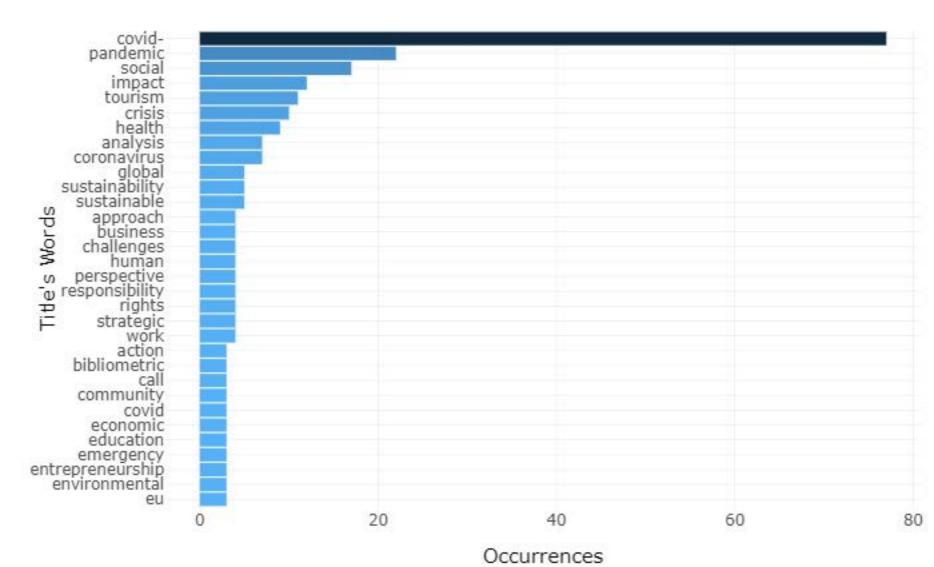
Most Cited Documents

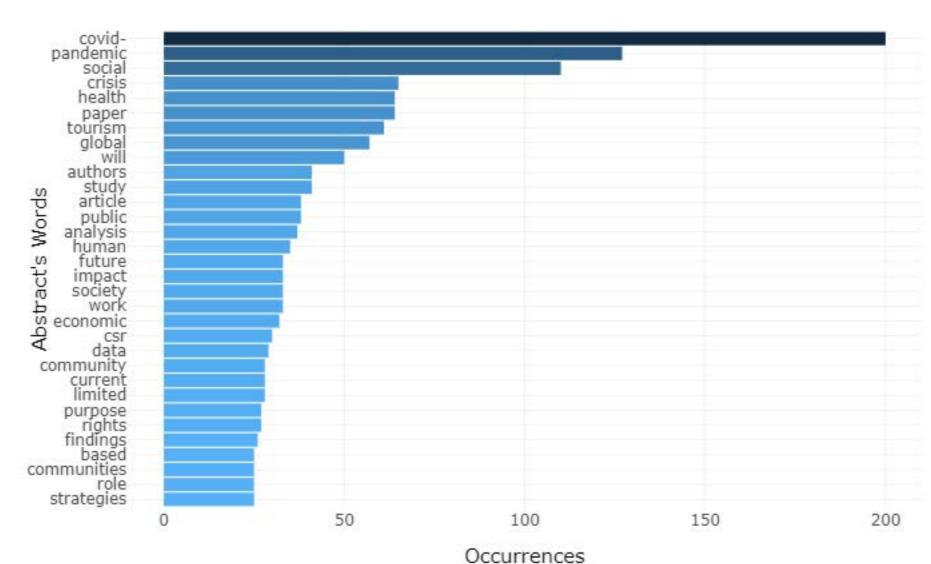




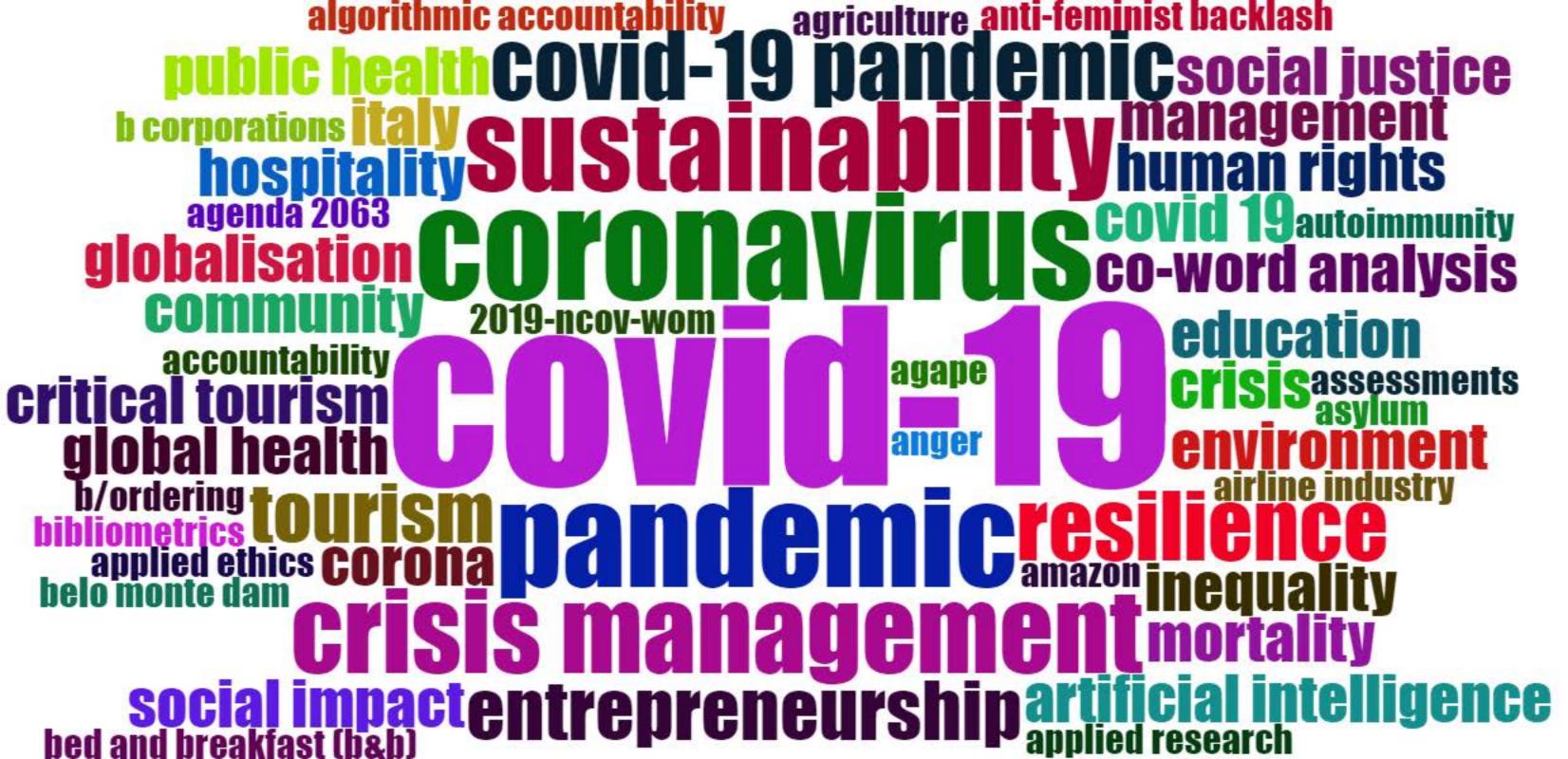


Occurrences

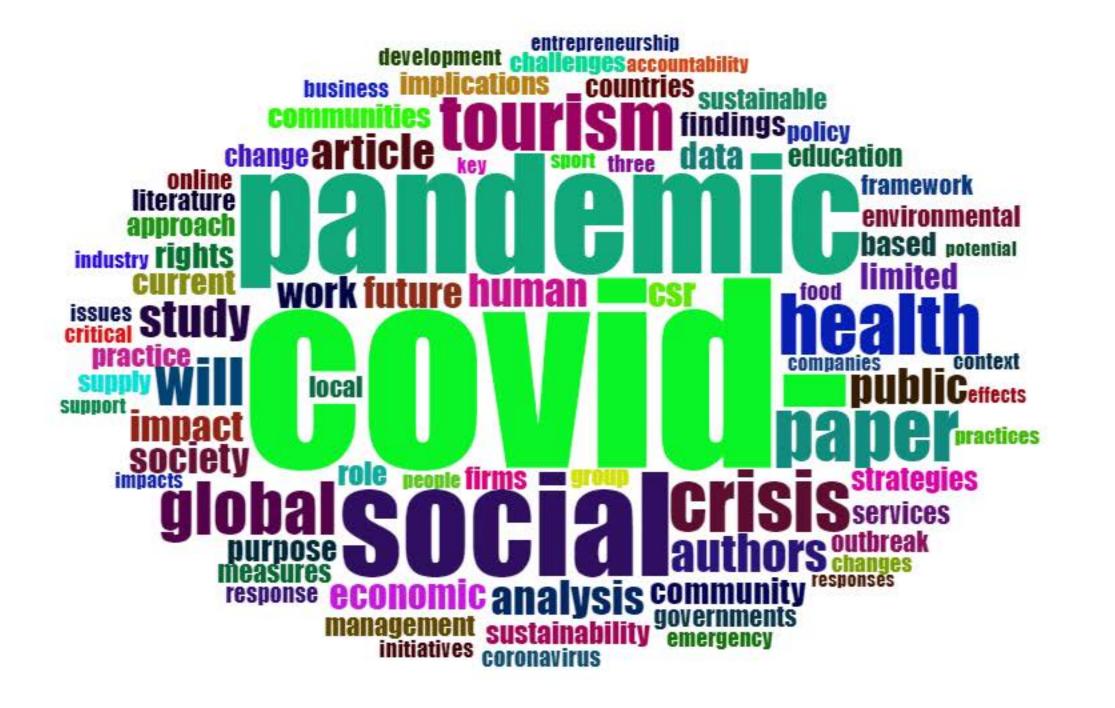






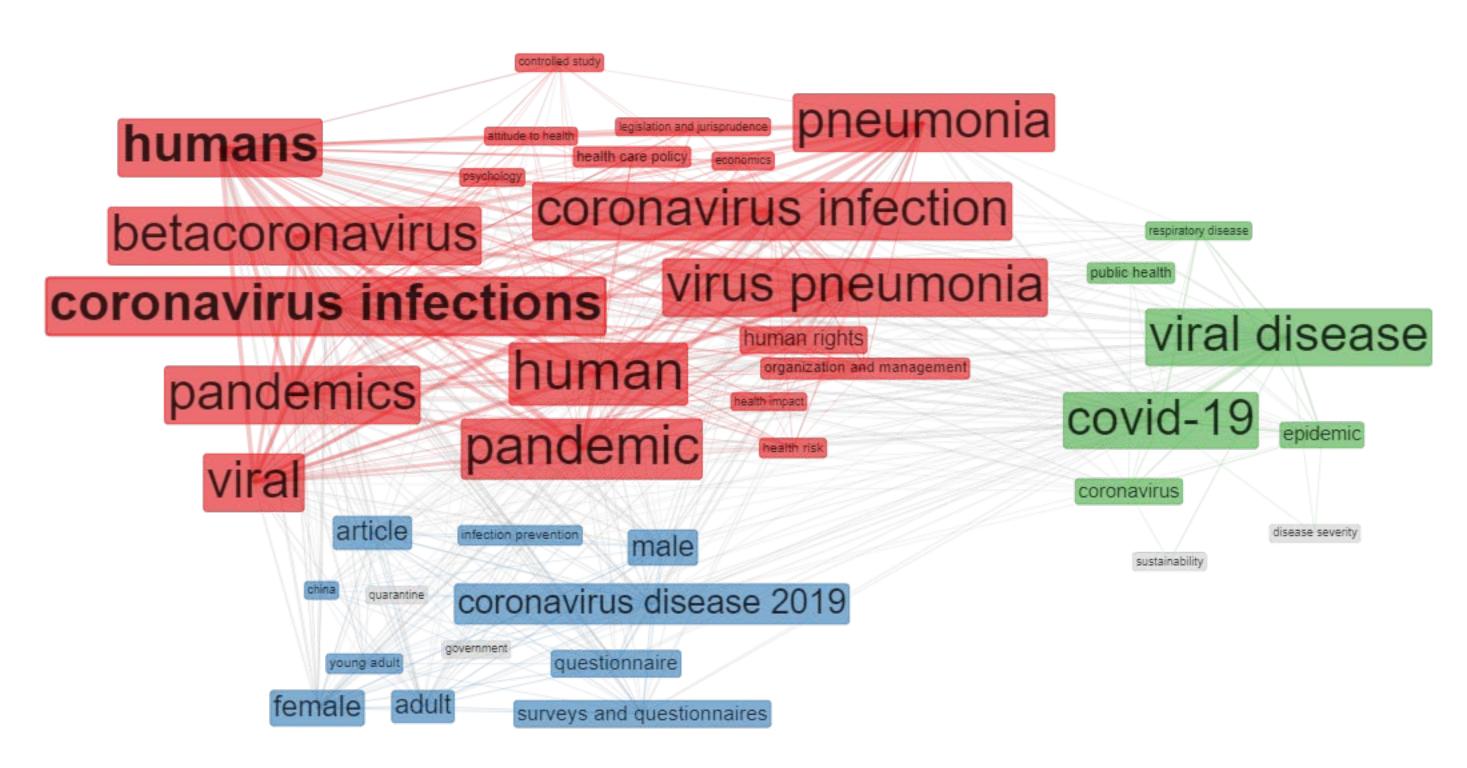


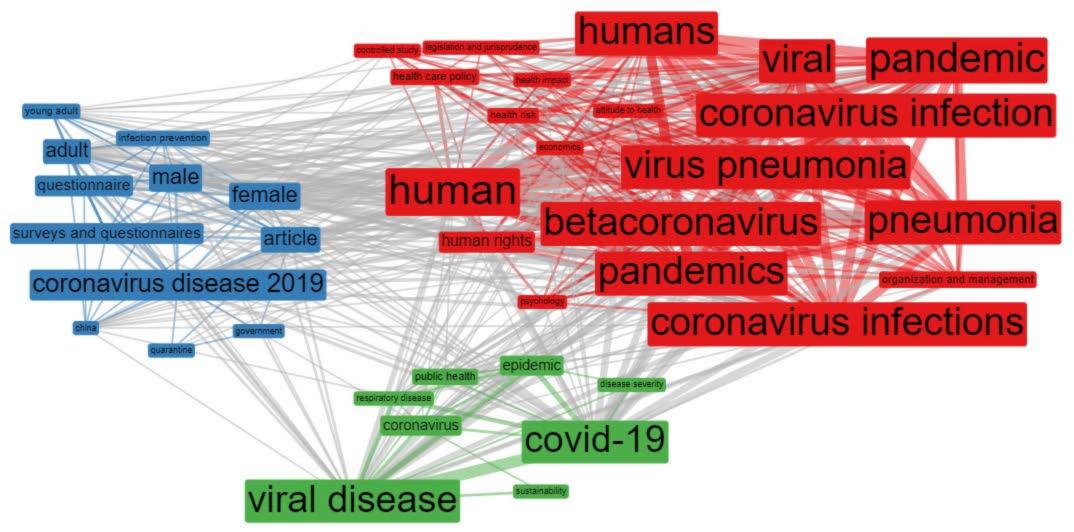
european responsibility strategical sustainability to the sustaina timesrights pandem sustainable COVIC Crisis Cally Cally hosting challenges actioncommunity educationWork



