



A COMPREHENSIVE STUDY OF CPEC UNDER ONE BELT AND ONE ROAD: A BIBLIOMETRIC ANALYSIS

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Abstract

China-Pakistan Economic Corridor (CPEC) is China and Pakistan joint project. According to the bibliometric Analysis of CPEC publications indexed in the Web of Science (WoS) database, most publications were observed between 2017 and 2019. 1012 authors from 31 countries submitted 459 papers in 324 publications, with an average of 4.514 citations per document. China ranked first in Single Country Publications (SCP=225), Multiple Country Publications (MCP=64), and Pakistan (SCP=42, MCP=13). Ferdinand P and Hong Yu were active authors. Sustainability is the highest productive journal. There was a significant correlation ($p < 0.0544$) between the total number of citations per year and science publications ($r = 0.4921$), number of citations and number of documents per country ($r = 0.9751$), number of citations and Single Country Publications ($r = 0.8232$, $p < 0.0001$), and number of citations and Multiple Country Publications ($r = 0.6977$, $p < 0.0001$). This study provides an in-depth impression of CPEC, highlighting the research area and contributing countries towards scientific research.



Keywords: Bibliometric Analysis; China Pakistan Economic Corridor; One Belt One Road

1. Introduction

China Pakistan Economic Corridor (CPEC) is a fundamental driving undertaking which is under the umbrella of the One Belt One Road (OBOR) project, which was started by the Chinese government in 2013 (H. Yu 2017), (Haidar, Sham and Fang 2019). OBOR is viewed as a uber project as it joins around 60 nations (Yu, Yaodong and Chang 2018). Besides, the meaning of CPEC is that it is important for Pakistan and the Middle East, China, and the entire of South Asia (Shaikh, Faheemullah and Ji, Qiang and Fan 2016). Monetarily, streets and transportation play had a huge influence in the advancement of business and monetary development of the nation; consequently, this uber project movement is the most gainful chance for both Pakistan as well as China to increment financial development and business open doors; and to work on neighborhood foundation (Ali, Liaqat and Mi, Jianing and Shah, Mussawar and Khan, Afedullah and Imran 2017). As per authorities, the CPEC projects are comprising of various different activities, including energy, financial, schooling and foundation improvement (Kanwal, Shamsa and Chong, Ren and Pitafi 2019). In particular, CPEC as the general venture can work on the improvement of the economies and aid different cultural objectives, like instructive open doors and natural assurance. For example, framework improvement, like schools, establishments, colleges, and institutional vehicle, essentially impacts the nearby networks' instructive level (Asomani-Boateng, Raymond and Fricano, Russell J and Adarkwa 2015). China and Pakistan have put a colossal sum in CPEC projects, accordingly can give noticeable help in collaboration and instructive improvement (Haidar, Sham and Fang 2019). The significant benefits to being acquired through CPEC uber projects comprise of foundation, innovation and schooling of nearby networks (Nasir, Zafar Mueen and Shah, Syed Zulfiqar Ali and Ahmed 2016). The megaprojects of CPEC will take care of the energy and schooling issues in country areas of Pakistan (Liang Tong 2014).

Furthermore, CPEC will build business open doors by giving simple admittance to the Arabian Sea (Gulf nations) (Nazneen, Shama and Xu, Hong and Din 2019); that will altogether save organizations time and cost-decreasing distance. Territorial network given by CPEC would likewise improve the travel industry in Pakistan (Nazneen, Shama and Xu, Hong and Din 2019). CPEC is viewed as one of the significant determinants in exchange advancement and modern development (Anwar, Muhammad and Shah, Syed Zulfiqar Ali and Khan 2018); and has essentially further developed interest in the few modern areas involving street. which straightforwardly or by implication contribute towards financial development (Shah 2018); offers a few amazing open doors including work and monetary



turn of events (Liang Tong 2014), and alleviate destitution and is relied upon to begin its activity soon to help Pakistan's economy as far as business age and neediness decrease (Anwar, Muhammad and Shah, Syed Zulfiqar Ali and Khan 2018). With prime actual framework and availability, the neighborhood local area financially gains benefits in work, different business amazing open doors and admittance to training organizations (Kanwal, Shamsa and Chong, Ren and Pitafi 2019).

