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Research Article

Retrospective view of SERVQUAL for prospective directions: A bibliometric analysis

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ABSTRACT

The current study aims to explore 'SERVQUAL', its variants in the literature, associations with service contexts and their service quality. Data is extracted from Scopus for the timeline of 1987 to 2020, and it is analysed in MS Excel & VOSviewer software. Co-authorship and Co-occurrence analysis have been performed to identify the links and collaborations among the items (authors, countries, and author keywords) globally. Findings of bibliometric mapping show that Han H. and Lee S. both have highest association with other authors, United States is on the top of other countries in collaborations and affiliations with greater total link strength (TLS). Diverse variants of SERVQUAL have been identified for different service contexts. Findings suggested underexplored SERVQUAL variants, services context, and subject areas for future research directions. This study presents the valuable insights regarding the variants of SERVQUAL that have been developed in the literature and the service context for future research.

Keywords: *SERVQUAL; Bibliometric Analysis; Service Quality*

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1. INTRODUCTION

This current study illustrates the exploration of 'SERVQUAL' through mapping of the service quality literature. The concept of service quality in a service setting has been measured and analysed with different dimensions. The most prominent and recognized scale to measure service quality is SERVQUAL model. It was developed by Parasuraman et al., (1988). Initially, it was named as RATER with 10 dimensions, it was modified and changed to SERVQUAL with five dimensions of service quality. These dimensions are Tangibles, Reliability, Responsiveness, Assurance and Empathy.

There is ample of literature available on service quality and servqual that contain reviews, bibliometric studies and empirical studies. But the current study has focused only "SERVQUAL". Different themes related to service quality have been explored such as service quality (Ali et al., 2021; de Castro Junior et al., 2013), service quality of education services, medical services, transportation services and financial services (Shi et al., 2020), China's service quality developments (Xu et al., 2021) and service quality attributes (Lotko et al., 2018). However, the current study intends to explore SERVQUAL only because it is widely

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used measurement model for service quality. Therefore, the current study intends to achieve following research objectives.

RO 1. To identify the publication output of SERVQUAL till 2020?

RO 2. To identify the most prolific authors and journals in SERVQUAL search?

RO 3. To identify the most prominent institutions and countries?

RO 4. To map and identify the collaborations between authors, countries, and keyword associated to SERVQUAL?

2. METHODS

The current paper presents the bibliometric analysis of 'SERVQUAL' search from 1987 to 2020. Visualizing and synthesizing the literature related to central theme of the research quantitatively is known as The bibliometric analysis (Alsharif et al., 2021; ALSHARIF et al., 2020; Khudzari et al., 2018). Scopus database is utilized for the data extraction because it is considered as the largest database (Khudzari et al., 2018). It also offered wide-ranging coverage of the subjects than that of MedLine, Web of Sciences and so on (Ali et al., 2021; Khudzari et al., 2018; Mongeon & Paul-Hus, 2016).

2.1. SEARCH STRATEGY

To scrutinize the documents, inclusion and exclusion criteria has been adopted. Exploration of data on Scopus began in March 2021. It started by applying the keyword (SERVQUAL) in the database. The complete search string was given in the Appendix-I. Inclusion and exclusion criterion was applied during the search. English language based articles at final stage of publication from journals only were included in the analysis. The year 2021 was excluded from the final analysis. Fig. 1 shows the search flow chart containing all steps in data extraction and screening. At the end the analysis was based on 12233 number of documents.