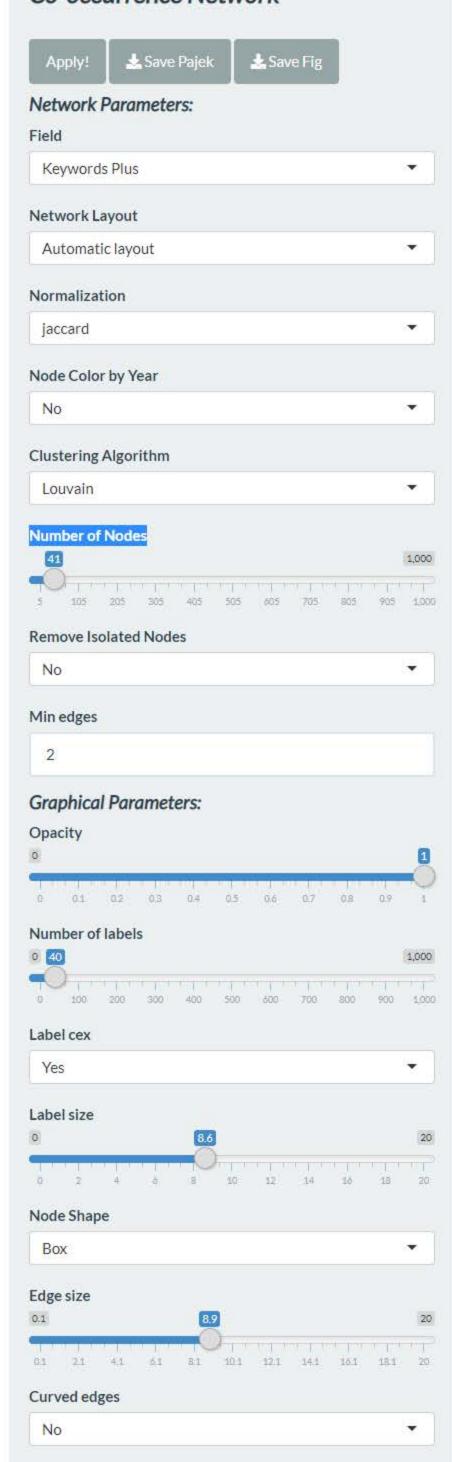
Word TreeMap

betacoronavirus	human rights	coronavirus infections	viral	adult	article	respiratory disease	international cooperation	tourism economics	economic impact	education	government	health ri	health workforce
	human	humans	virus pneumonia	sustainability	china	communicable disease control	mental health	young adult	learning	racism	social media	socioecon impac	
viral disease covid-19						21-1-11-11-11	organization and management	attitude to health	public health quarantine	*			
	pandemic	pandemics	female	coronavirus disease 2019	coronavirus	global health				supply cha managem	tourism	market	travel
						health care policy		disease incidence		surveys a	Control of the case of the cas	nagom	africa atr
	coronavirus infection	pneumonia	male	epidemic	economics				questionna		1998	outh of transportation	
						housing	psychology	disease spread	questionnaire	sustainab development	AND DESCRIPTION OF THE PARTY OF	scent ar	tificial intelligence