Despite the fact that CPEC is by and large generally contemplated, there are as yet many promising areas of uncovered potential remained. Thusly, an extensive comprehension of over a wide span of time research patterns is expected to observe research holes and further propose techniques that will completely assemble the advantages of this significant task. In this review, an exhaustive bibliometric examination of exploration on CPEC crossing [covering] over thirty years, explicitly from 1990 to 2020, was inspected. Accentuation was laid on the investment and cooperation among creators, nations and diaries. Utilizing the bibliometric investigation instrument following the advancement of the logical exploration efficiency has been accounted for by many creators to help analysts and leaders gain knowledge into the examination usefulness to comprehend logical examination progress in huge information produced by established researchers on the planet (Tan, Xian-Chun and Zhu, Kai-Wei and Sun, Yu-Ling and Zhao, Wan-Yu and Chen, Fang 2021), (Cao, Mingchun and Alon 2020). Thusly, the review planned to survey the worldwide exploration yield zeroing in on CPEC on the Web of Science data set, recognize the most persuasive variables related with the references, and further distinguish the examination holes and future review bearing in the CPEC field.

2. Materials and Methods

2.1 Data sources

Bibliometrics use quantitative data analysis to determine trends of publications and research in a specific field of study (Omoregbe, Osaze and Mustapha, Abdullah Naseer and Steinberger-Wilckens, Robert and El-Kharouf, Ahmad and Onyeaka 2020). For the study, we used the Web of Science (WoS) database (<https://apps.webofknowledge.com/>) through a comprehensive online search of documents published between the years spanning from 1900 to 2020.

2.2 Search strategy of data from Web of Science

All the China Pakistan Economic Corridor (CPEC) and One Belt One Road (OBOR) related distributions from WoS were gathered on a solitary day (on 16 February 2021) by



two analysts (AF and AA) to stay away from the WoS information base update. A far reaching search was directed by utilizing the accompanying terms looked as follows: Title: (China Pakistan Economic Corridor* OR CPEC* OR One Belt One Road*) during explicit Timespan: All years (1900-2020) and records Indexes: Science Citation Index Expanded (Science Citation Index Expanded, Social Sciences Citation Index, Arts and Humanities Citation Index, Conference Proceedings Citation Index-Science, Conference Proceedings Citation Index-Social Science and Humanities, Emerging Sources Citation Index, Current Chemical Reactions, Index Chemicus) data set. The pursuit of the connected report was confined to archives just written in English with respect to record types. Different reports distributed in (Chinese* OR Polish* OR Spanish* OR Russian*) were rejected from the last investigation. At long last, the subsequent bib.txt information were downloaded from WoS, and accordingly, 459 reports connected with CPEC and OBOR were remembered for bibliometric examination.

2.3 Data Analysis

Data were analysed using VOS viewer software (L.waltman 2019), HistCite (Shah, Syed Hamad Hassan and Lei, Shen and Ali, Muhammad and Doronin, Dmitrii and Hussain 2019). Bibliometrics, whereas R package (Shah, Syed Hamad Hassan and Lei, Shen and Ali, Muhammad and Doronin, Dmitrii and Hussain 2019) was used for frequency analysis, network analysis and visualisation between of co-authorship. Spearman correlation coefficients were used to evaluate the associations between the number of citations and study variables. A *p*-value less than 0.05 was considered to indicate statistical significance.

3. Results

3.1. Annual trend of publications and citations score

Figure 1. Shows the annual trends and citations regarding the CPEC. CPEC publications were first seen as early as 1993s, and actual growth started in 2015 and gradually increased to reach the maximum after 2017-2019. The initial analysis highlights the number of articles published by year during the period 2015 to 2020.