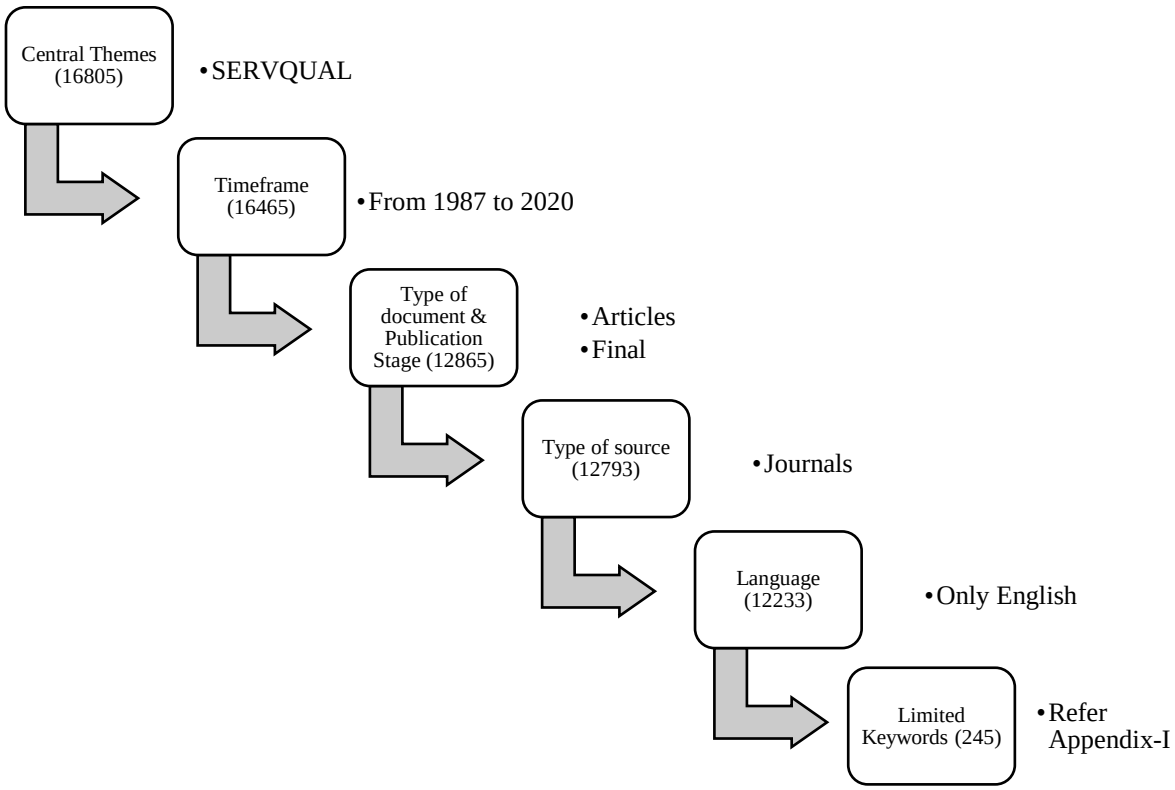


Fig. 1. Search Flow Chart.

3. ANALYSIS AND RESULTS

Document were extracted from Scopus and with the help of VOSviewer (Centre for Science and Technology Studies, Leiden University, Netherlands), bibliometric maps containing links were created. This software was user-friendly and helpful in creating bibliometric maps. Bibliometric maps containing links represent collaborations among authors, countries, and keywords. Authors, countries, keywords, and are considered as items in the software. These items are associated with the links and their strength which is represented with positive numerical value (Van Eck & Waltman, 2013). The higher the value, the higher the link strength between two items (Van Eck & Waltman, 2013).

3.1. Research Output and Trend

Publication trend inclusive of 'SERVQUAL' is upward showing increasing interest of the researchers throughout the years (Fig. 2). The year 1987 witnessed one publication of 'SERVQUAL'. Publication output from 2010 till 2018 shows 500 plus number of documents each year. Publications of year 2019 and 2020 revealed more than 1000 documents each year. It showed the research in service quality and SERVQUAL was increasing in recent years. It is Business, Management and Accounting (40.5%) in which majority of the publications has taken place, after that there is social sciences (15%) and Computer Science (8.2%). Other subjects are mentioned in Fig. 3.

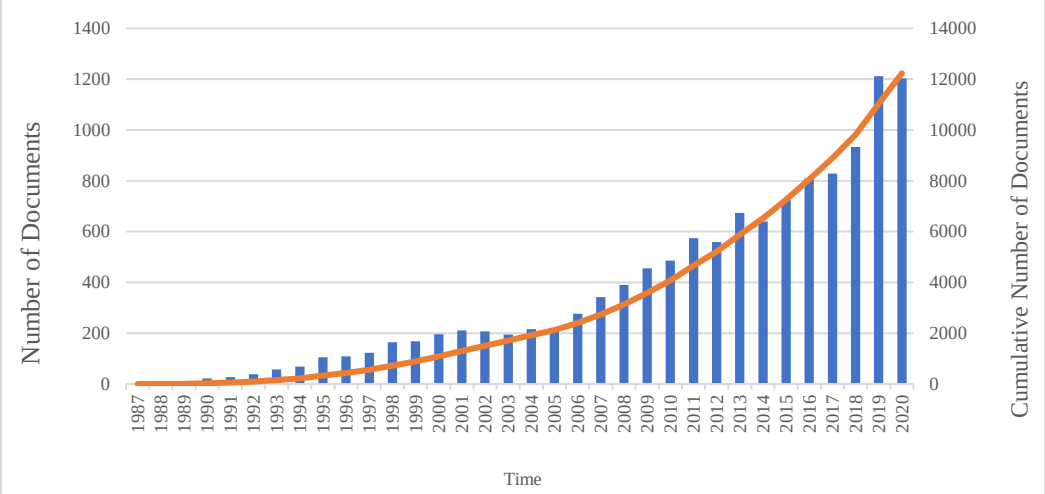


Fig. 2. Graph showing publication output of SERVQUAL search.

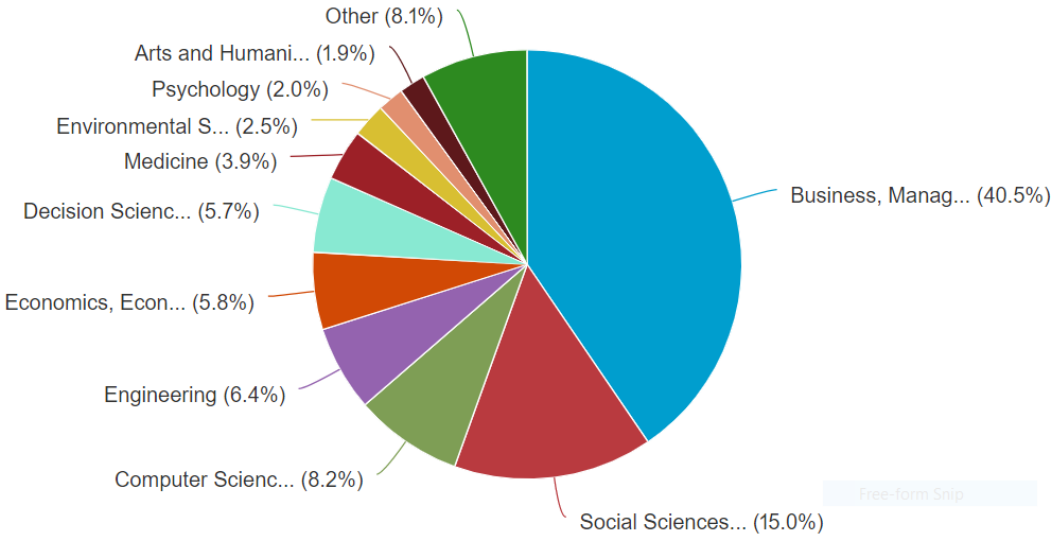


Fig. 3. Publications across subjects.