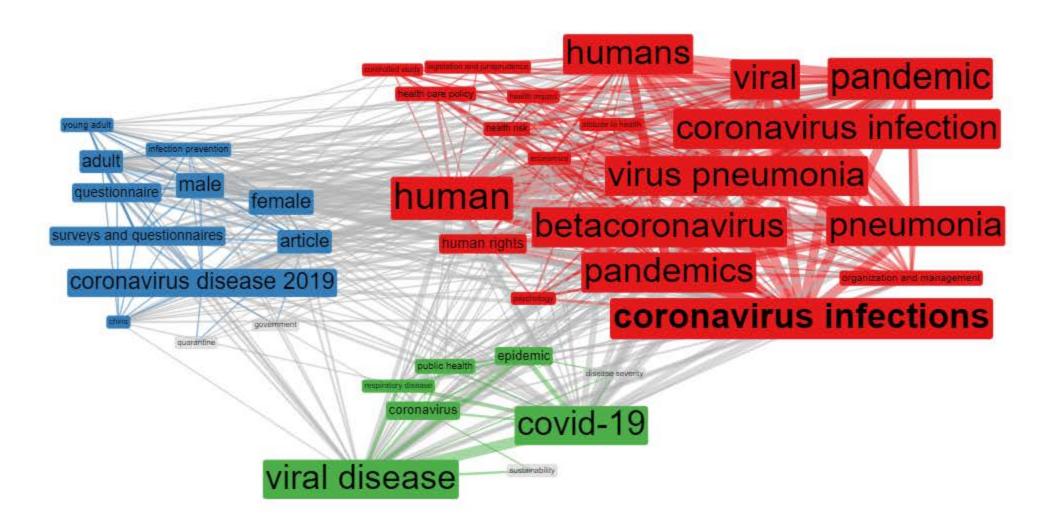




Co-occurrence Network



coronavirus infectic ✓



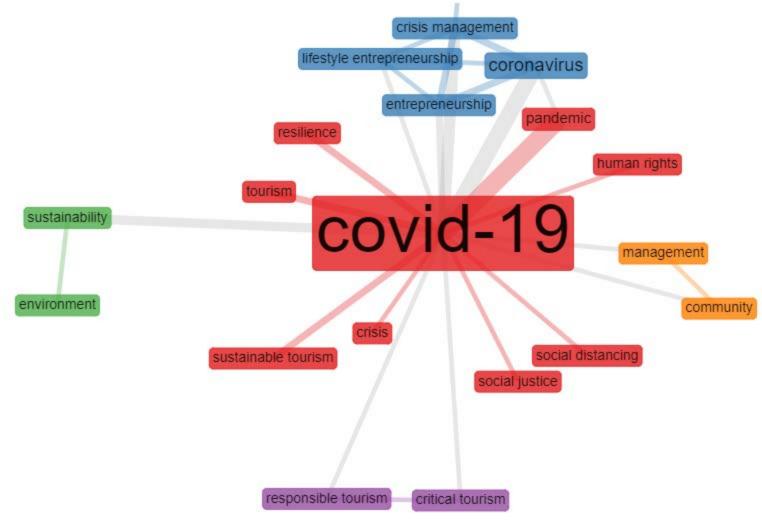


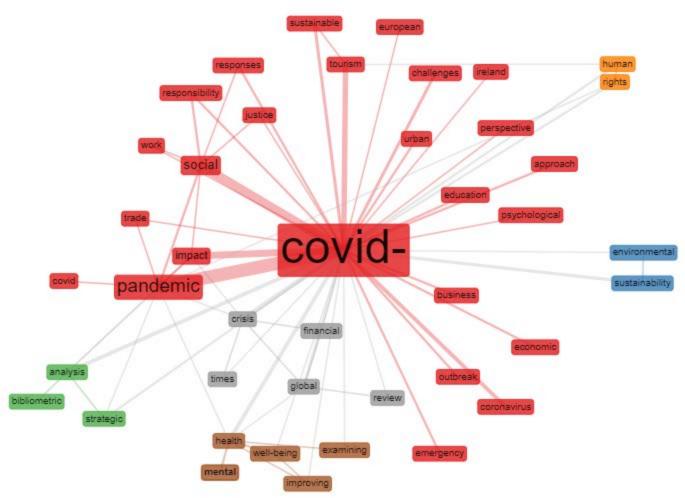




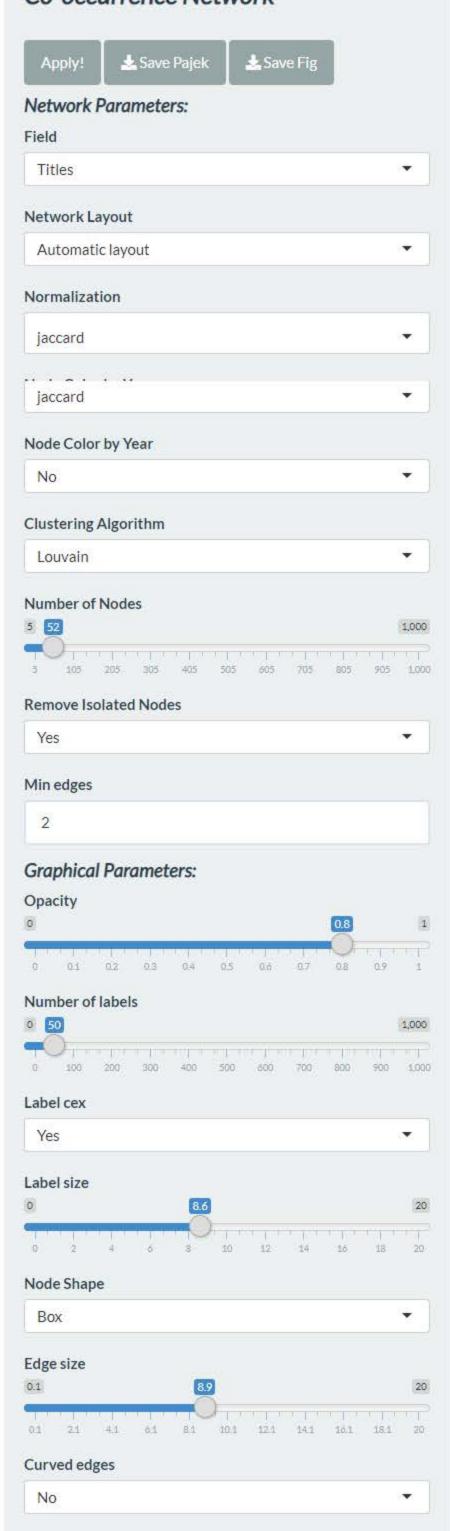


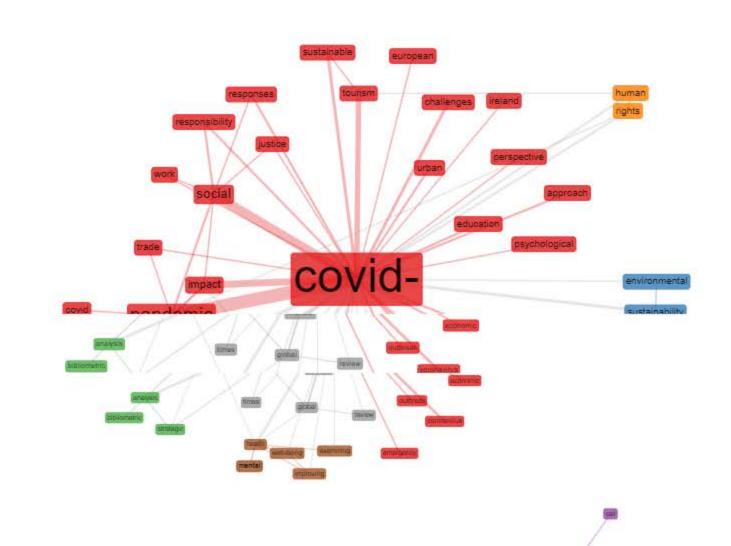






Co-occurrence Network







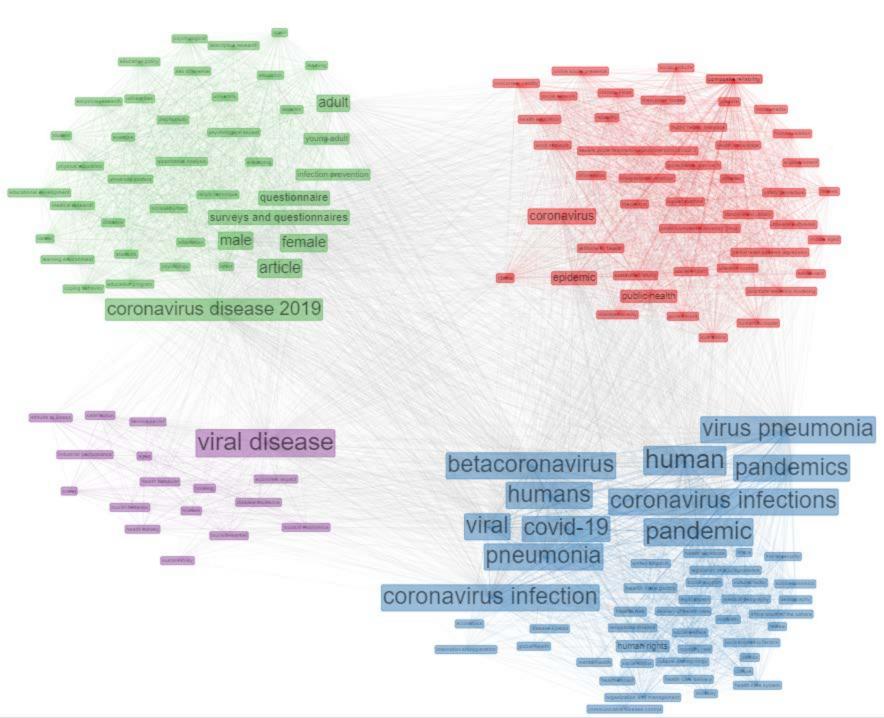
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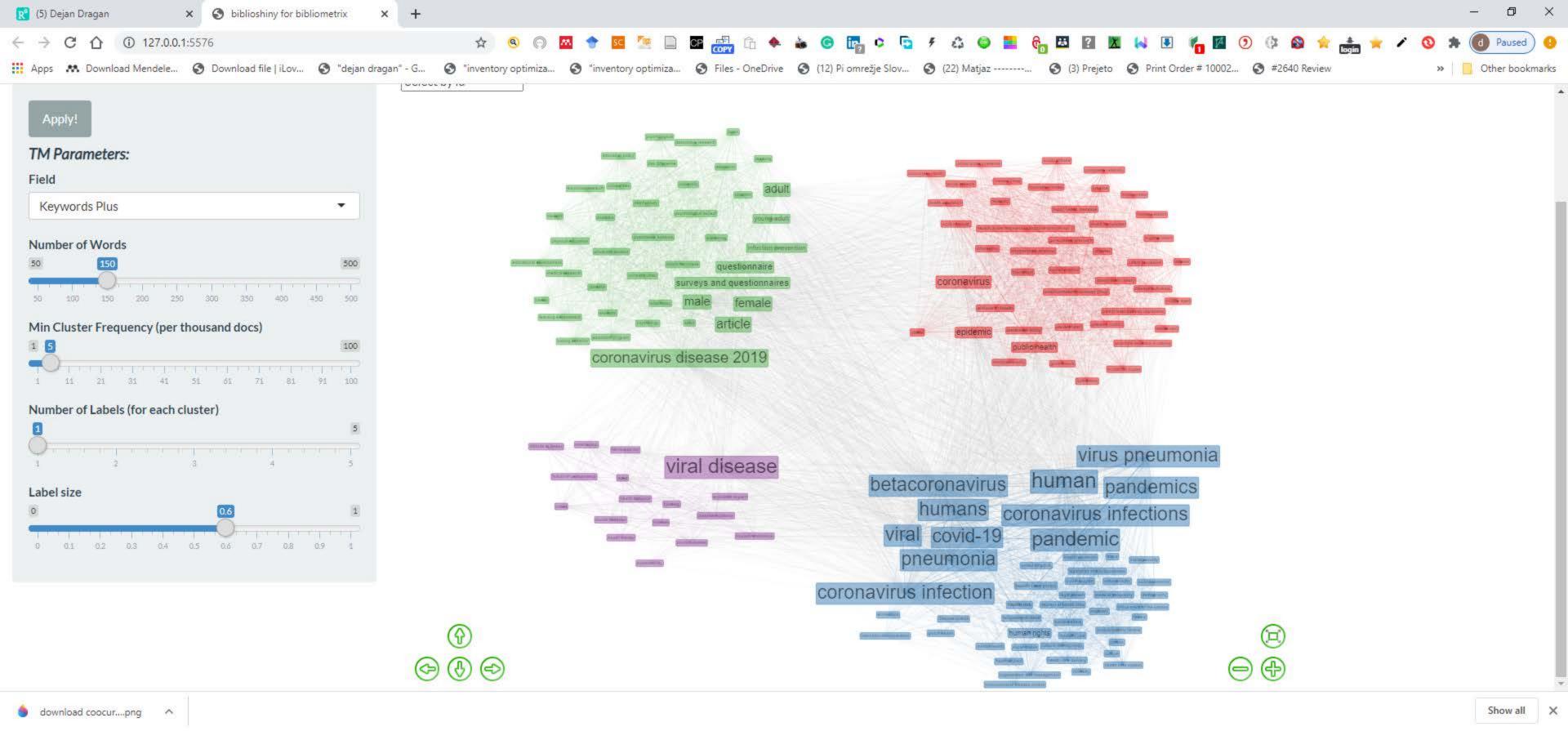