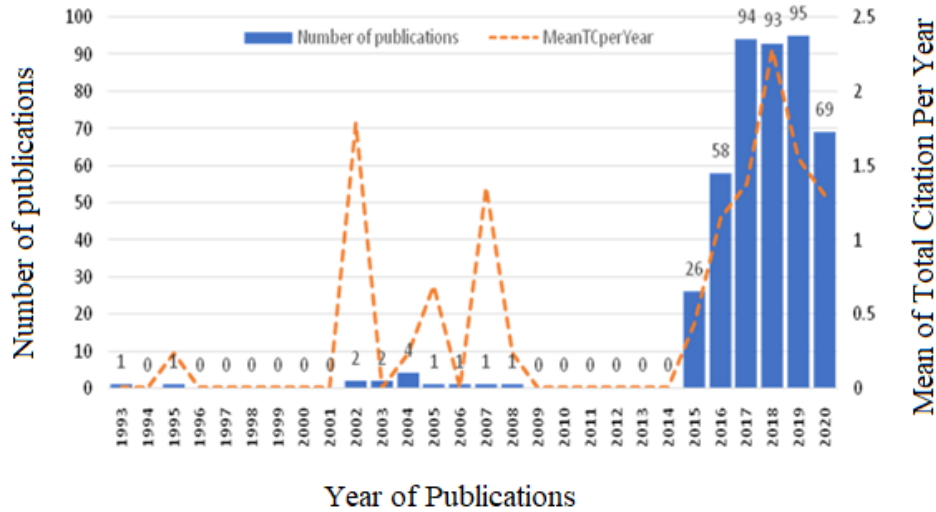


Figure 1. The is a figure. Schemes follow the same formatting

3.2. Publication output and document types

Based on the search criteria in the WoS database (459) articles on "CPEC" published between 1993-2020. Out of all the collected publications in CPEC, original articles accounted for about 213(96.97%), followed by review papers (46, 3.02%). The articles received an average (47) standard deviation of (32.02) citations per article. The retrieved documents received 31,577 citations, an average of 20.75 per document. The h-index of the retrieved document 82 and Collaboration Index 3.6 (Table 1).

Table 1. Main Information about data

Description	Results
Timespan	1993:2020
Sources (Journals, Books, etc)	324
Documents	459
Average years from publication	3.59
Average citations per document	4.514
Average citations per year per doc	1.064
References	11710
Document types	
Article	213
Proceedings Paper	185



Editorial Material	15
Book Review	11
Meeting Abstract	13
Article; Early Access	9
Review	4
Article; Proceedings Paper	4
Letter	2
Correction	1
database review	1
Correction	1
Retraction	1
Document contents	
Keywords Plus (ID)	572
Author's Keywords (DE)	1186
Authors	
Authors	1012
Author Appearances	1274
Authors of single-authored documents	137
Authors of multi-authored documents	875
Authors collaboration	
Single-authored documents	146
Documents per Author	0.454
Authors per Document	2.2
Co-Authors per Documents	2.78
Collaboration Index	2.8

3.3. Top 10 productive countries

Table 2. Shows the data on CPEC determining China and Pakistan as the two countries most frequently contributed in CPEC studies. China and Pakistan have reported high international collaboration. Interestingly, of the most productive countries in CPEC, China chaired (NP = 289) studies, followed by Pakistan (NP =55), then USA (NP=18) articles, among others, respectively. While Germany had less publication frequency collaborating the research at the international level.



Table 2. The 10 Productive Countries in China Pakistan Economic Corridor

R	Country (n=31)	Articles	SCP	TC	AAC	MCP	MCP Ratio
1	China	289	225	1054	3.65	64	0.2215
2	Pakistan	55	42	232	77.33	13	0.2364
3	USA	18	13	117	6.50	5	0.2778
4	United Kingdom	11	10	243	22.09	1	0.0909
5	Russia	8	5	16	2.00	3	0.3750
6	Korea	7	3	18	2.57	4	0.5714
7	Poland	7	6	30	4.29	1	0.1429
8	Australia	6	4	4	4.00	2	0.3333
9	India	6	6	21	3.50	0	0.0000
10	Germany	4	0	18	4.50	4	1.0000

R: Rank, SCP: Single Country Publications, MCP: Multiple Country Publications; TC: Total Citations, AAC: Average Article Citations

3.4. The top 10 articles in China Pakistan Economic Corridor

The top 10 articles on CPEC are listed in Table 3. A list identifying the 10 top-cited articles was reviewed and checked regarding authorship, title, and the number of citations. Articles that shared the same number of citations were given the same rank number of top authors, enhancing studies in CPEC. Ferdinand P, Hong Yu, and Du JL and Zhang YF published topic on OBORas China dream, Establishing the Asian Infrastructure Investment Bank and promoting Chinese overseas direct investment among other authors; with global citation scores ranging between 117 to 195, among others.

Table 3. The top 10 Tittle in China Pakistan Economic Corridor and One Belt One Road

R	Author / Journal	TC
1	Ferdinand P. West ward ho-the China dream and 'one belt, one road': Chinese foreign policy under Xi Jinping. <i>International Affairs</i> . 2016 Jul; 92 (4): 941.	195
2	Hong Yu. The motivation behind China's "One Belt, One Road" Initiatives and Establishment of the Asian Infrastructure Investment Bank. <i>Journal of Contemporary China</i> . 2017 May; 26 (105): 353-368	155
3	Du JL, Zhang YF. Does the One Belt One Road initiative promote Chinese overseas direct investment?. <i>China Economic Review</i> . 2018 Feb; 47: 189-205	117
4	Sidaway JD, Woon CY. Chinese Narratives on "One Belt, One Road" in Geo-Political and Imperial Contexts. <i>Professional Geographer</i> . 2017; 69 (4): 591-603	73
5	Cobley JG et al. CpeR is an activator required for the expression of the phycoerythrin operon (cpeBA) in the Cyanobacterium <i>Fremyelladiplosiphon</i> and is Encoded in the Phycoerythrinlinker-Polypeptideoperon (CPEC CDESTR). <i>Molecular Microbiology</i> . 2002 Jun; 44 (6): 1517-1531	68
6	Shaikh F, et al. Prospects of Pakistan-China Energy and Economic Corridor.	59