3.2. Authors & Journals

The most prolific authors and journals associated to 'SERVQUAL' have been identified in the current study. List contains top ten authors and journals. Han, H. and Prybutok, V.R. both are at the top with total publications of 32 papers. The former has 51 h-index with 10527 total citations till 2020, and is affiliated to Sejong University, Seoul, South Korea. The later had 34 h-index with 4687 total citations and was affiliated to University of North Texas, Denton, United States. They were followed by Wu, H.C. (TP, 29; h-index, 23; TC, 1664), and Shahin, A. (TP, 28; h-index, 21; TC, 1525). Table 1 shows other authors.

It is Services Marketing that is at the top of other journals with total publications of 243, having Cite Score of 4.8 (2019) and it is published by Emerald. "Customer satisfaction with services: putting perceived value into the equation" was its most cited article in 'SERVQUAL' search. it was cited 862 times (2020). Among others, there is 'Total Quality Management and Business Excellence and Service Industries Journal' which have also contributed to the area of 'SERVQUAL' in the research. Table 2 shows the contributions of these journals.

Table 1. List of top ten prominent authors in SERVQUAL search.

No	Author's Name	Author's ID (Scopus)	1st publication*	TP	h-index	TC	Current affiliation	Country
1	Han, H.	21233360400	2007*	32	51	10527	Sejong University, Seoul	South Korea
2	Prybutok, V.R.	7004907736	1997***	32	34	4687	University of North Texas, Denton	United States
3	Wu, H.C.	55847642000	2013*	29	23	1664	Nanfang College of Sun Yet-sen University, Guangzhou,	China
4	Shahin, A.	18435139400	2007*	28	21	1525	University of Isfahan, Isfahan	Iran
5	Cheng, C.C.	24466498300	2012*	23	20	1002	Taipei University of Marine Technology, Taipei	Taiwan
6	Parasuraman, A.	6603335581	1991*	21	47	23254	University of Miami, Coral Gables	United States
7	Qu, H.	7101947105	1998*	21	34	4831	Center for Hospitality and Tourism Research, Stillwater	United States
8	Chang, K.C.	25627193100	2008*	19	19	972	Chihlee University of Technology, Banciao	Taiwan
9	Kandampully, J.	13606837900	1997*	18	37	4586	The Ohio State University, Columbus	United States
10	Ryan, C.	15136764700	1992**	18	48	7812	University of Waikato, Hamilton	New Zealand

Table 2. List of top ten journals.

NO	Journal	TP	Cite Score 2019	The most cited article (reference)	Times cited	Publisher
1	Journal of Services Marketing	243	4.8	"Customer satisfaction with services: putting perceived value into the equation"	862	Emerald
2	Total Quality Management and Business Excellence	221	4.6	"The impact of e-service quality, customer satisfaction and loyalty on e-marketing: Moderating effect of perceived value"	223	Taylor & Francis
3	Service Industries Journal	208	3.3	"Analysing service quality in the hospitality industry using the servqual model"	357	Taylor & Francis
4	International Journal of Hospitality Management	159	8.0	"Service quality, customer satisfaction, and customer value: A holistic perspective"	560	Elsevier
5	International Journal of Bank Marketing	158	4.7	"Determinants of customer satisfaction in retail banking"	360	Emerald
6	Tourism Management	149	12.8	"Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists"	985	Elsevier
7	Journal of Business Research	134	8.9	"An empirical assessment of the SERVQUAL scale"	1095	Elsevier

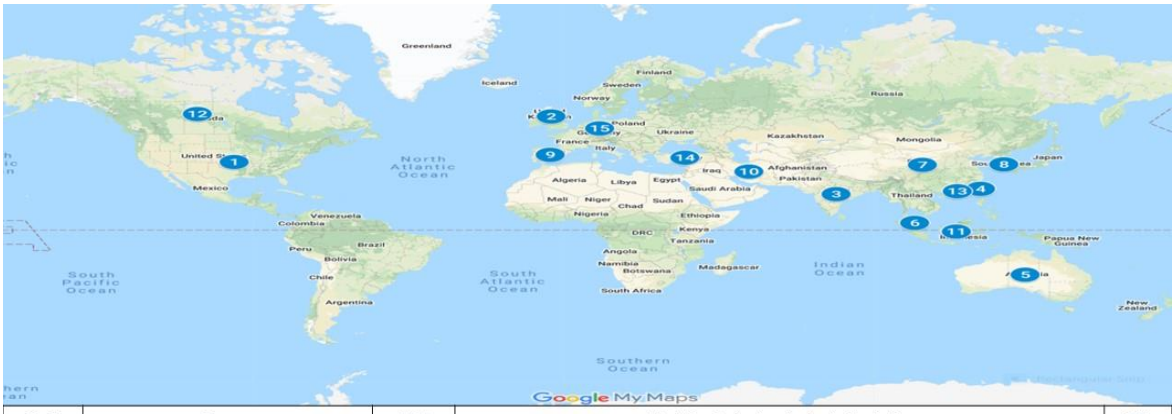
NO	Journal	TP	Cite Score 2019	The most cited article (reference)	Times cited	Publisher
8	Journal of Retailing and Consumer Services	124	7.4	"The role of entail quality, e-satisfaction and e-trust in online loyalty development process"	251	Elsevier
9	International Journal of Contemporary Hospitality Management	123	7.2	"The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions"	507	Emerald.
10	Sustainability Switzerland	121	3.2	"The service quality dimensions that affect customer satisfaction in the Jordanian banking sector"	31	(MDPI)