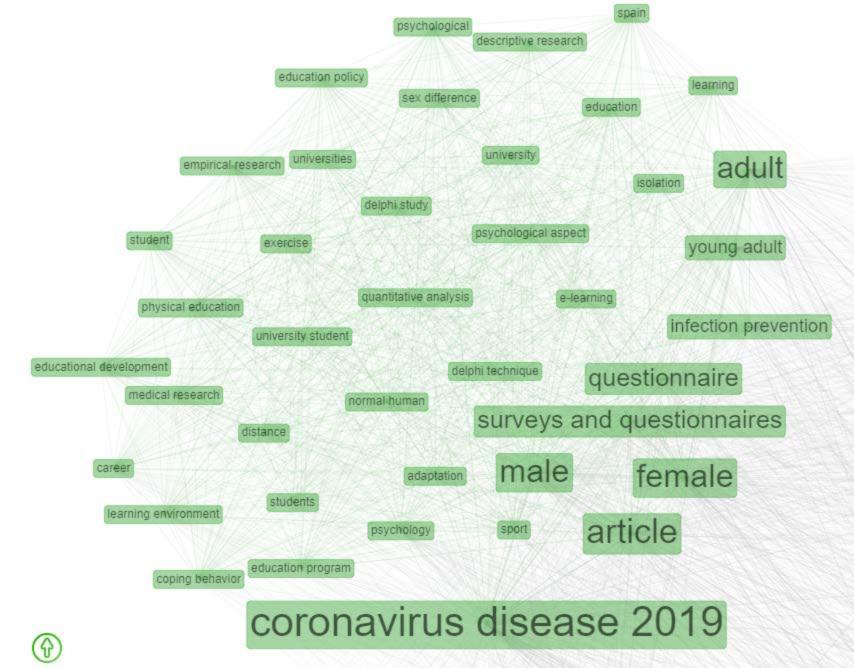


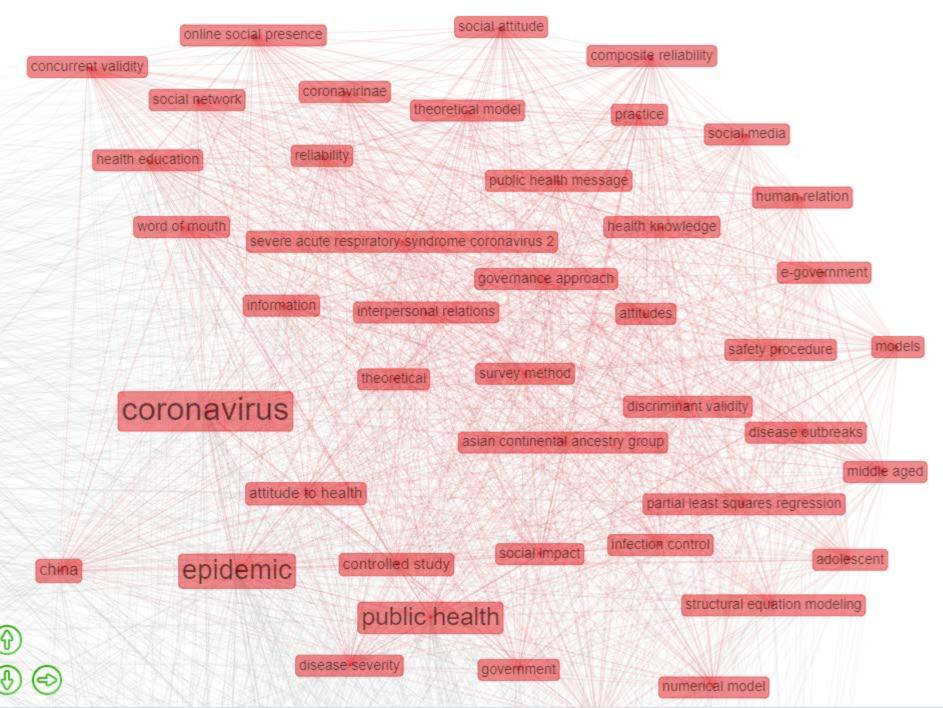












sustainability

viral disease

aged

service sector

industrial performance

tourism

health survey

tourist behavior

housing

economic impact

tourism market

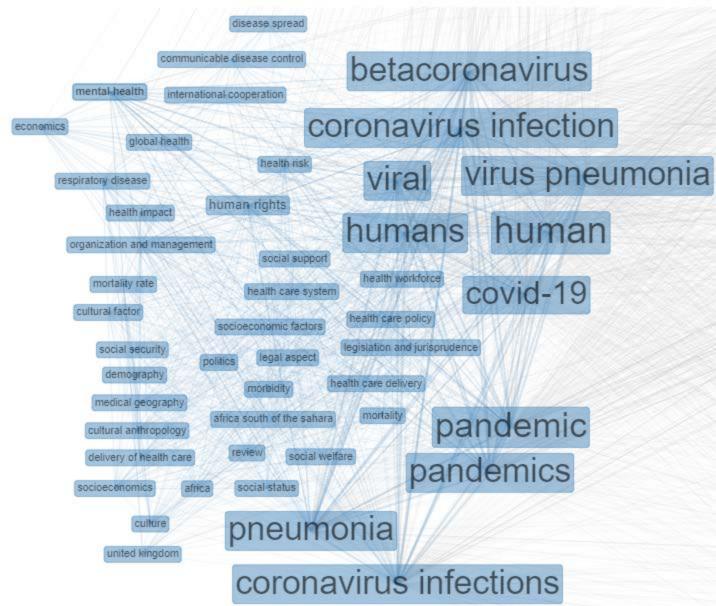
satisfaction

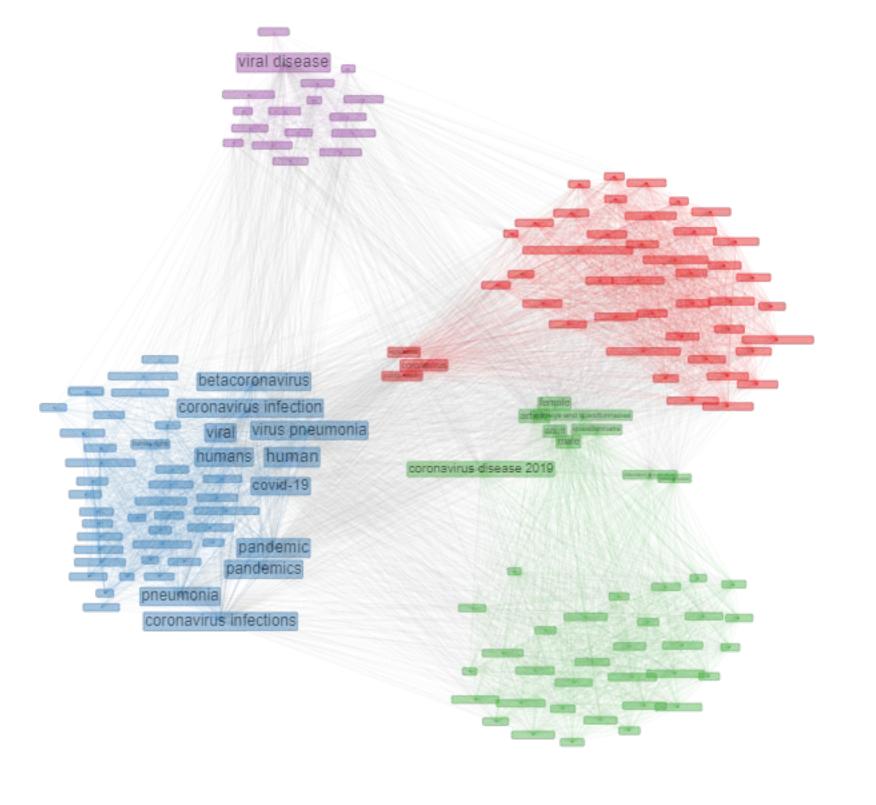
travel attitude to illness

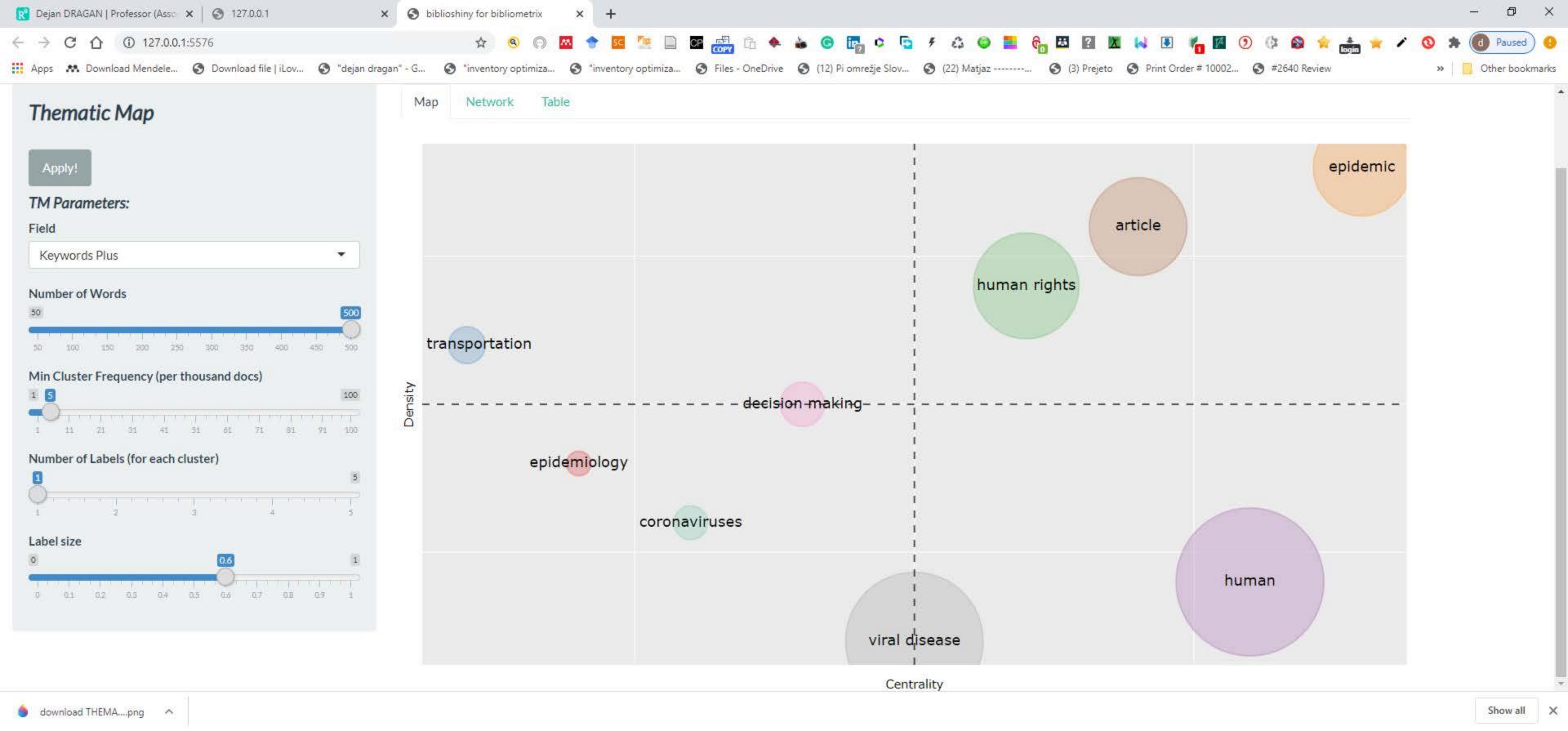
health behavior

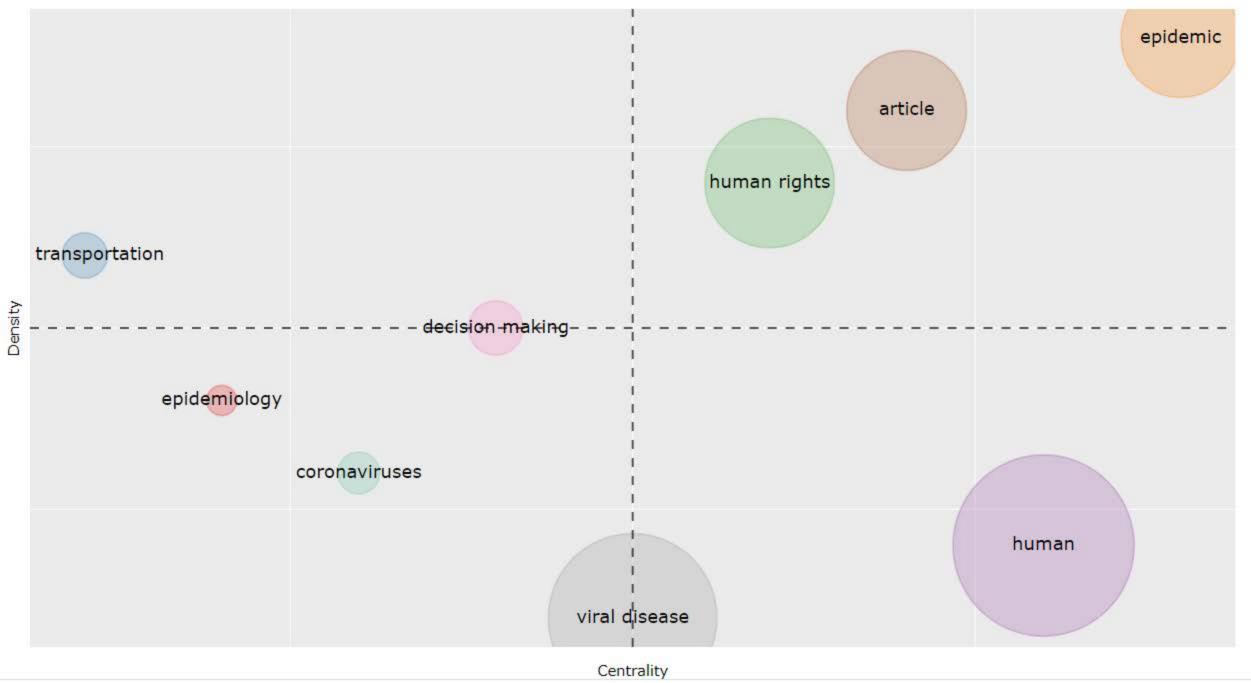
tourism economics

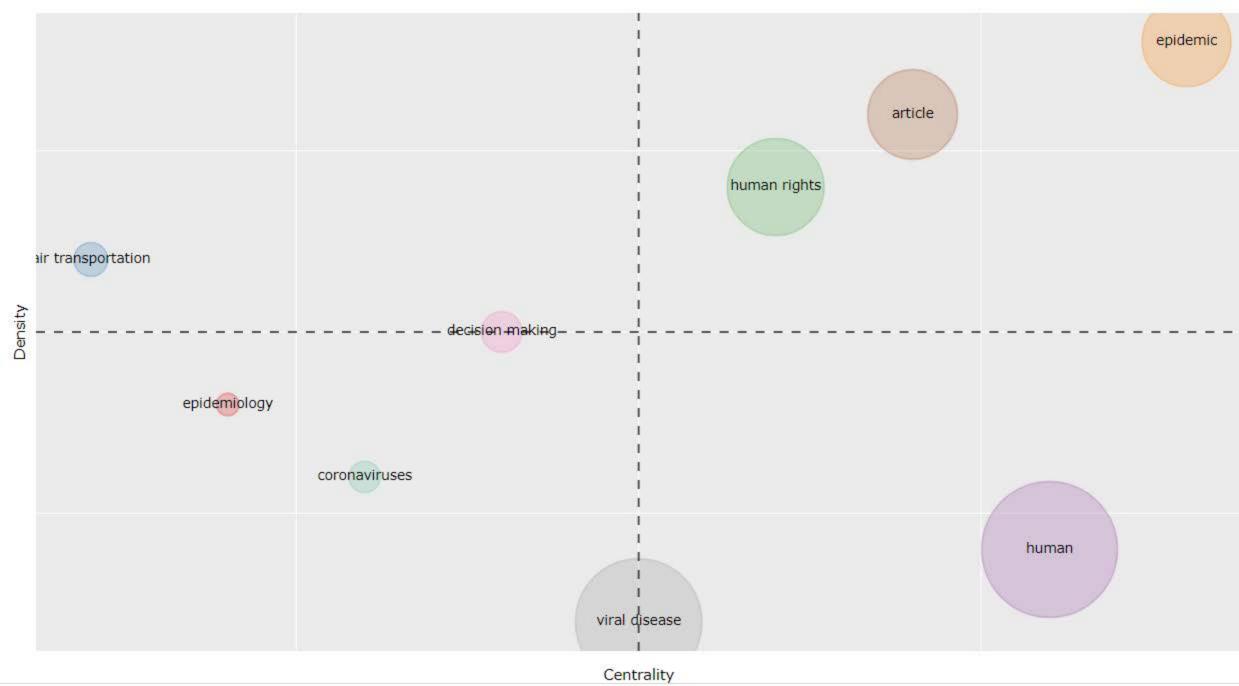
disease incidence

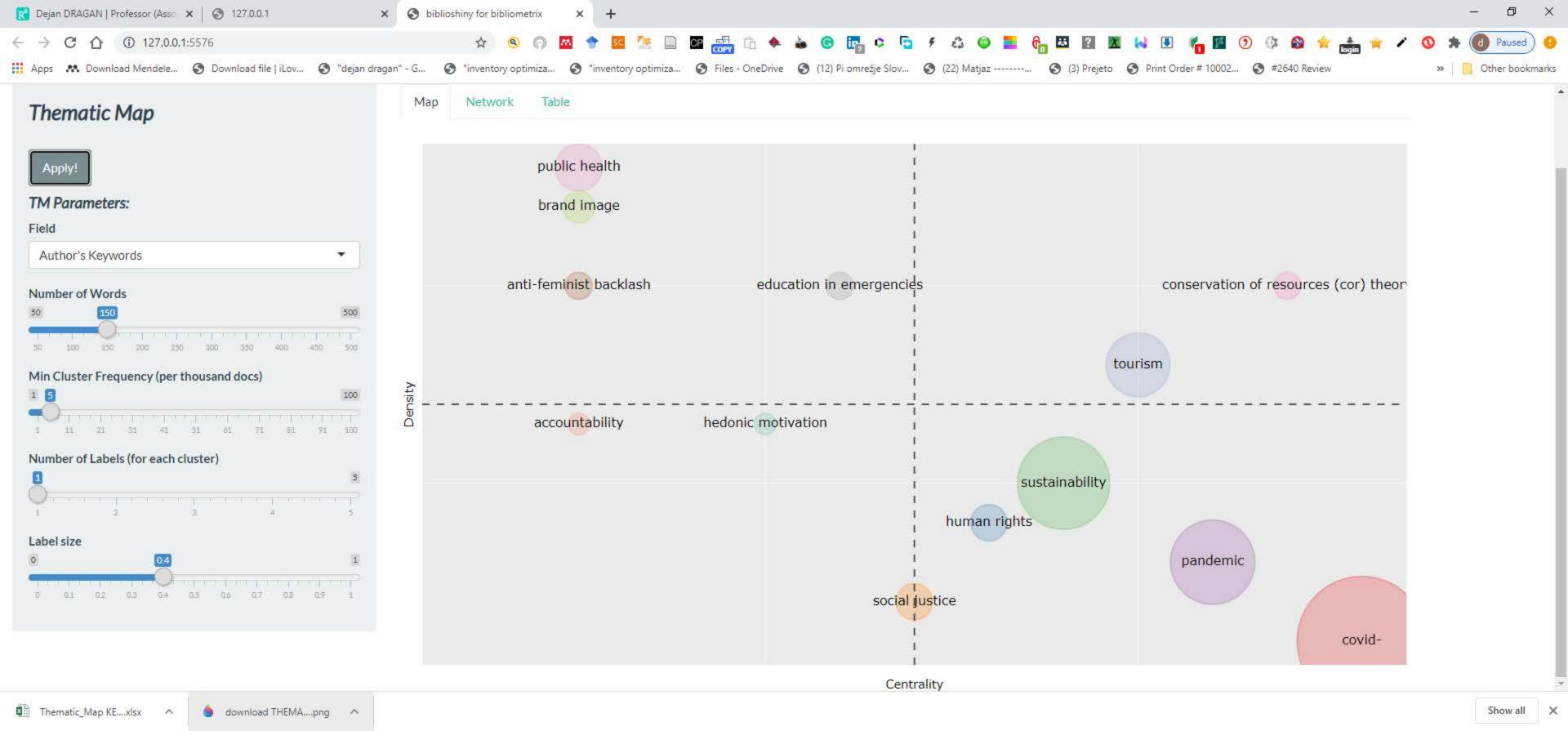


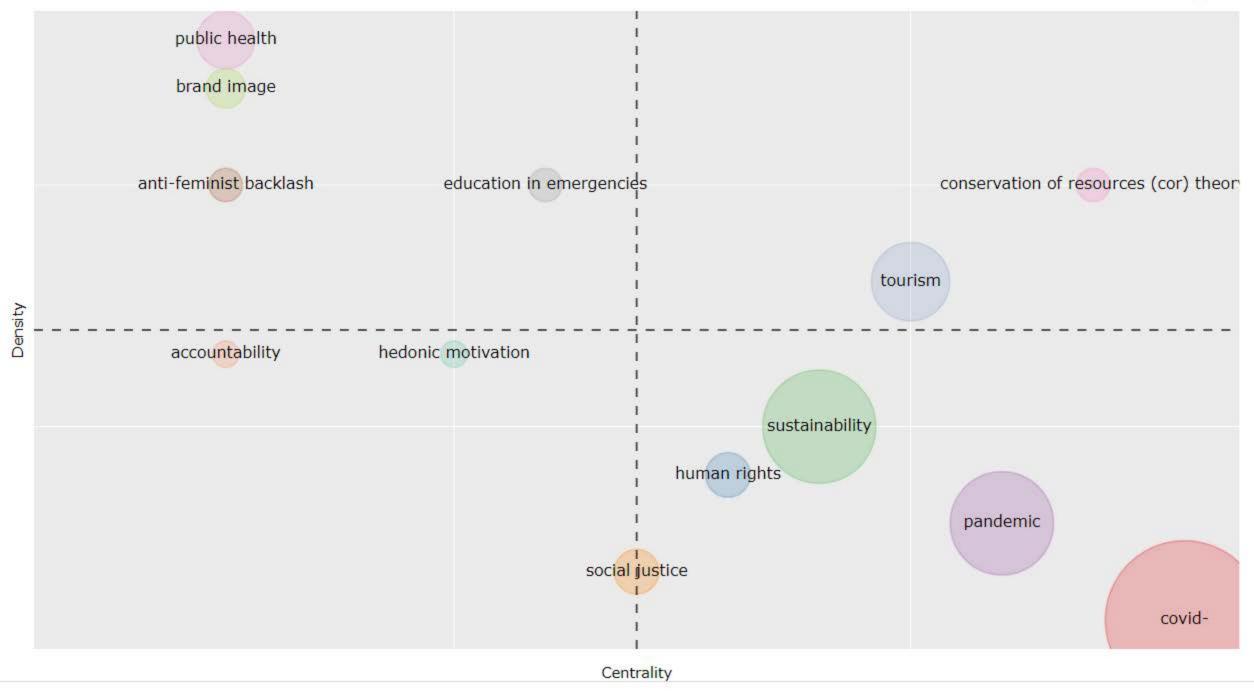




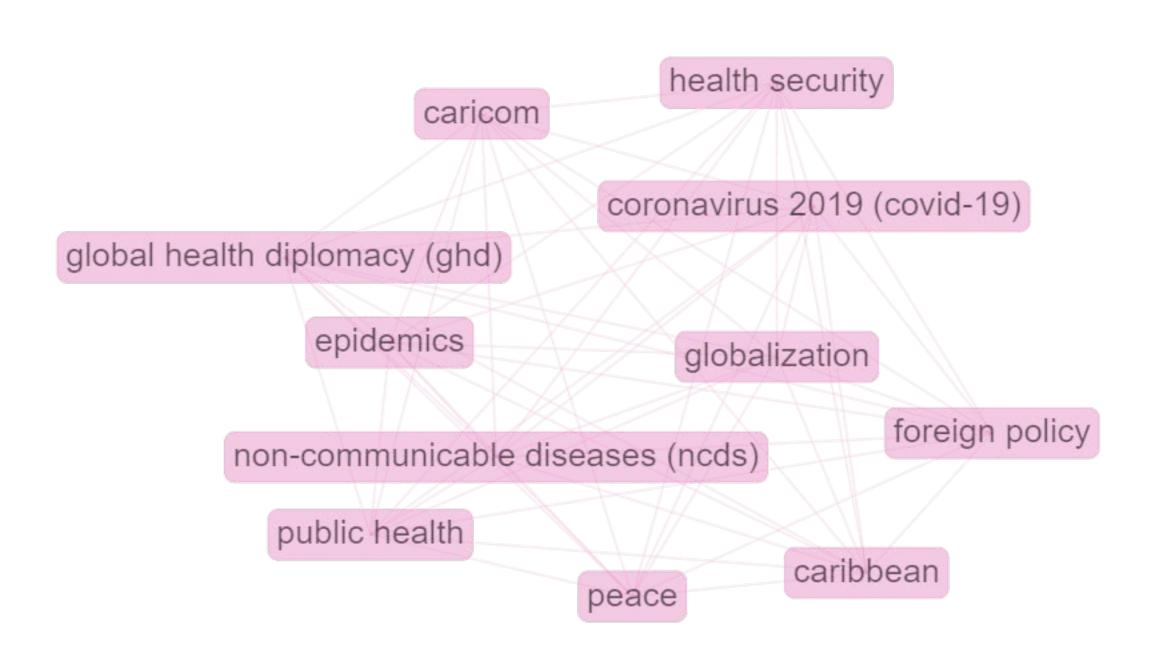












artificial intelligence corporate social responsibility covid-19 sustainable tourism corona value co-creation social value entrepreneuriat social entrepreneurship entrepreneurship social policy globalisation gestion de crise lifestyle entrepreneurship coronavirus entrepreneuriat de style de vie crisis management disaster recovery global health third-order change tourism policy pandemic response disaster management pandemic impact resilience