	Renewable & Sustainable Energy Reviews. 2016 Jun; 59: 253-263	
7	Hafeez M et al. Does finance affect environmental degradation: evidence from OneBelt and OneRoadInitiativeregion? Environmental Science and Pollution Research. 2018 APR; 25 (10): 9579-9592	59
8	Ullah S, You QL, Ullah W, Ali A. Observed changes in precipitation in China-Pakistaneconomi corridor during 1980-2016. Atmospheric Research. 2018 Sep 15; 210: 1-14	43
9	Liu XT, et al. analysis of logistics service supply chain for China's the One Belt and One Road initiative. Transportation Research Part E-Logistics and Transportation Review.2018 Sep;117:23-39	39
10	Sheu JB, Kundu T. Forecasting time-varying logistics distribution flows in the One Belt-One Road strategic text. Transportation Research Part E-Logistics and Transportation Review. 2018 Sep; 117:5-22	38

R: Rank; TC: Total Citations

3.5. The top 10 institutions contributed to China Pakistan economic corridor

Table 4 shows the top ten most relevant institutions that published research on CPEC. We presented the ranking by the Number of Publishing (NP) and the Total Citations (TC). Most institutions related to China included the Chinese Academy of Science, which was the first ranked institution in top of the list with several publications (NP=14, TC=125), followed by National University Science and Technology (NP=14; TC=43) and Shanghai Univesity (NP=12; TC=43). Moreover, publication levels from COMSATS Univesity Islamabad and Nankai University institutions were comparatively lower.

Table 4. The top 10 Institution enhanced research on China Pakistan Economic Corridor

R	Institution	NP	TC
1	Chinese Academy Science	14	125
2	Natinal University Sci & Technology	14	43
3	Shanghai University	12	7
4	Zhejiang University	12	33
5	Harbin Institue Technol	11	41
6	Beijing Jiaotong University	9	9
7	University of Science & Technol China	8	43
8	Yunnan University Finance & Economy	8	2
9	COMSATS University Islamabad	7	10
10	Nankai University	7	34

R: Rank; NP: Number of Publications, TC: Total Citations



3.6. The top 10 institutions contributed to China Pakistan economic corridor

The 10 top journals contributing articles on CPEC related publications are shown in Table 5. Among the top 10 journals, published studies range from 4-19. The most productive journal was Sustainability with (NP=19, TC= 98), followed by Journal of China report, Environmental Science and Pollution Research, and Proceedings of the 2016 international symposium on business cooperation and development, with each journal published around 7 topics, among others. And their h-index ranged from 2 to 6. Overall the 10 top journals published articles on CPEC in years between 2016 to 2019.

Table 5. The Top 10 Journals Contributed to China Pakistan Economic Corridor

R	Source	h_index	TC	NP	PY_start
1	Sustainability	6	98	19	2018
2	China Report	2	23	7	2017
3	Environmental Science and Pollution Research	4	99	7	2018
4	Proceedings of the 2016 International Symposium on Business Cooperation and Development	1	1	7	2016
5	Journal of Public Affairs	3	39	6	2019
6	Sustainable economic Growth, Education Excellence, and Innovation Management Through Vision 2020, vols i-vii	0	0	6	2017
7	China Quarterly of International Strategic Studies	2	12	5	2017
8	Journal of Contemporary China	4	212	5	2017
9	Chinese Economy	2	9	4	2018
10	Innovation, Entrepreneurship and Strategy in the Era of Internet	0	0	4	2016

R: Rank; NP: Number of Publications, TC: Total Citations', PY_start: Active Year start Publishing

3.6. The top 10 Authors in China Pakistan economic corridor

The 10 top authors who contributed to CPEC studies are shown in Table 6. The most productive authors of these studies included Ali. A with (NP=10, h_index=5) publications, followed by Ibrar. M with (NP=7, h_index=3) publications, and Ali. L with (NP=6, h_index=5=3), among others. Of the top 10 productive authors, most were mainly from the Pakistan institutions. Ali. A reported the highest number of publications, with the highest



total citation of (TC=92), which further indicated that these papers were published earlier since 2003, while other 9 authors reported their articles in years between 2016 and 2019.