3.3. Countries & Institutions

We also analyzed the prominent countries and institutions having significant contributions in 'SERVQUAL' search. Results showed the top fifteen countries and institutions mentioned in figure. Among the top countries, United States was leading all with total publication (TPC) of 2701. It was followed by United Kingdom (1024), and India (968). Other top countries could be found in

Though United States and United kingdom were leading the countries, institution of Hong Kong namely Hong Kong Polytechnic University was far ahead of all other institutions of the world with 197 total publications (TPI). It was followed by Universiti Utara Malaysia (TPI, 85) and University of North Texas, United States (TPI, 82).

presents other countries and institutions.



Rank	Country	TPC	The Most Productive Academic Institution	TPI
1	US	2701	University of North Texas	82
2	United Kingdom	1024	The University of Manchester	45
3	India	968	Indian Institute of Technology Roorkee	31
4	Taiwan	929	National Cheng Kung University	60
5	Australia	749	The University of Queensland	74
6	Malaysia	698	Universiti Utara Malaysia	85
7	China	693	Nanfang College of Sun Yet-sen University	22
8	South Korea	575	Sejong University	67
9	Spain	553	University of Valencia	65
10	Iran	401	Islamic Azad University	58
11	Indonesia	355	Universitas Indonesia	23
12	Canada	344	Université du Québec à Montréal	19
13	Hong Kong	316	Hong Kong Polytechnic University	197
14	Turkey	316	Doğu Akdeniz Üniversitesi	29
15	Germany	232	Universität Mannheim	9

Fig. 4. Image showing top fifteen countries and institutions.

3.4. Bibliometric Mapping

Bibliometric maps of the current study comprised of 12233 documents. Maps encompassed co-authorship analysis of authors and countries, and co-occurrence analysis of author keywords. These are discussed in next sessions.

3.4.1. Co-authorship (Authors)

The co-authorship analysis illustrated the links between two authors who had coauthored the documents and published them. It was represented with the link strength. Therefore, the total link strength (TLS) exhibited the total co-authorship strength of one author with the other.

After applying different thresholds, out of 21791, 756 authors met the criteria. Results reveal that Han H. and Lee S. have the highest total link strength (TLS) of 52, respectively. The former has published 34 documents with 1555 citations and the later has published 38 documents with 1317 citations. Among others are Chang K. -C. (TLS, 34; Documents, 19; Citations, 328) and others (Table 3).

Mapping of co-authorship is presented in two sets. One set contains all items (authors) that are connected and also not connected, and the other comprises of connected items only. Not connected set represented 756 authors and connected set shown 457 items (authors). These maps are shown in Fig. 6 and Fig. 7. Fig. 5 is the map showing the prominence of Parasuraman A. because of his outstanding breakthrough of developing SERVQUAL. He has published 11 documents with 16169 citations and has 11 links with 26 TLS.

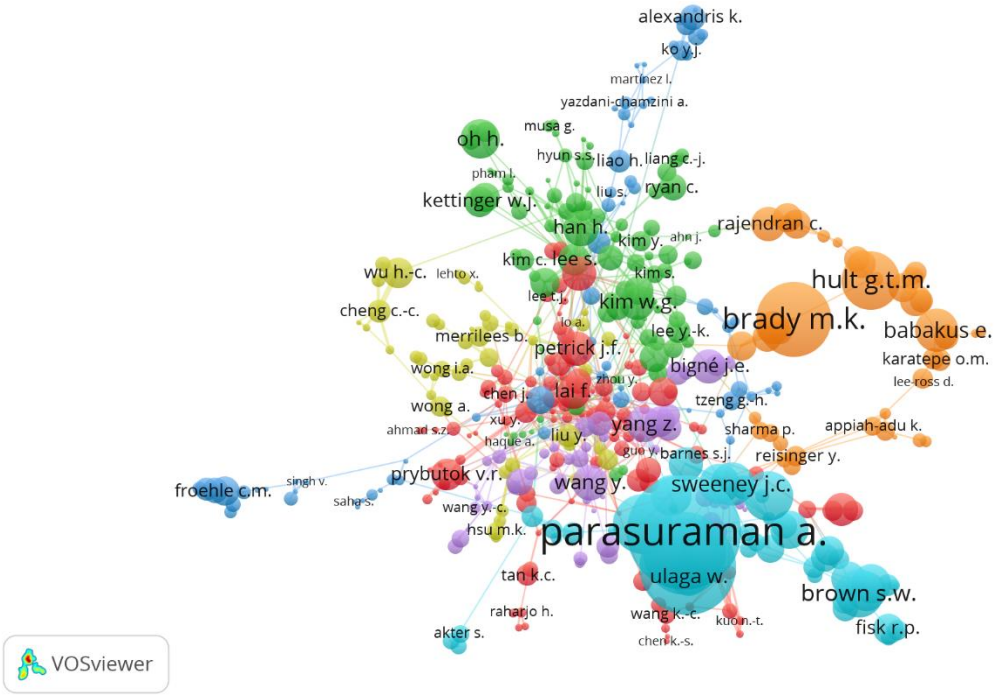


Fig. 5. Screenshot showing co-authorship (authors) based on citations.