transformation

universities

research

assessments

competitiveness

tourism

destination

management

community

learning

education

community of practice

entrepreneurship education



corporate social responsibility (csr)

hope

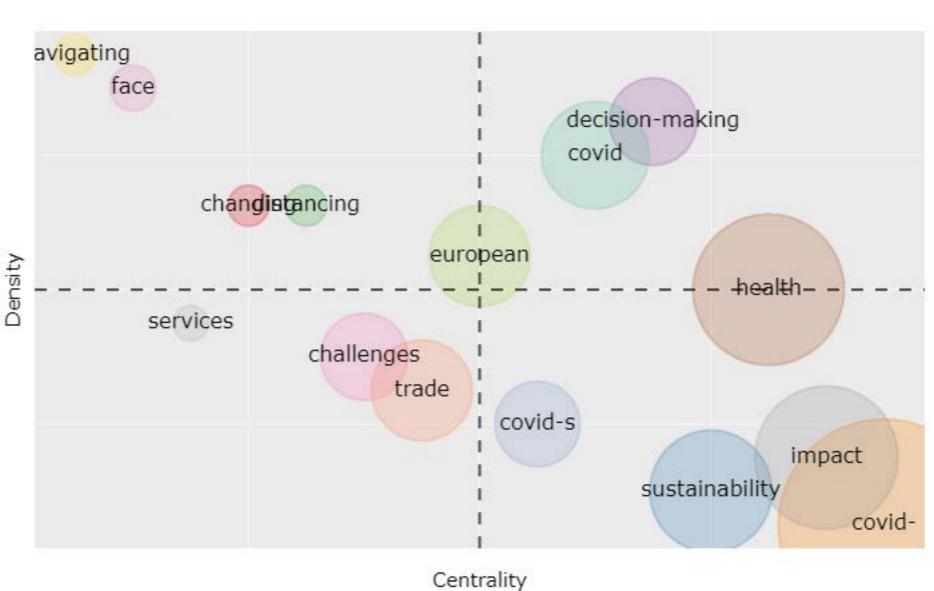
conservation of resources (cor) theory

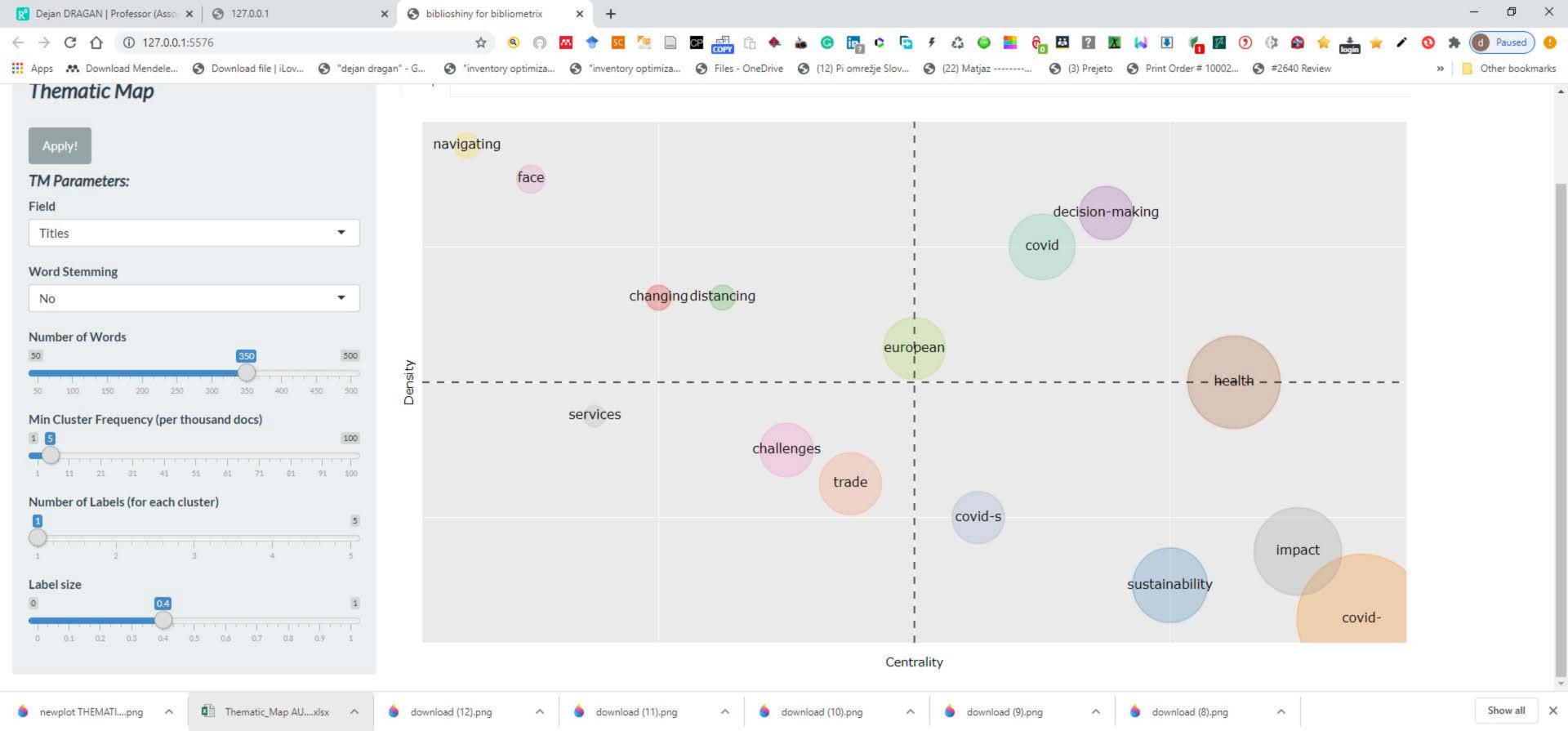
satisfaction with corporate covid-19 responses

