

Bibliometric Analysis of Brand Research indexed in Web of Science (1955-2019)

Abstract

In the last two decades, more and more scholars and practitioners were interested in brand research. However, there are too many concepts and theories in this field and no comprehensive review to systematically introduce significant brand concepts, theories and the basic knowledge. Therefore, this article seeks to contribute to the extant papers of brand research by systematically reviewing the related literatures with a bibliometric analysis tool. Aims at providing a macroscopical landscape and historical progression of extant brand research. This systematic literature review examined 11649 articles (83 in detail) from Web of Science between 1955 and 2019 using Biblioshiny to show a statistical description and constructure analysis exhibition.

Introduction

In 1955, a paper named “Product and Brand” published by Levy & Gardner in Harvard Business Review, identified as the beginning of brand research in the academic field. Since then, more and more academical researchers attended in this area. As the American Marketing Association (AMA) listed “Brand Equity” as the most important topic in 1988, a large number of articles emerged. Under this circumstance, researchers did a great attribution to brand theory from kinds of aspects, such as brand image (Park et al 1986;), brand extensions (Aaker and Keller 1990; Boush et al 1991; Park et al 1991; Keller 1992), brand equity (Keller 1993), brand personality (Aaker J.L., 1997), brand relationship (Fournier 1998), brand community (Muniz 2001), brand leveraging (Keller 2003), brand engagement (Gambetti et al 2012; Hollebeek et al 2014; etc).

In 2020, there are more than 69,000 papers related to the topic of brand in Web of Science (WoS) Core Collection. Faced with the huge amount of papers, it is difficult to identify and capture the intellectual and conceptual structures of this field that are fundamental to the training of new researchers or cross-disciplinary researchers in this field. Of course, there have been many review papers for scholars to refer, for example:

Brand Equity: (Christodoulides et al 2010) analyzed literatures on consumer-based brand equity’s conceptualization and measurement.

Brand Image: (Plumeyer et al 2019) did a systematic review on the topic of measuring brand image. They identified 224 scholarly articles published between 1991 and 2016 using 12 main techniques for measuring brand image, providing a comprehensive discussion and characterization of brand image measurement techniques, offering recommendations for measuring brand image through a roadmap.

Branding: (Fetscherin et al., 2012) examined how scholarly research on corporate branding has evolved using bibliometric author co-citation analysis of articles published between 1969 and 2008 on corporate branding. (Edwards Martin R, 2010) reviewed the literature linked to employer branding with a perspective of the management of human resources. (Theurer et al., 2018) took a brand equity perspective to analyze the literature related to employer branding and created an integrative model: an employer branding value chain. (Leek et al, 2010) provided a critical discussion of the fragmented literature on business-to-business branding.

Brand Personality: (Eisend et al., 2013) conducted a meta-analysis on brand personality by investigating the antecedents and consequences of the brand personality dimensions of sincerity, excitement, competence, sophistication and ruggedness based on 76 independent samples in 56 studies. Except that, (Radler V.M., 2018) applied bibliometric co-citation meta-analysis to deconstruct 20 years of brand personality research, which included 220 articles in 62 journals from Web of Science. And she identified five research clusters: Measurement of Brand Personality, Direct and Indirect Effects of Brand Personality, Dynamics of Brand Personality Dimensions, Brand Personality in Brand Extensions and Application of Brand Personality to Related Areas. Based on the study, she provided a relevant interdisciplinary platform on brand personality research.

Brand Relationship: (Fetscherin et al., 2015) conducted a bibliometric citation meta-analysis based on 392 papers by 685 authors in 101 journals. This study explored seven sub-research streams and visualized how articles on consumer brand relationship build on each other using co-citation mapping technique.

Brand Community: (Hook et al., 2018) examined over 1900 articles (41 in detail) related to brand community participation literature, to find antecedents grouped into five categories (self-related, social-related, information-related, entertainment-related and technology-related) and consequences into three categories (brand-related, brand-community-related and social-related), and revealed 16 specific research questions.

As for the synthetical and systematical literature review, there are only few papers, such as Brands and branding: Research findings and future priorities published by Keller K.L. in 2006. In general, most articles attempted to identify and systematize the scientific literature of brand in a specific perspective and used traditional methods, such as systematic literature reviews or meta-analytical approaches. Distinguished from the extant studies, this paper will study brand research in a more macroscopical perspective, and apply another approach: scientific mapping based on bibliometrics, which is an important method to evaluate scientific research. Taking the extrinsic features of the scientific literature as the research object, bibliometrics studies the distribution structure, quantitative relationship and variation of the literatures

(Bornmann & Marx 2018). And this paper aims to present the “big picture” of extant brand research by using Biblioshiny, an open-source tool proposed by Dr. M. Aria.