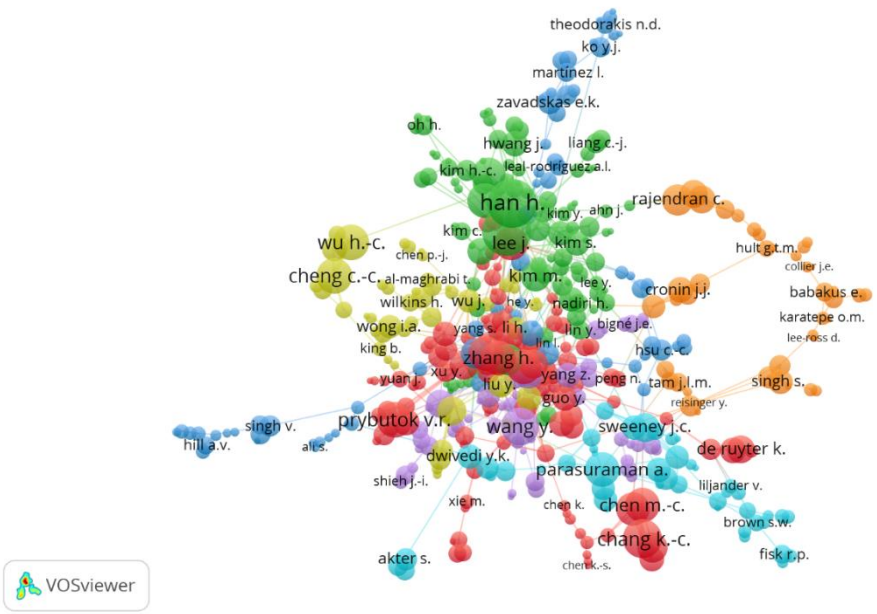


Fig. 6. Screenshot showing co-authorship (authors) connected set based on total link strength (TLS).

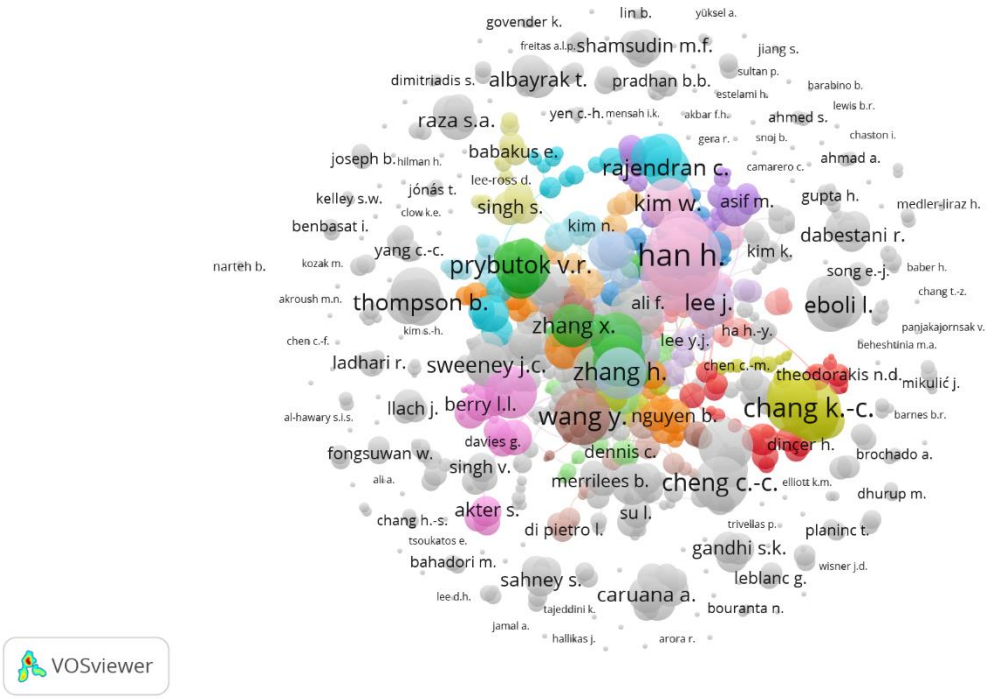


Fig. 7. Co-authorship (authors); not-connected set based on TLS.

Table 3. List of 100 authors (from co-authorship) ranked on TLS.

Item (Author)	Documents	Citations	TLS	Item (Author)	Documents	Citations	TLS
Han H.	34	1555	52	Berthon P.	11	732	14
Lee S.	38	1317	52	Cheng Y.-S.	7	89	14
Chang K.-C.	19	328	34	De Oña J.	8	612	14
Wang Y.	48	1566	31	Dwivedi Y.K.	13	589	14
Cheng C.-C.	22	658	28	Kim S.	23	393	14
Prybutok V.R.	32	1295	28	Lee J.-S.	14	391	14