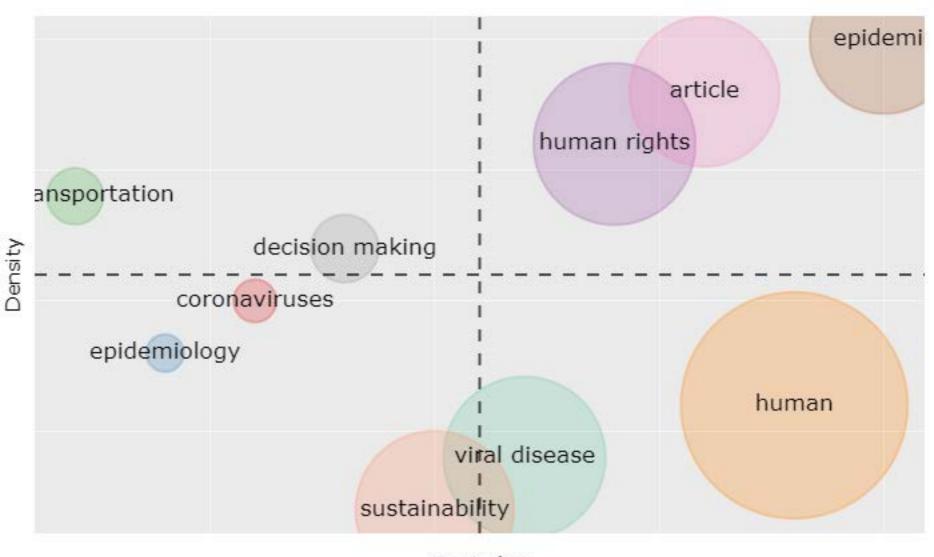
self-efficacy

loss orientation

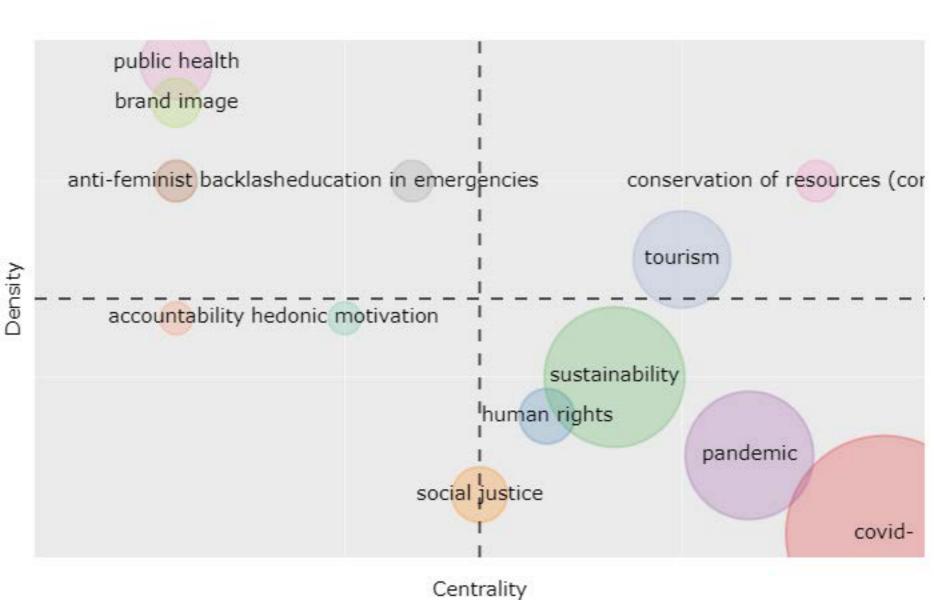
optimism

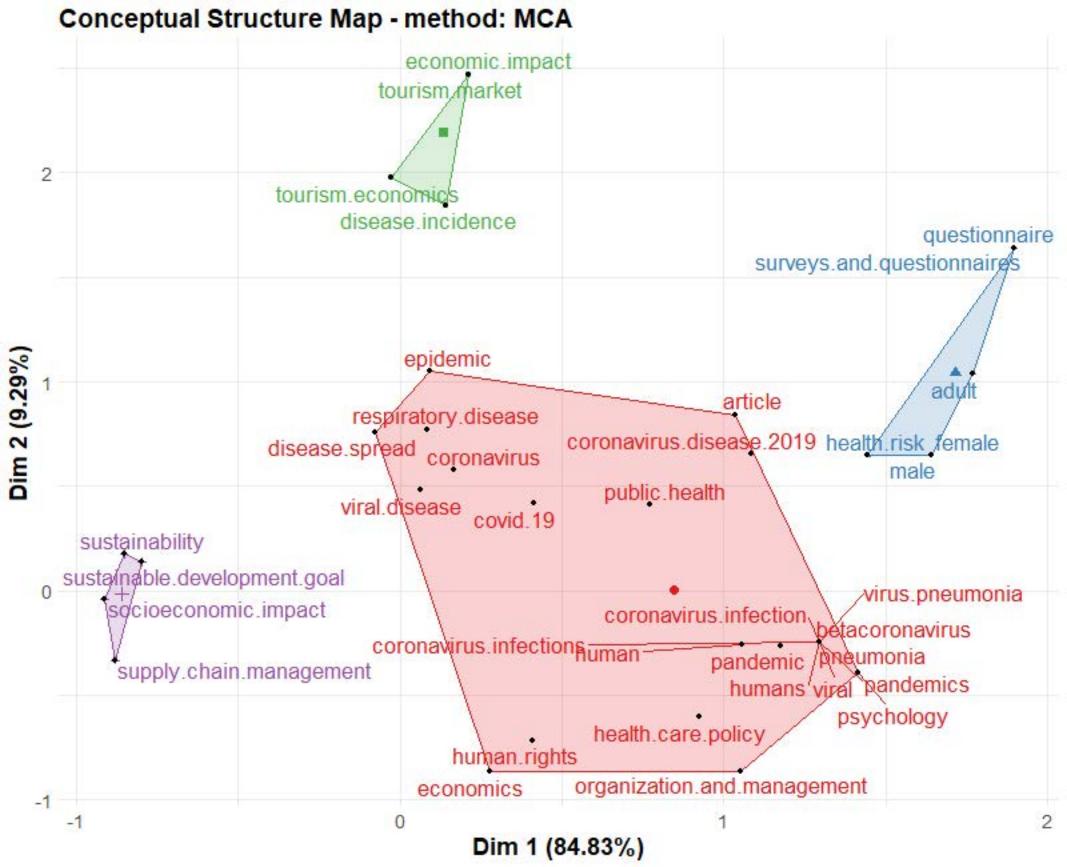


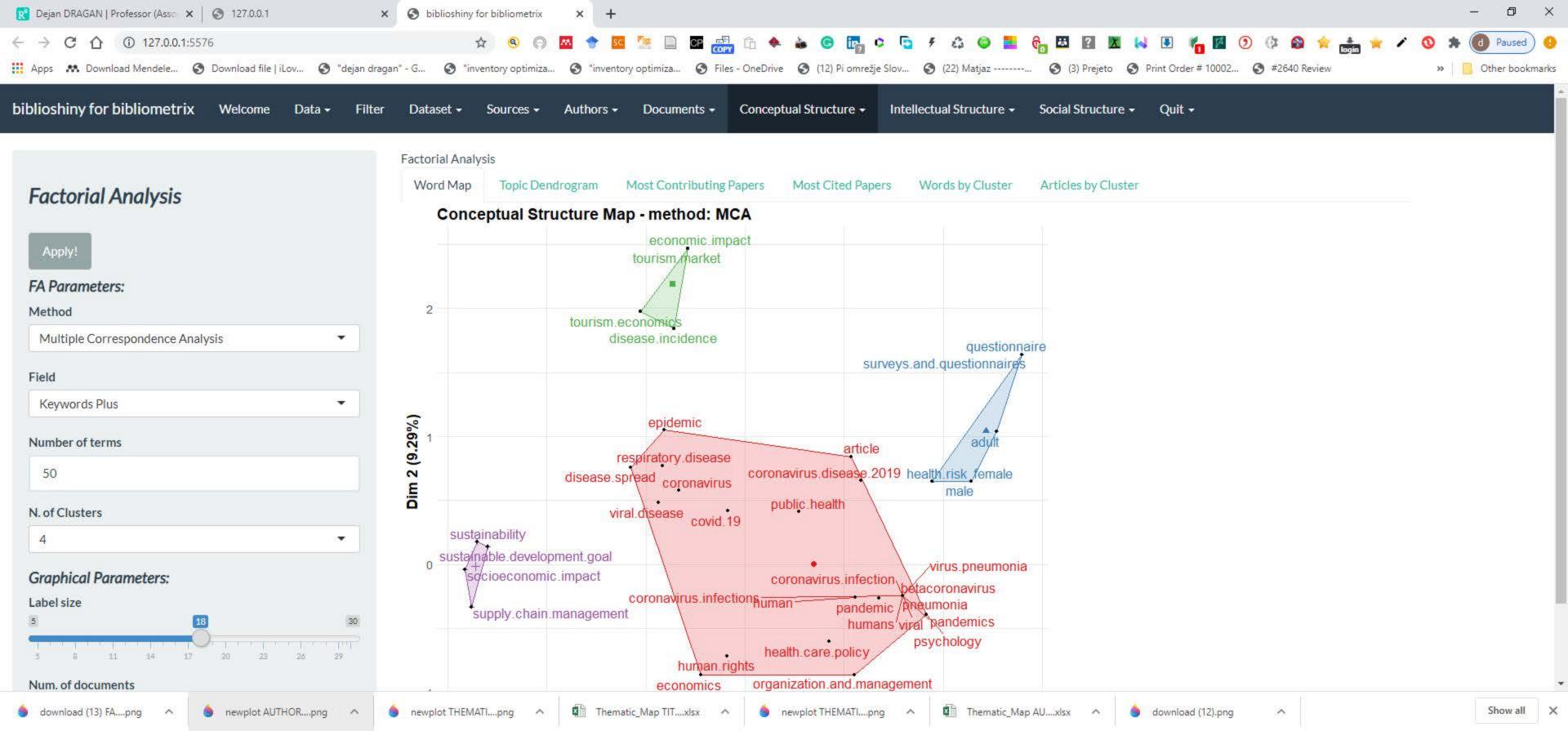




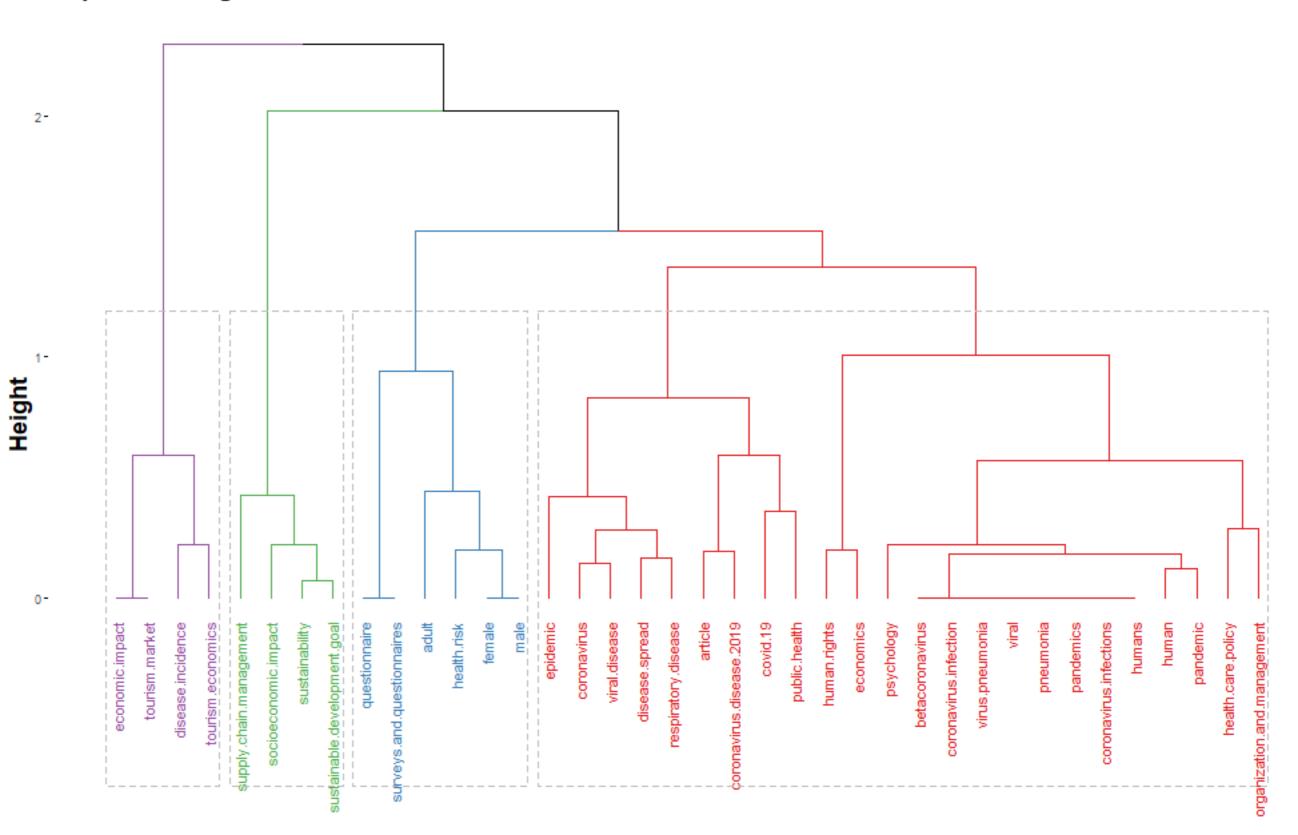
Centrality



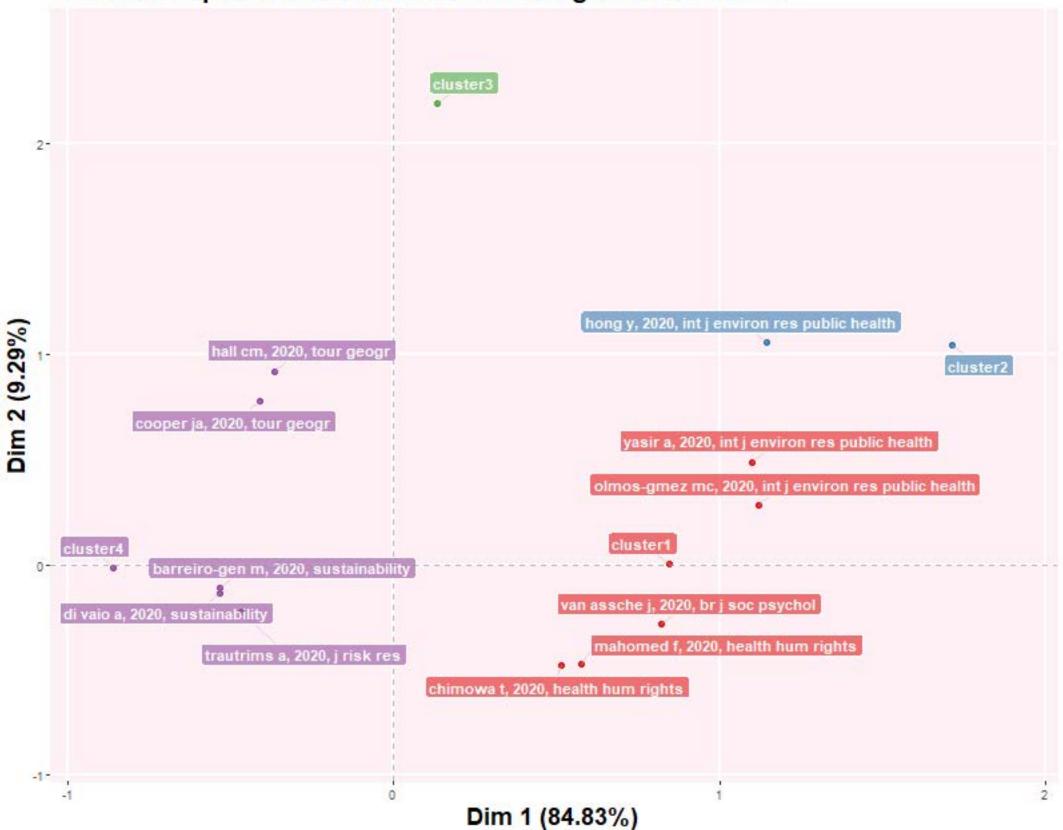




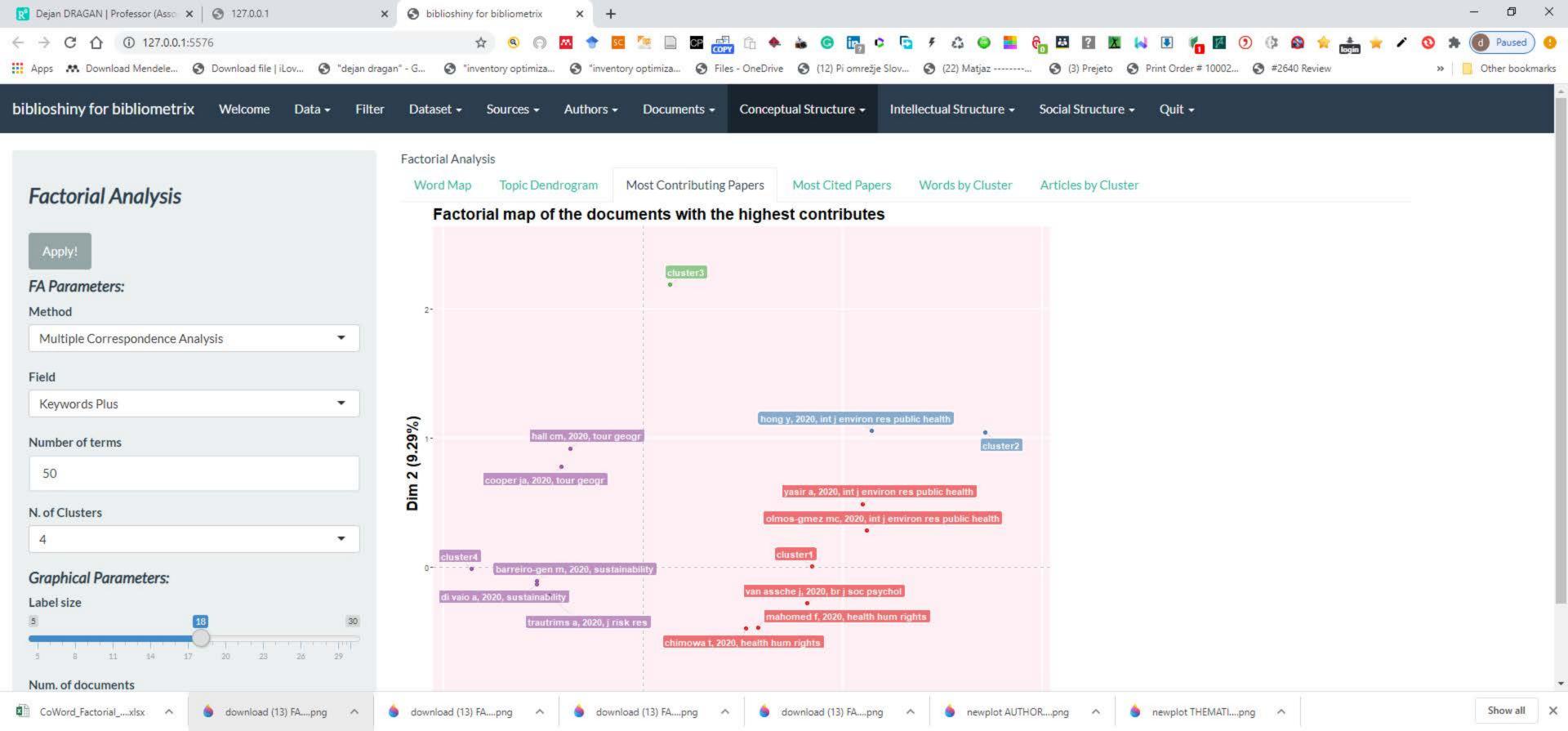
Topic Dendrogram

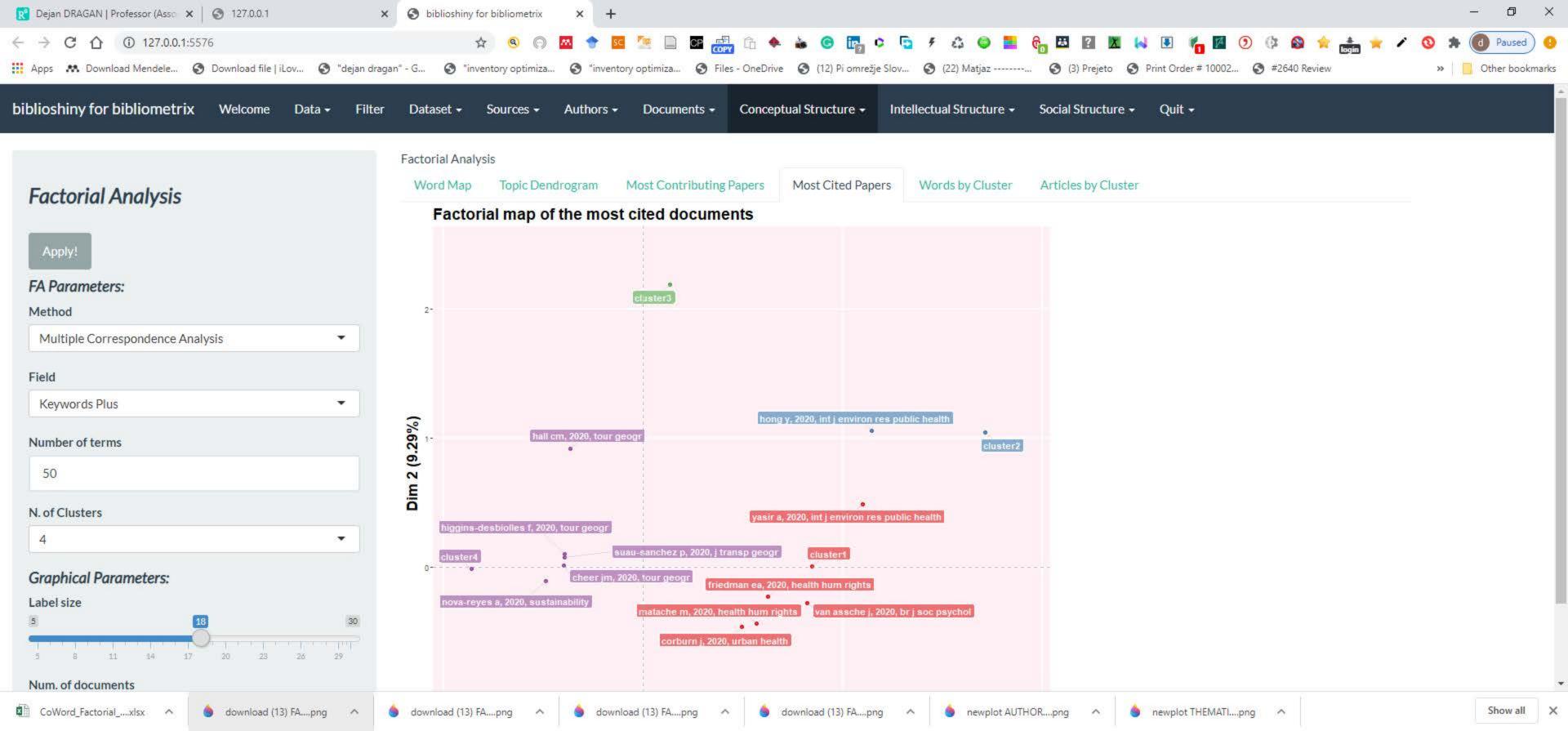


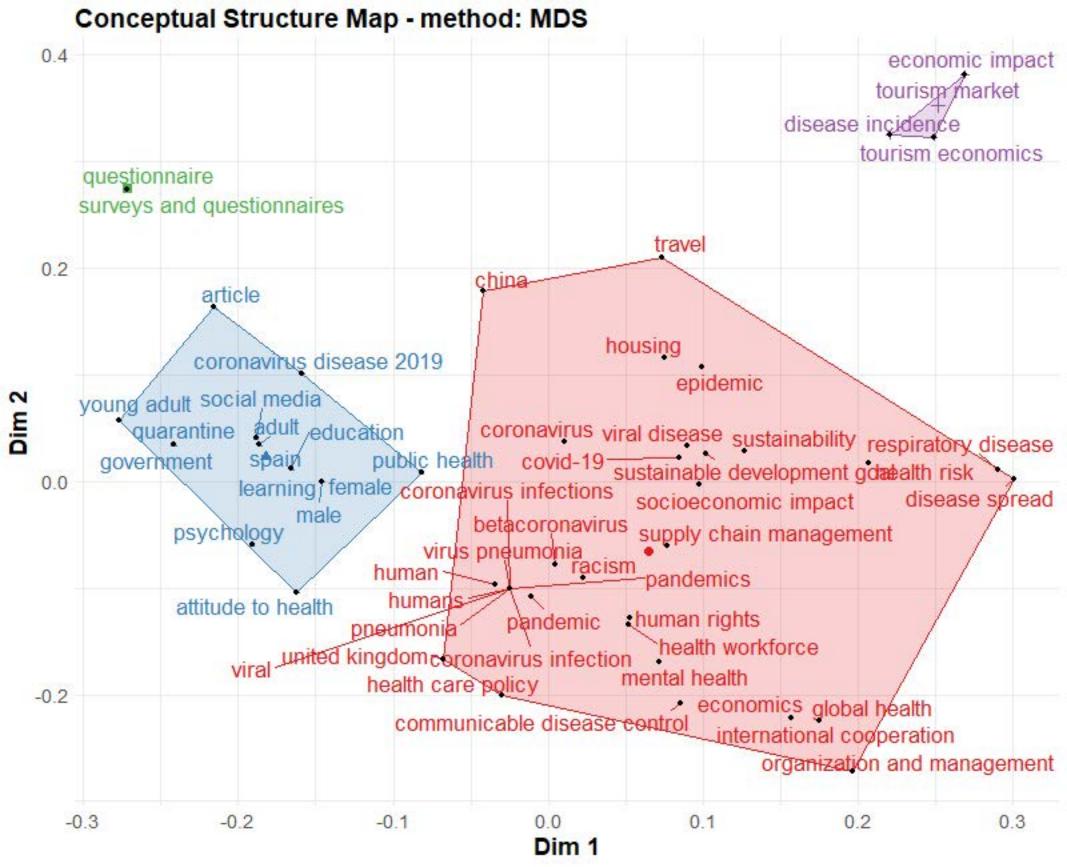
Factorial map of the documents with the highest contributes