Table 6. The Top 10 Authors Contributed to China Pakistan Economic Corridor

Author	h_index	TC	NP	PY_start
Ali A	5	92	10	2003
Ibrar M	3	18	7	2016
Ali L	3	28	6	2016
Pitafi AH	3	39	6	2019
Afzaal M	1	3	5	2019
Ali M	3	15	5	2018
Kanwal S	3	39	5	2019
Khan A	2	20	5	2017
Khan S	5	51	5	2017
Khan Z	2	7	5	2018

NP: Number of Publications, TC: Total Citations, PY_start: Active Year start Publishing

3.7. Organizations-Enhanced

The leading productive institutions included the Chinese Academy of Sciences 22 (4.79%), National University of Sciences Technology Pakistan 22 (4.79%), Zhejiang University 13 (2.83%) followed by Comsats University Islamabad and Cui and Shanghai University with 12 (2.61%) publications each, among others. Among all institutions, the most institutions that contributed to CPEC were from China, followed by Pakistan. Collectively, the organisation and collaboration analysis is shown in Table 7.

Table 7. Organizations-Enhanced Contributed in China Pakistan Economic Corridor

R	Organizations-Enhanced	NP	% of 459
1	Chinese Academy of Sciences	22	4.79
2	National University of Sciences Technology Pakistan	22	4.79
3	Zhejiang University	13	2.83
4	Comsats University Islamabad	12	2.61
5	Shanghai University	12	2.61
6	Harbin Institute of Technology	11	2.39
7	Beijing Jiaotong University	9	1.96
8	University of Science Technology of China	9	1.96
9	Yunnan University of Finance Economics	8	1.74
10	Nankai University	7	1.52

R: Rank, NP: Number of Publications



3.8. International state relationship analysis

Figure 2. presents the international state relationship in the research topic published in CPEC. China and Pakistan showed a significant role in research concerning CPEC, as China and Pakistan have more international relationships in topics reported on CPEC than other countries. Besides the international state relationship between China and Pakistan in research topic published in CPEC, the USA ranked first, followed by the UK, Italy, Russia, Turkey, South Korea, Saudi Arabia, Hungary and Brazil, among other collaborating countries. While countries that have an international relationship with China only were Australia, Canada, South Africa, Egypt, Kenya, Singapore and Malaysia.

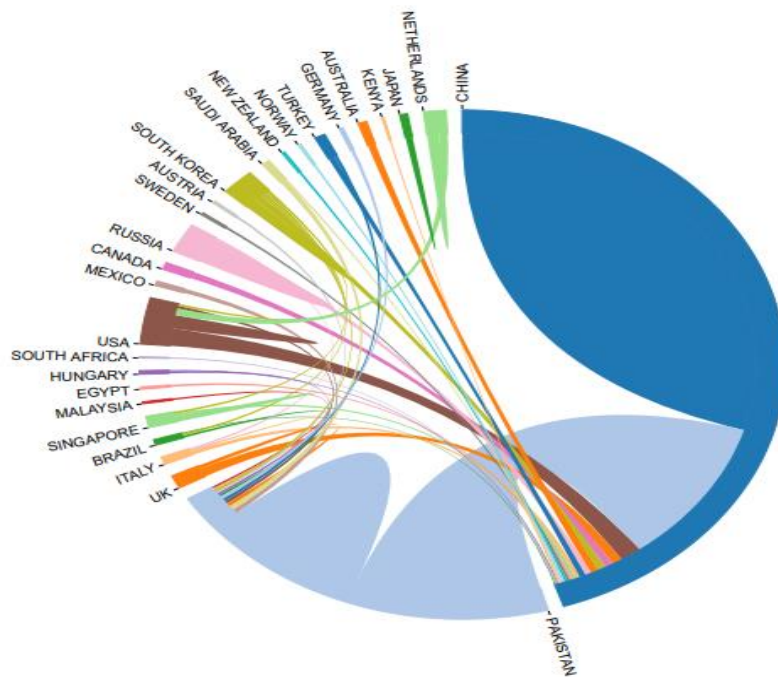


Figure 2. International state relationship in research topic published in China Pakistan Economic Corridor

3.9. World cloud of Keywords Plus analysis

The evaluation of keywords in terms of their frequency is shown in Figure 3. The word cloud made from keyword plus is shown. The common keyword Plus with the frequency of appearances are "Impact" (18), growth (12), management (13), model (11), Trade (11),



Figure 4. World cloud of Authors Keyword visualisation analysis

3.11. The dendrogram on CPEC analysis

Figure 5. Illustrates the dendrogram to identify the hierarchical relationship between the CPEC topics during the study periods. We used factorial analysis with a multi-dimensional scaling method to show different keywords by topic in each cluster.