Item (Author)	Documents	Citations	TLS	Item (Author)	Documents	Citations	TLS
Wu H.-C.	28	1144	28	Pitt L.F.	11	1487	14
Chen M.-C.	17	262	26	Yang Z.	14	1603	14
Chua B.-L.	11	217	26	Aksoy L.	10	411	13
Parasuraman A.	21	16169	26	Ali M.	10	190	13
Zhang H.	17	277	26	Guo Y.	7	42	13
Zhang L.	20	435	26	Hussain K.	11	391	13
Zhang Y.	17	337	26	Kim J.	19	856	13
Cook C.	17	666	24	Liu Y.	18	672	13
Hsu C.-L.	14	202	24	Nguyen B.	15	295	13
Kim W.	14	289	24	Shamsudin M.F.	11	48	13
Lee J.	31	1532	24	Singh S.	14	477	13
Eboli L.	13	832	22	Soutar G.N.	13	2023	13
Mazzulla G.	13	832	22	Xu X.	10	193	13
Thompson B.	13	521	22	Berry L.L.	9	8491	12
Rajendran C.	17	1504	21	Dabestani R.	8	101	12
Wang X.	17	404	21	Gandhi S.K.	6	27	12
Heath F.	11	313	20	Gupta A.	16	281	12
Kuo N.-T.	9	124	20	Jr.	24	1090	12
Lu Y.	16	1027	20	Keiningham T.L.	9	397	12
Li X.	19	551	19	Mccoll-Kennedy J.R.	8	210	12
Sweeney J.C.	14	2407	19	Sachdeva A.	7	38	12
Zhang X.	16	589	19	Shahin A.	28	404	12
Chen X.	13	296	18	Shirouyehzad H.	9	117	12
Kim M.	19	514	18	Wong I.A.	13	365	12
Anantharaman R.N.	9	1114	17	Wu J.	11	153	12
De Ruyter K.	18	1410	17	Yee R.W.Y.	7	501	12
Sureshchandar G.S.	8	1088	17	Zavadskas E.K.	13	223	12
Wang J.	17	265	17	Zeithaml V.A.	12	11429	12
Zhang J.	21	856	17	Akter S.	8	410	11
De Oña R.	9	661	16	Appiah-Adu K.	9	497	11
Lee H.	20	1094	16	Chen J.	13	334	11
Li Y.	17	749	16	Chen Y.	16	379	11
Qin H.	12	296	16	Cheng T.C.E.	10	817	11
Raza S.A.	15	307	16	Deng Y.	7	515	11
Albayrak T.	13	228	15	Huang Y.-Y.	5	50	11
Caber M.	12	225	15	Li H.	13	255	11
Caruana A.	16	1006	15	Li S.-J.	5	50	11
Cronin J.J.	10	1346	15	Liu X.	8	213	11
Ewing M.T.	11	636	15	Marimon F.	17	399	11
Hwang J.	16	426	15	Park J.	13	196	11
Li J.	14	177	15	Sahney S.	10	477	11
Wetzels M.	12	552	15	Shareef M.A.	7	461	11
Yeung A.C.L.	10	688	15	Wang W.	8	87	11
Ai C.-H.	8	283	14	Zhang M.	9	112	11

3.4.2. Co-authorship (Countries)

Similar to that of authors, Co-authorship for countries has been explored further. Different thresholds were applied while creating the maps. The maximum number of documents of a country was 25, minimum number of documents of a country was 01 and minimum number of citations of a country was 00. Thus, all 132 countries met the threshold except

one item which was placed instead of those items which were not representing the countries.

There were items in the data which were not named as countries, they were replaced with proper country names or excluded from the data by creating a thesaurus file. The normalization method of analysis was, by default, the method of association strength. The layout values were slightly changed as attraction value was to 05 and repulsion value was to 02. Minimum size of the clusters was made 05 with resolution of 1.00.

The largest set of connected items (countries) consisted of 124 out of 132 (Fig. 8). We found that United States was dominant with highest TLS of 1215. It had produced 2707 documents with 175252 citations. It was followed by United Kingdom, China, Australia, and Malaysia. On the contrary, the countries such as Tajikistan, Sudan, Papua New Guinea and along with others mentioned in table 4 had not shown any collaborations and associations with other countries in SERVQUAL search.

Table 4. List of countries with highest and lowest TLS.

Countries with highest TLS					Countries with lowest TLS				
S/No	**Country**	**Documents**	**Citations**	**TLS**	**S/No**	**Country**	**Documents**	**Citations**	**TLS**
01	United States	2707	175252	1215	01	Armenia	01	00	00
02	United Kingdom	1027	40640	605	02	Cameroon	01	00	00
03	China	689	13546	491	03	Eritrea	02	01	00
04	Australia	746	29002	444	04	Malawi	01	16	00
05	Malaysia	697	9188	331	05	Mongolia	02	00	00

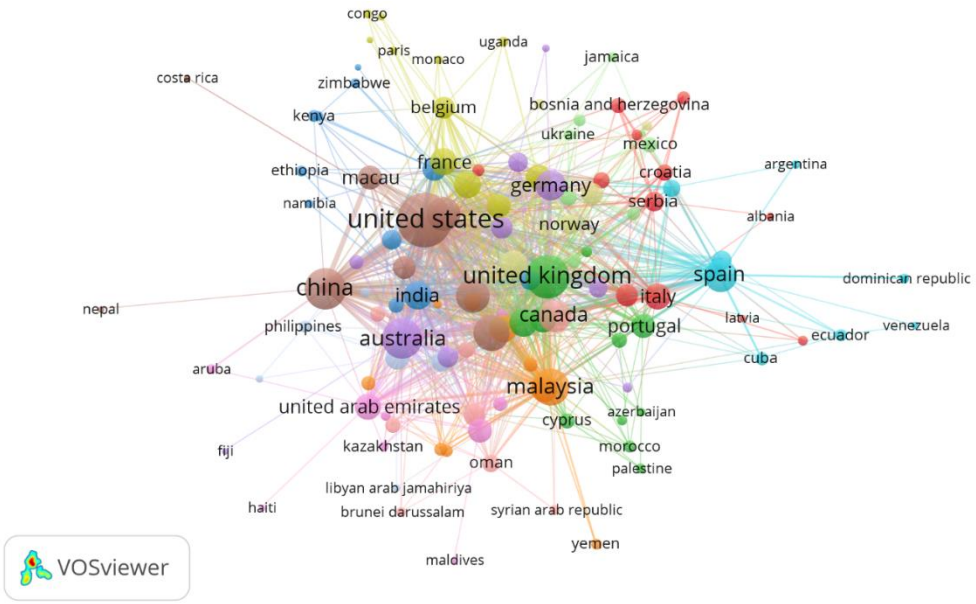


Fig. 8. Screenshot showing co-authorship (countries) based on TLS.