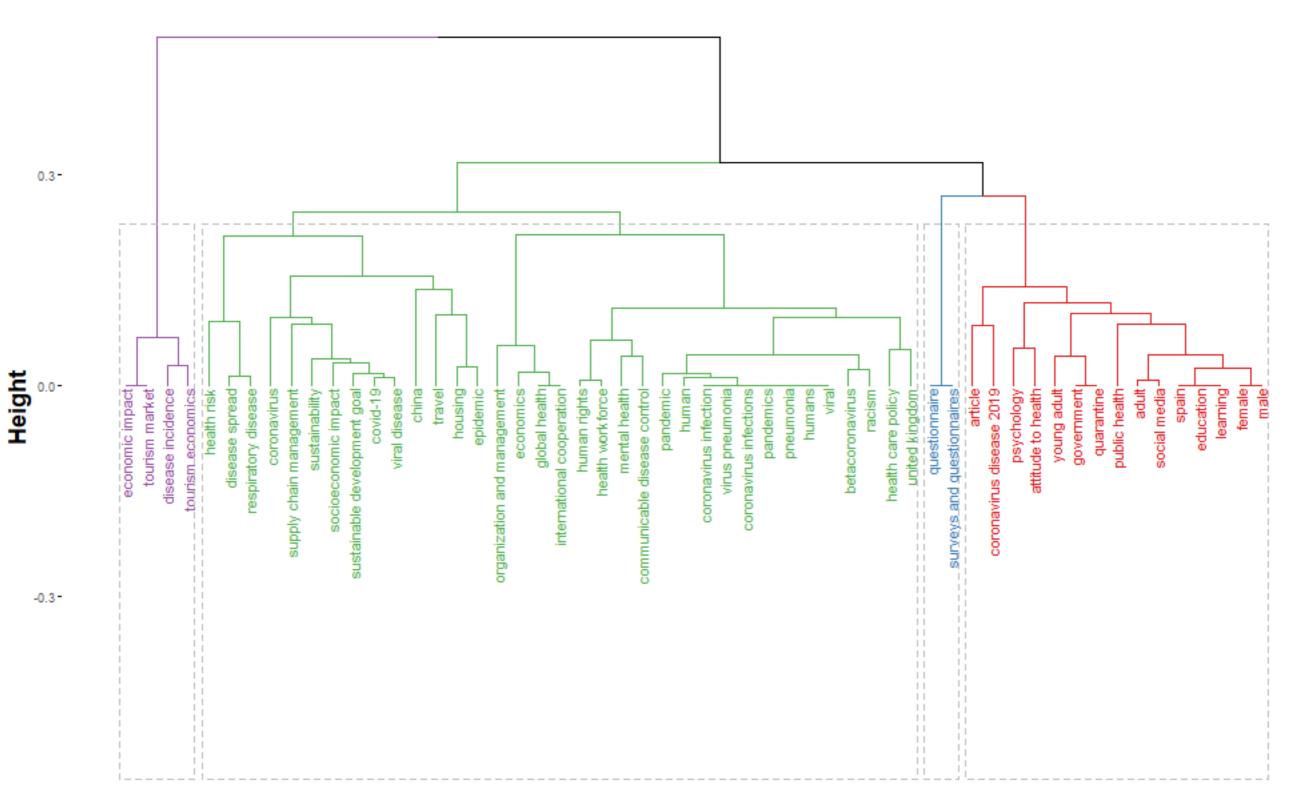
Factorial map of the most cited documents 2hong y, 2020, int j environ res public health Dim 2 (9.29%) hall cm, 2020, tour geogr cluster2 yasir a, 2020, int j environ res public health higgins-desbiolles f, 2020, tour geogr suau-sanchez p, 2020, j transp geogr friedman ea, 2020, health hum rights nova-reyes a, 2020, sustainability matache m, 2020, health hum rights van assche j, 2020, br j soc psychol corburn j, 2020, urban health 2 Dim 1 (84.83%)