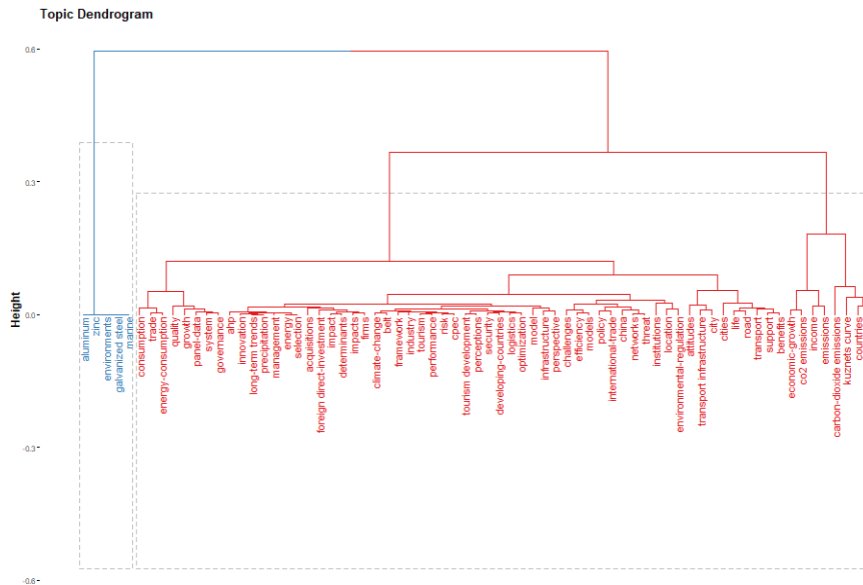


Figure 5. The topic dendrogram on CPEC Topic dendrogram analysis



3.12. The relationship between countries, keywords and affiliations summarised by a Sankey Plot

Figure. 2 shows the evolution of the study areas in the top productive countries, most keyword use, and organisation. It can be seen that China and Pakistan maintained their interest in researching globally and nationally on CPEC across the globe. The Mesh keywords focus only on impact, growth, Trade, model, road, management and infrastructure, among the reported ones, where most CPEC research is published in "University of Science & Technology, China."

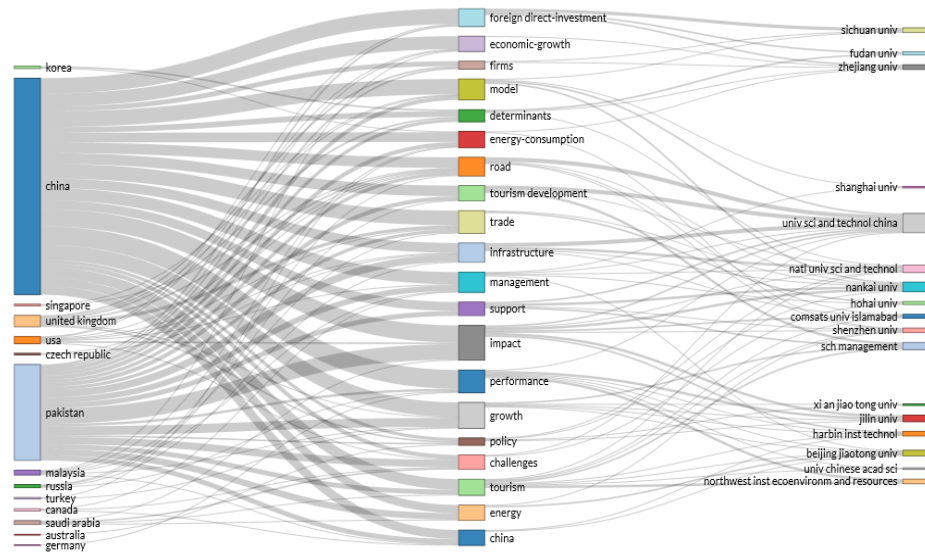


Figure6. Summarised the relationship between countries, keywords and affiliations summarised by a Sankey Plot

3.13. Factor influence citations score

There is a critical relationship between reference scores and study factors ($P < 0.001$). Likewise, our investigations uncovered a huge connection between the absolute number of references each year science distributions ($r = 0.4921$, $p < 0.0544$), No. of reference and creator h_index ($r = 0.9185$, $p < 0.0544$), No. of references and Number of creators g_index ($r = 0.9192$, $P < 0.0001$), No. of references and number of reports per country ($r = 0.9751$, $p < 0.0544$), No. of references and Single Country Publications ($r = 0.8232$, $p < 0.0001$), and negative. of references and Multiple Country Publications ($r = 0.6977$, $p < 0.0001$).