3.4.3. Co-occurrence (Author Keywords)

Co-occurrence analysis was performed to explore the author keywords that occurred together in the chosen search criteria. Different threshold was applied while executing co-occurrence analysis. Minimum occurrence of a keyword was set at 07. Out of 17414 keywords, 316 met the threshold. To make the visualization of map better, layout values

were set as attraction at 09 and repulsion at 01. Screenshot of the co-occurrence map of author keywords is shown in Fig. 9.

Overall result of co-occurrence revealed some prominent keywords. Service quality occurred 3066 times with total link strength of 7995. It was followed by 'customer satisfaction' (occurrence, 1494; TLS, 4275), 'SERVQUAL' (occurrence, 835; TLS, 2366), 'satisfaction' (occurrence, 765; TLS, 2222), 'banking' (occurrence, 530; TLS, 1655), 'healthcare' (occurrence, 551; TLS, 1385) and 'customer loyalty' (occurrence, 439; TLS, 1379).

Moreover, we divided the list of resulting keywords in three categories as per their importance of the research area. Firstly, results showed the different variants of 'SERVQUAL' that had been developed to measure the service quality in different service settings (Table 5). Secondly, we have identified the services related keywords which were found in the search (Table 6). Lastly, the service quality related keywords were identified (Table 7).

Various variants of 'SERVQUAL' scale were found in the analysis. Results revealed 'e-s-qual' and 'libqual' were the leading variants which had highest association strength. The former measured the electronic service quality and developed by parasuraman 2005 and the later measured the service quality of library services and developed by reference. They were followed by E-servqual, Eduqual and others. Their occurrence and total link strength with service descriptions were mentioned in table 5.

We identified services related keywords. The keywords of banking, healthcare, tourism, hotels, and retailing were among the most prominent keywords in the list and had greater total link strength than others. It showed the highest number of studies in these industries in relation to service quality. List of all these and other services related keywords with their occurrence and TLS scores were mentioned in table 6. Results also revealed service quality related keywords. Electronic service quality was found to have highest association strength than other keywords found. Other service quality related terms were mentioned in the table 7.

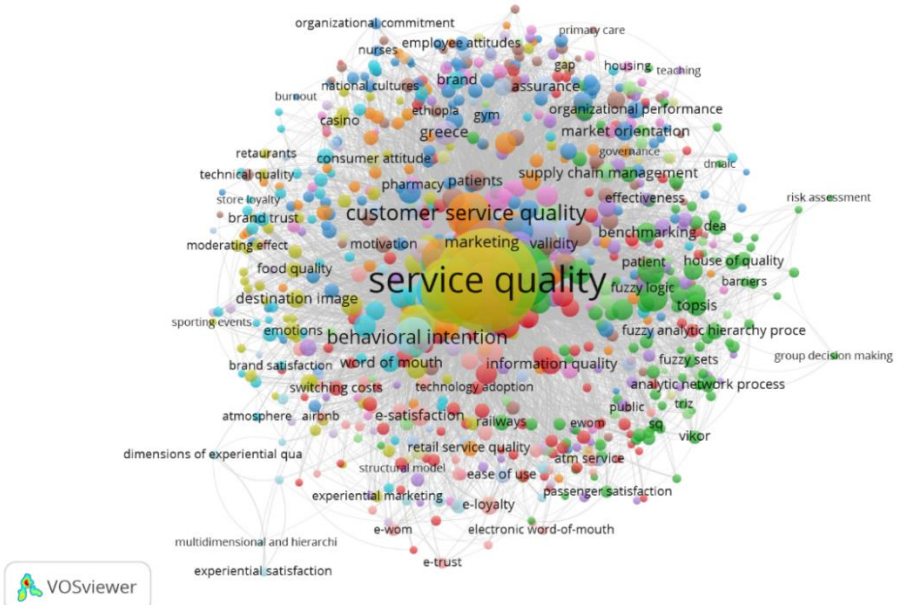


Fig. 9. Screenshot showing the Co-occurrence (Author Keywords) based on TLS.

Table 5. List of SERVQUAL variants ranked on TLS. Note: Some of the keywords (SERVQUAL variants) could not be seen in the map of co-occurrence because of their occurrence of less than 7 which was the set threshold. They were identified from the complete list of keywords found.