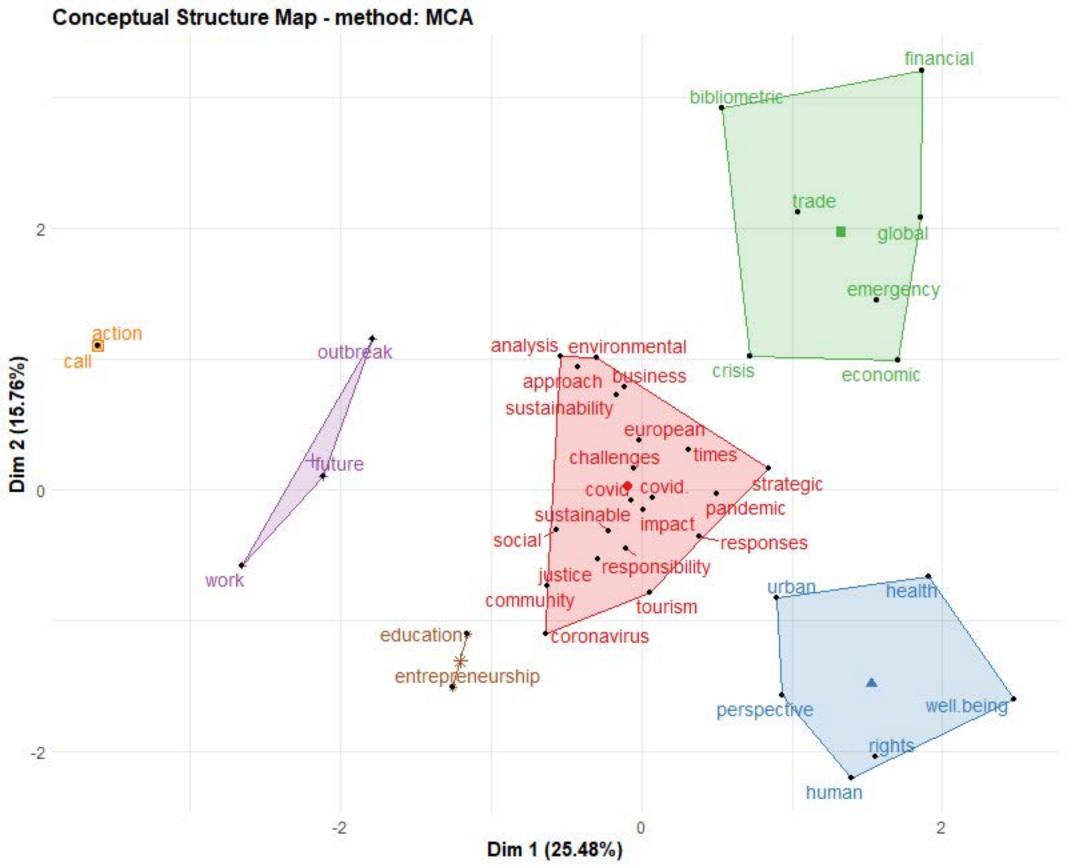


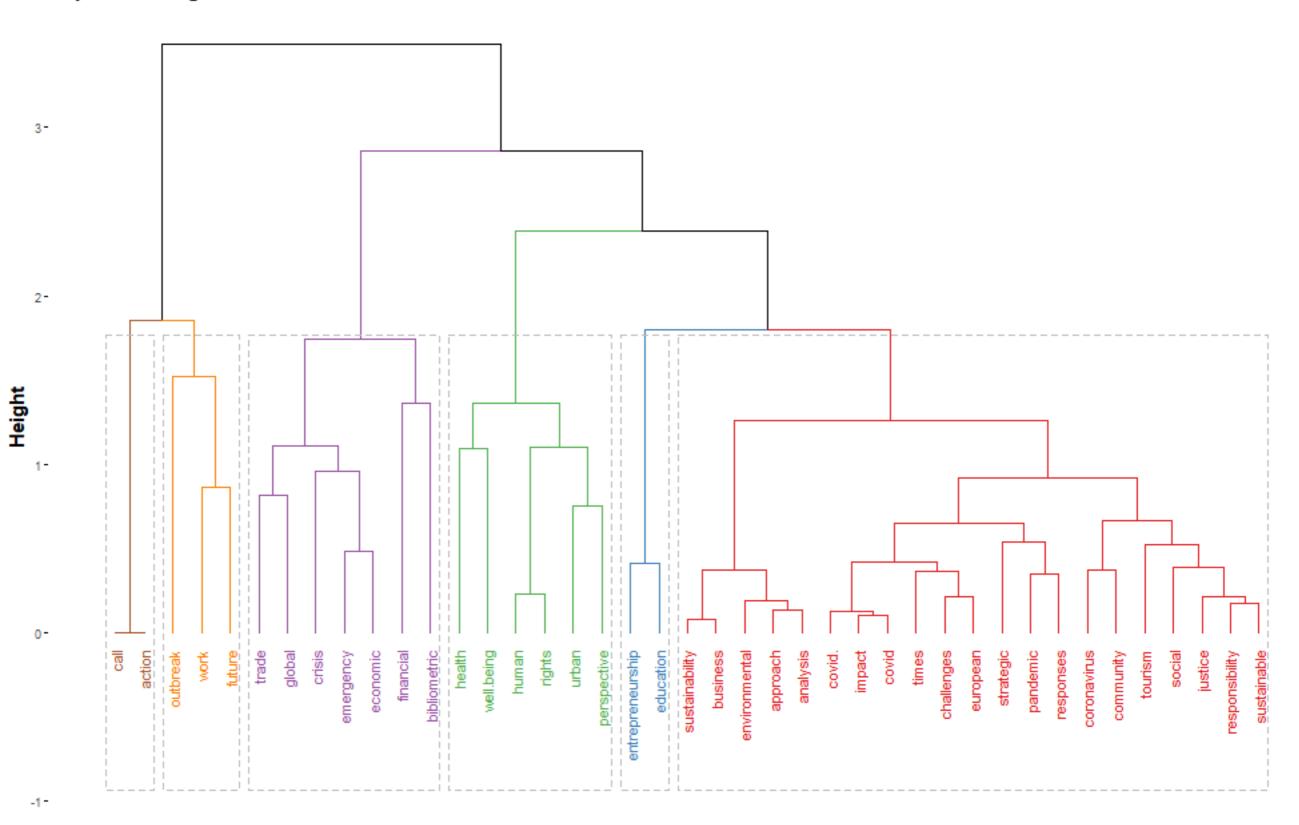


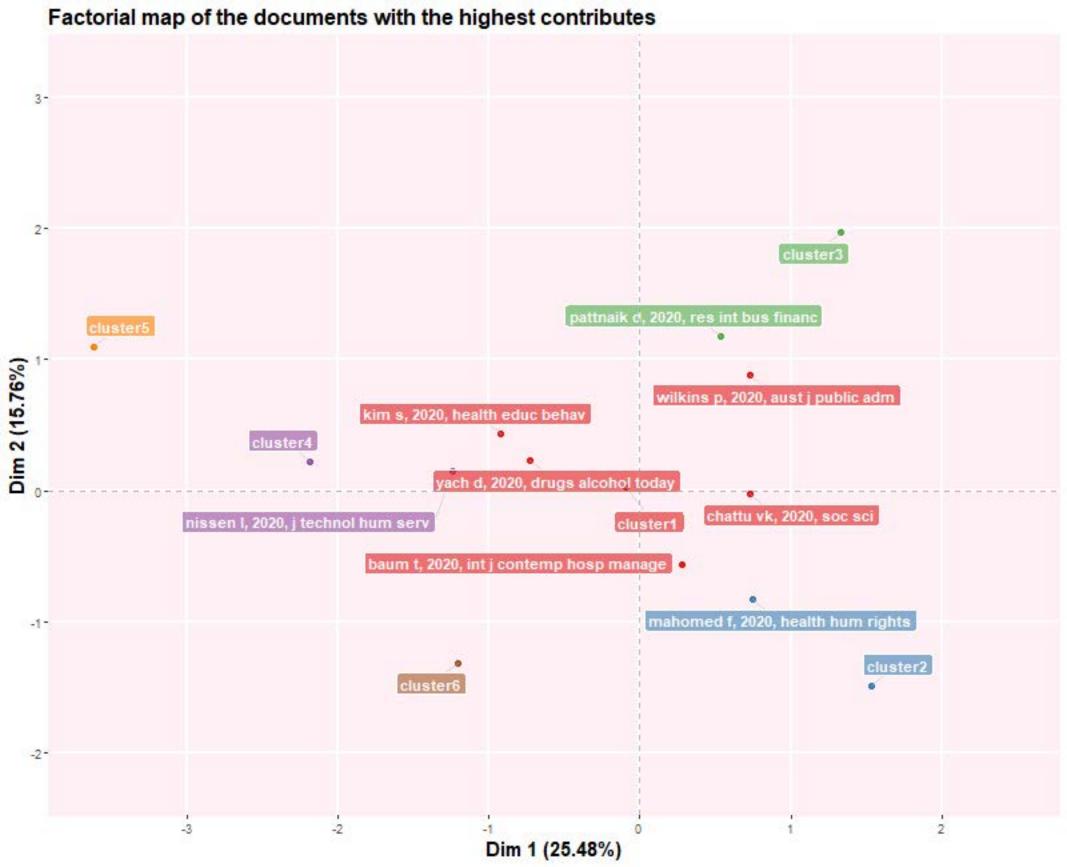


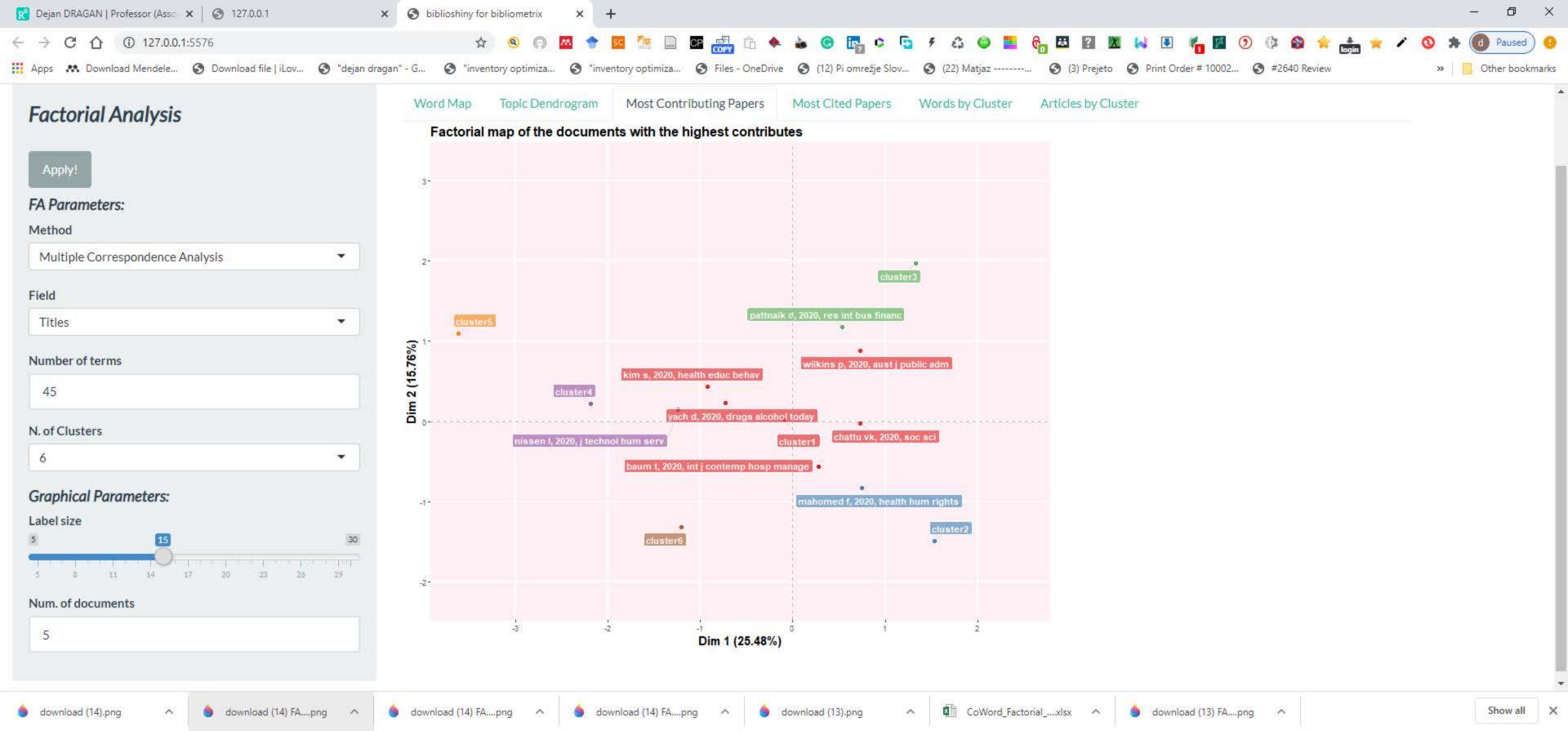
Topic Dendrogram

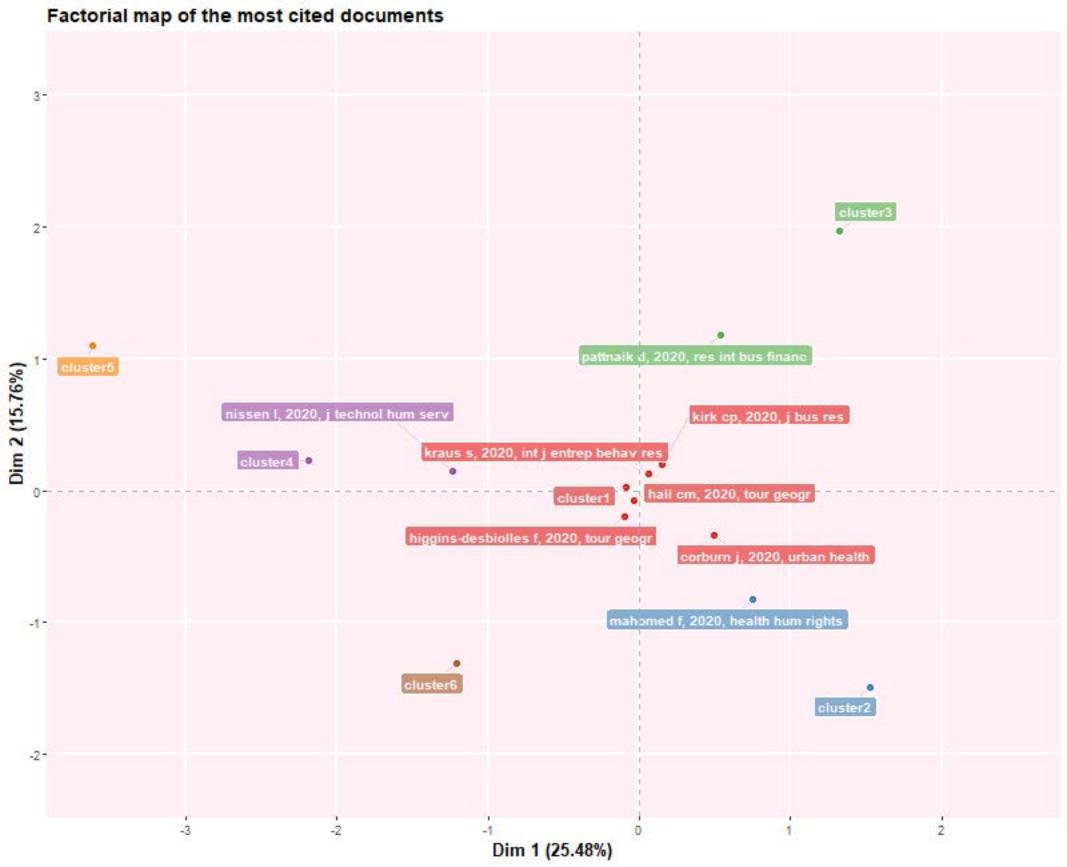


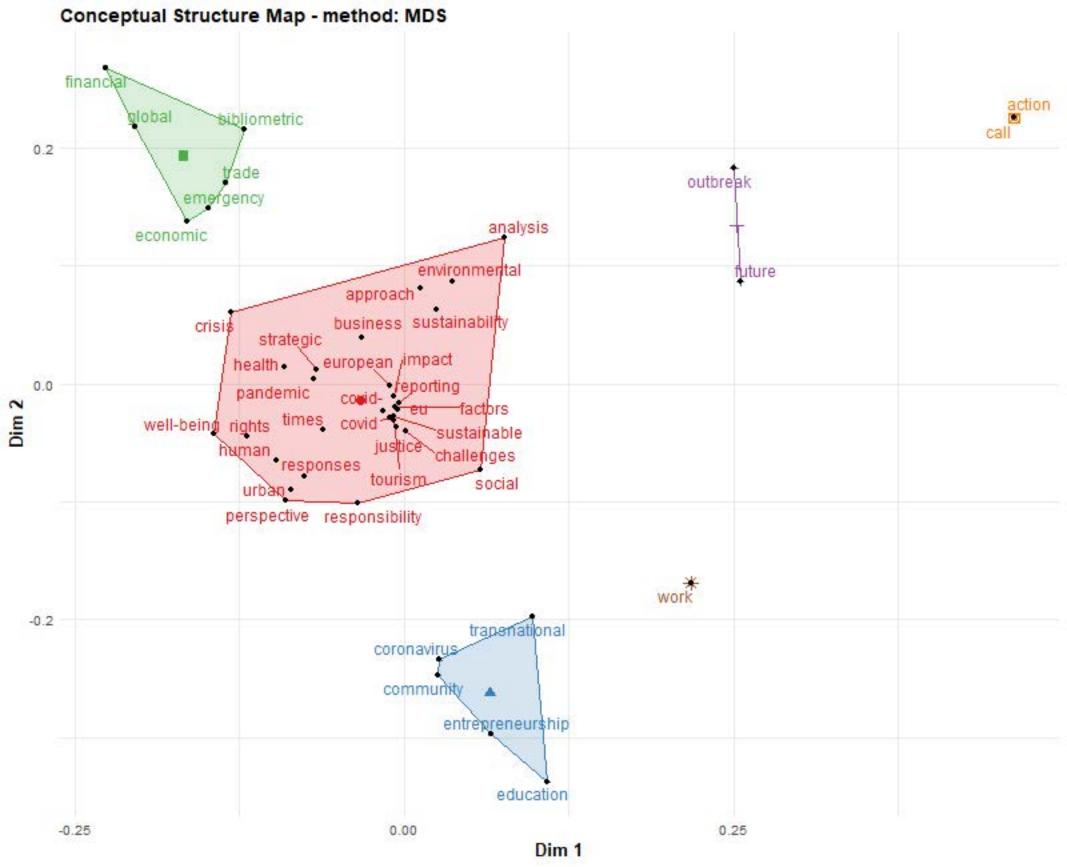


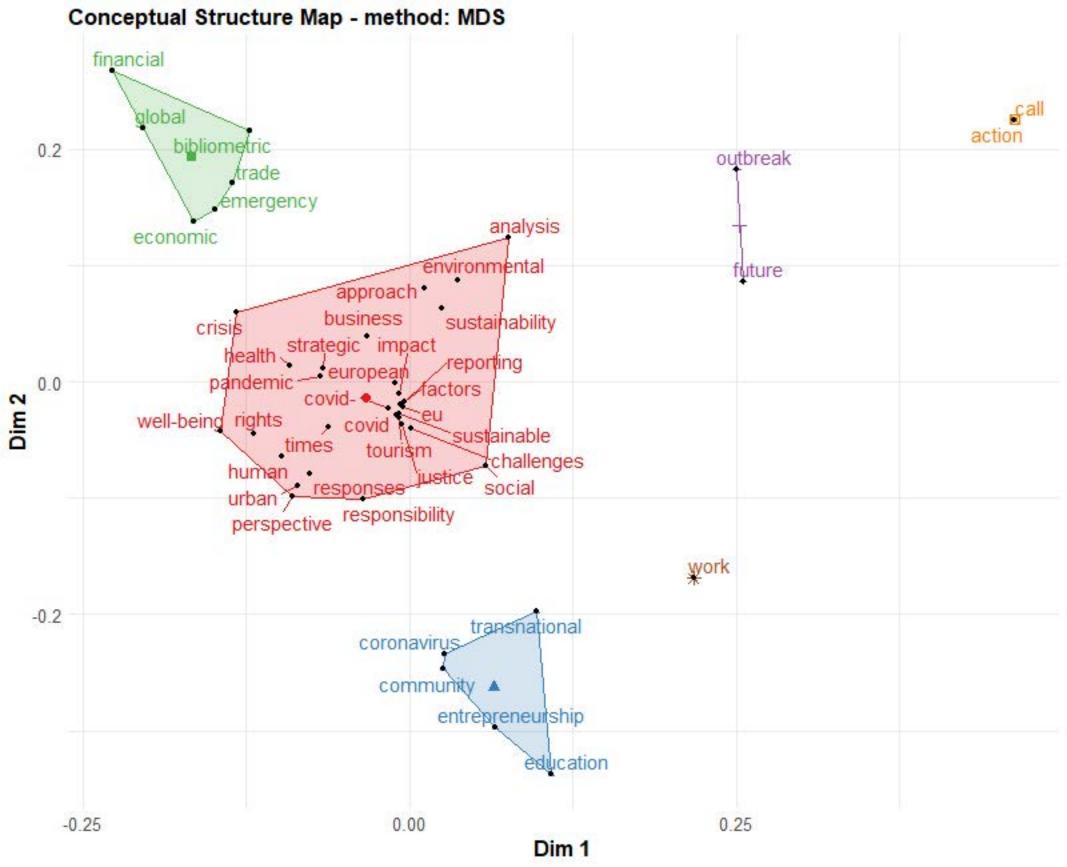












Topic Dendrogram