Table 8. Factors influence the citations score

Variables	Spearman correlation (r)	95% Confidence Interval	P_value
No. of citations and Number of documents per Year	0.4921	0.1474 ~ 0.7424	0.0065
No. of citations and Number of authors	0.2366	0.1758 ~ 0.2957	0.0001
h_index	0.9185	0.9080 ~ 0.9279	0.0001
No. of citations and Number of authors g_index	0.9192	0.9087 ~ 0.9285	0.0001
No. of citations and Number of documents per country	0.9751	0.9473 ~ 0.9883	0.0001
No. of citations and Single Country Publications	0.8232	0.6557 ~ 0.9135	0.0001
No. of citations and Multiple Country Publications	0.6977	0.4473 ~ 0.8467	0.0001

4. Discussion

Bibliometric Analysis is a quantitative exploration strategy that means to portray, assess and screen distributed examination (M. J. Cobo, M. A. Martínez, M. Gutiérrez-Salcedo, H. Fujita 2015) to distinguish, gather, arrange and investigate articles about CPEC. The current review was led in light of the internet based adaptation of distributions in the Web of Science information base. In the current review, The extent of bibliometric examination was restricted to a review time period of 30 years covering the years 1993 to 2020.

The CPEC is probably the biggest venture started by the public authority of China and actualised by Pakistan. It's anything but a solitary venture, as it contains a few activities that incorporate energy, emergency clinics, schools, rail route lines, modern zones, and transport framework. Past investigations discovered that the CPEC will help China and Pakistan and different nations (Ali, Yousaf and Rasheed, Zaeem and Muhammad, Noor and Yousaf 2018). In particular, the CPEC will give nearby Pakistani and Chinese people group work, business, and monetary open doors (Kanwal, Shamsa and Pitafi, Abdul Hameed and Ahmad, Mudaser and Khan, Naseer Abbas and Ali, Syed Muhammad and Surahio 2020). It will likewise expand the competition rate in the worldwide market and lift the economy of an entire area through industrialisation.

CPEC is a fundamental driving venture under the umbrella of the OBOR project started by the Chinese government in 2013 (H. Yu 2017), (Haidar, Sham and Fang 2019). The entire task of CPEC is relied upon to be finished in three stages. The main stage will be done in 2020, the second in 2025, and the third in 2030 (Javaid, Umbreen and Javaid



2016). This study gave experiences into the yearly patterns and references in regards to the CPEC. CPEC distributions were first considered to be ahead of schedule as 1993s, and the genuine development began in 2015 and slowly expanded to arrive at the greatest throughout recent years from the years 2017-2019. The demonstrates that the documentation concerning CPEC as a piece of OBOR were expanded each year.

In light of the web-based pursuit, 459 articles on "CPEC" were distributed. Out of the relative multitude of gathered distributions in CPEC, unique articles represented around (213, 96.97%), trailed by survey papers (46,3.02%). The paper covers the bibliometric investigations in which the sent out information incorporated the yearly development of distributions, sorts of reports, dialects, nations, creators, establishments, diaries, references, and association. The recovered writing was likewise sent out utilizing HistCite and the VOSviewer programming program (L.waltman 2019). The recovered reports got 31,577 references, showing a normal of 20.75 references per record. The h-record of the recovered report was 82, and Collaboration Index was 3.6.

The CPEC is a piece of OBOR is perhaps the biggest task. OBOR is viewed as a uber project as it joins around 60 nations (Yu, Yaodong and Chang 2018). In addition, the meaning of CPEC is that it is vital for Pakistan and the Middle East, China, and the entire of South Asia. Our information on CPEC decided China and Pakistan as the two nations most often added to CPEC studies. China and Pakistan have revealed showing high worldwide joint effort. Strangely, China is a more useful country in CPEC studies, trailed by Pakistan, among different nations. Past investigations connected with the CPEC have proposed that the CPEC will help China and Pakistan and different nations Europe, and Africa (Ali, Yousaf and Rasheed, Zaeem and Muhammad, Noor and Yousaf 2018).

A rundown recognizing the 10 top-referred to articles was explored and checked in regards to initiation, title, and the quantity of references. Among top creators all things considered contributed and upgraded investigations in CPEC and OBOR, Ferdinand P (Ferdinand 2016), Hong Yu (Hong Yu 2017), Ferdinand P (H. Yu 2017) and Du JL, Zhang YF (Du, Julan and Zhang 2018) distributed themes on OBOR. Our outcomes saw that the greatest writers that distributed articles were from China. Since China and Pakistan have put an immense sum in CPEC projects and gave conspicuous help in instructive upgrade than different nations in the CPEC project (Haidar, Sham and Fang 2019), which empowered China scientists to be the more useful as CPEC project action fundamental for China and Pakistan. Also, among the best 10 investigations, 9 examinations cover research on OBOR, while the leftover one spotlights on CPEC, which might have represented their wide impact. And furthermore affirmed the thought that CPEC is a significant piece of OBOR.