SERVQUAL Variants			
Item (Keyword)	**Occurrence**	**TLS**	**Description (Scale was developed to measure…**
e-s-qual	22	74	Electronic Service Quality
Libqual	27	74	Library Service Quality
e-servqual	10	28	Electronic Service Quality
Eduqual	4	24	Education Service Quality
e-recs-qual	4	20	Quality of Recovery Services
Webqual	4	19	Website Service Quality
Saasqual	3	17	Service Quality of Software-as-a-Service
Sstqual	2	13	Service Quality of Self-Service Technologies
modified servqual	2	11	Service Quality
pharma-servqual	1	11	Service Quality of Pharmaceutical Services
Healthqual	2	8	Healthcare Service Quality
p2psnsqual	1	8	Peer-to-Peer Social Networking Site Service Quality
Airqual	1	7	Airline Service Quality
Instaqual	1	7	Institutions Service Quality
Efqmqual	1	6	Service quality of European Foundation for Quality Management
Railqual	2	6	Railways Service Quality
Artqual	1	5	Service Quality of Cultural Centers
Eventqual	1	5	Service Quality of Sporting Event
Hieduqual	1	5	Higher Education Service Quality
Ruralqual	1	5	Rural Service Quality
e-govqual	1	4	Electronic Government Service Quality
e-public-sector-qual	1	4	Electronic Public Sector Service Quality
Heisqual	1	4	Higher Education Institutions Service Quality
Hesqual	1	4	Higher Education Service Quality
Histoqual	1	4	Historic Houses Service Quality
Intservqual	1	4	Internal Service Quality
Pubhosqual	1	4	Public Hospital Service Quality
Rentqual	1	4	Car Rental Service Quality
Tarrqual	1	4	Trasnsportation & Freight Forwarder Service Quality
Tourqual	1	4	Tourist Attraction Service Quality
Bankqual	1	3	Bank Service Quality
Bevqual	1	3	Performance Quality in Beverage Establishment
Coursequal	1	3	Course Evaluation by Students
e-selfqual	1	3	Online Self-Service Quality
Mariqual	1	3	Marital Quality
p-transqual	1	3	Public Land Transport Service Quality
refined webqual	1	3	Website Service Quality
Sitequal	1	3	Website Service Quality

Table 6. List of services contexts found in the search ranked on TLS.

Services related Keywords					
Item (Keyword)	**Occurrence**	**TLS**	**Item (Keyword)**	**Occurrence**	**TLS**
Banking	530	1655	Call Center	27	74
Healthcare	551	1385	Care Services	22	62
Tourism	395	954	Professional Services	24	61
Hotels	307	841	Gym	21	57
Retailing	226	598	Event Management	24	55

Services related Keywords					
Item (Keyword)	**Occurrence**	**TLS**	**Item (Keyword)**	**Occurrence**	**TLS**
Restaurants	190	519	Museum Service	23	48
Education	200	513	Bus Service	22	46
Airlines	144	391	Shipping	18	45
Library	112	291	Entertainment	16	41
Internet Service	85	288	Lodging	18	41
Hospitality	106	279	Energy Service	14	34
Transportation	97	220	Carrier Service	14	33
Financial	69	210	Airport Services	9	32
Insurance	73	202	Web Services	14	32
Logistics	69	157	Car Rental	10	29
E-Government	62	154	Doctor Services	8	25
Telecommunication	50	153	Municipality Services	7	23
Government Services	37	98	Social Service	12	21
Nursing	37	93	Consultancy	11	18
Public Service	38	88	Policing	9	16
Railways	37	77			

Table 7. list of Service Quality related keywords (Services).

Service Quality related keywords		
Item (Keyword)	**Occurrence**	**TLS**
Electronic Service Quality	128	354
Healthcare Service Quality	29	73
Retail Service Quality	28	73
Web Service Quality	15	40
Logistics Service Quality	19	35
Airline Service Quality	14	30
Education Service Quality	16	30
Library Service Quality	8	18
Airport Service Quality	8	15

4. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The current study was restricted to specific keyword (SERVQUAL) which might not cover the overall aspects. Different other keywords could be used instead. To make the results more appealing, different thresholds were applied which limited the findings to lesser number of items and excluded other available items pertaining to authors, countries, and keywords.

Different avenues for future research were recommended. Few subject areas (e.g., Arts & Humanities, Psychology, Environmental Sciences) revealed less than 2% publications of SERVQUAL based studies, therefore, more studies were suggested in those subject areas. Different SERVQUAL variants had very less number occurrence with less association strength (e.g., Bankqual, Mariqual, Coursequal) could explored further and investigated empirically in future research studies. Similarly, future research studies are suggested for service contexts or settings (e.g., Social Service, Municipality Services, Consultancy, Policing) which were found to have less association strength.

5. CONCLUSION

The current study is designed to map the literature of 'SERVQUAL', from 1987 till 2020. Service quality is not complete without SERVQUAL and it is widely accepted and used measurement model. To explore SERVQUAL, bibliometric analysis is performed on 12233 documents extracted from Scopus. Publication trend was found increasing across the years showing the increasing interest of researchers in SERVQUAL and thereafter. It would help in exploring, understanding, and extending the SERVQUAL and service quality in future. Valuable contributions made by productive researchers from United States and other countries had made search area more valuable to study further. Links and collaborations among authors, countries and keywords were identified and investigated. Prominent authors and countries were highlighted which had greater collaborations with other authors and countries, respectively. Various prominent keywords were identified which were referred to SERVQUAL variants, Service Contexts, and their Service Quality.

Author Contributions:

Conceptualization, Javed Ali & Masroor Ali; methodology, Javed Ali; software, Javed Ali; validation, Javed Ali, Masroor Ali & Aisha Ghouri; formal analysis, Javed Ali; original draft preparation, Javed Ali; writing—review and editing, Sadaf Latif and M. Saleem Korejo; visualization, Javed Ali & M. Saleem Korejo. All authors have read and agreed to the published version of the manuscript."

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Informed Consent Statement:

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Data Availability Statement:

Data can be provided by emailing to the lead author.

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Conflicts of Interest:

No conflicts of interest.

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APPENDIX-I

The search string;

servqual AND (EXCLUDE (PUBYEAR, 2021)) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (PUBSTAGE, "final")) AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (LANGUAGE, "English"))