With prime actual framework and network, the neighborhood local area helps financially in work, different business valuable open doors, and availability to schooling organizations (Kanwal, Shamsa and Chong, Ren and Pitafi 2019). Our discoveries have shown that the main ten most important establishments distributed exploration on CPEC in view of positioning by the quantity of distributions and the Global Citations. Most foundations connected with China incorporated the Chinese Academy of Science. The mirrors the foundation has upgraded research on CPEC, as CPEC is a uber project financially helping both China and Pakistan, consequently, improved exploration endeavors in these nations. Nonetheless, commitments from different nations showed the overall extent of CPEC research.

References per diary is a decent mark of the nature of the diary (Donthu, Naveen and Kumar, Satish and Pattnaik 2020). Concerning top 10 diaries efficiency in regards to CPEC, Sustainability, a diary that had the most elevated useful diary, and should be visible in a spearheading diary that offered CPEC research specific consideration; the majority of these diaries had a place with MPDI and Springer distributor stage, which featured future patterns and famous themes in CPEC research.

Of the 10 top creators in CPEC studies, the most useful creators included Ali. A with 10 distributions, Ibrar. M with 7 distributions, trailed by Ali. L and Pitafi. A H, both with 6 papers, among others creators. Of the best 10 useful creators, most were basically from the organizations in Pakistan. Ali. An announced more distributions, with a complete reference of 92, which demonstrated that these papers were distributed before beginning around 2003, while other 9 writers revealed their articles in years between 2016 to 2019.

CPEC project pointed toward expanding scholastic and exploration cooperation. In such manner, China and Pakistan have put an enormous sum in CPEC projects that can give conspicuous help in association and instructive improvement (Haidar, Sham and Fang 2019). The demonstrated that most establishments that added to CPEC were from China, trailed by Pakistan. The association and coordinated effort investigation showed that of the each of the 10 top-referred to CPEC associations, the larger part were from China and Pakistan organizations, which delivered a greater number of articles than some other country in the CPEC project in light of the fact that CPEC is considered as a drawn out essential arrangement for China and Pakistan, and more valuable to the two nations, for example China and Pakistan, than different nations, which empowers China and Pakistan analysts to be the more useful in CPEC research.

China and Pakistan played a critical part in CPEC research than different nations. Also, nations that had worldwide state relationship with the two nations in research theme



distributed in CPEC, USA positioned first followed by UK, Italy, Russia, Turkey, Saudi Arabia, Hungary and Brazil among other working together nations. While nations having global associations with China, just Australia, Canada, South Africa, Egypt, Kenya, Singapore and Malaysia were available. This global joint effort concerning research articles distributed in the CPEC venture will help China and Pakistan and in excess of 60 coordinated nations of South Asian, Central Asia, the Middle East, Africa, and Europe.

Concerning the advancement of the review regions in the top useful nations, the most catchphrase utilized, it very well may be seen that China and Pakistan kept up with their advantage in investigating worldwide and broadly on CPEC across the globe. The Mesh watchwords center just around sway, development, Trade, model, street, the board and framework, among the announced ones, where most CPEC research is distributed in "College of Science and Technology China", which has a huge commitment to the exploration concerning CPEC.

Utilizing bibliometric and perception investigations, this study outfits profound bits of knowledge into the 10 most-referred to articles on CPEC. Nonetheless, a few constraints attributable to results examination from a solitary information base should have been tended to. In this manner, there is plausible of missing key top-referred to articles just in different information bases like Scopus, PubMed, and Google Scholar. Thusly, the evaluation of our outcomes probably won't be completely extensive. Likewise, we just elaborate examinations distributed in the English language and neglected investigations distributed in different dialects, which might have a high reference. Besides, it was difficult to look by class or top-referred to papers in related regions, either from the WoS site or set physically.

5. Conclusions

This bibliometric analysis of the top 10 publications was conducted, confirming the quality of the CPEC research published by journals. The CPEC publications were reported as early as 1993s, and the actual growth started in 2015 and reached the maximum from 2017 to 2019. China and Pakistan are the most frequently contributing countries in CPEC studies and have reported high international collaboration. Chinese Academy of Science was the first top of the ten institutions that published most research on CPEC. Ferdinand P, Hong Yu, and Du JL, Zhang YF were published more topics on OBOR. Sustainability is the highest productive journal among other journals included in the analysis of the current study. Chinese Academy of Sciences (China) contributed more publications, followed by the National University of Sciences Technology (Pakistan), Zhejiang University (China),



COMSAT University, Islamabad (Pakistan), and Shanghai University (China). The results provided a reference for current and future CPEC research and policymaking worldwide.



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