The results achieved in the analyzed domain aim to:

- 1) help new researchers in this field identify the knowledge base of brand research and its intellectual structure;
- 2) examine the research front (conceptual structure) of this field
- 3) give some directions for the future study

The structure of this paper is as follows: Section 2 describes the study design and research methodology; Section 3 presents the results and interpretation of the bibliometric analysis; Section 4 offers a brief summary.

Research Method

A standard workflow for science mapping consists of five steps: study design, data collection, data analysis, data visualization and interpretation (Zupic & Cater, 2015).

Study design

For drawing the big picture of brand research, this article will figure out two questions: 1) Identify the knowledge base of research and its intellectual structure; 2) Examine the research front (conceptual structure) of this field. In this study, we will use the bibliometric analysis web-app Biblioshiny 3.0, provided by Dr M. Aria.

Data collection

This article's data is all from Web of Science Core Collection database. And the study used keywords: “Brand” to retrieve pure txt. Documents from WoS published within 1955-2019. The keywords were searched in the article titles to maximize the accuracy of the retrieved research output. Except that, “language = English” and “document type = article” are also the filter conditions. Finally, 11649 documents (including 115 articles delivered online in 2019 but published in 2020) on brand research during 1955-2019 were obtained.

Data analysis

This study mainly demonstrated descriptive statistics and visualization. And the data will be analyzed by using “Biblioshiny”, a very helpful tool based on R cloud, combining the functionality of bibliometrix package with the ease of use web-apps using the Shiny package environment, provided by Doctor M. Aria. It can be used for whole-process bibliometric analysis and visual display.

Statistical analysis, data preprocessing, co-occurrence matrix construction, co-citation analysis, coupling analysis, co-word analysis and cluster analysis on documents from the Scopus and Web of Science databases are achievable too. Combining the visualization capabilities of a variety of scientific mapping

tools, bibliometrix performs a complete set of literature information analysis and the visualization of results (Aria and Cuccurullo 2017).

Data visualization

In this article, besides the basic descriptive visualization (bar chart, word cloud, etc), we will use three types of mapping: Factorial map, Network map and Historiograph, to show the conceptual and intellectual structure in the field of brand research.

Interpretation

Fitting with the definition of research questions, in this study, we mainly discuss about the core journals, core authors, core literature and keywords. And based on the interpretation of important content, some conclusions for the extant articles and some directions for the future research will be delivered.

Research Procedure

Figure 1 shows the procedure of this study.

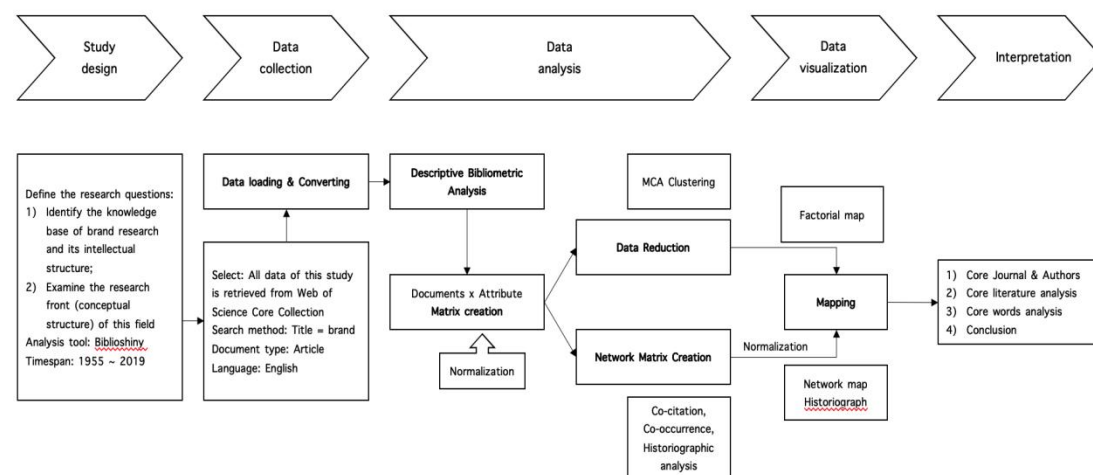


Figure 1: Research workflow

Results Analysis

Table 1 shows the main information of meta-data used to analyze. The number of documents is 11649, including 115 papers delivered online in 2019 but published in 2020. And the time span is from 1955 to 2019.

Description	Results
Documents	11534(115)
Authors	21225
Period	1955:2019(2020)
Sources (Journals, Books, etc)	2821
Keywords Plus (ID)	9399
Author's Keywords (DE)	18723

Average citations per documents	26.06
References	261530
Documents per Author	0.549
Co-Authors per Documents	2.71
Collaboration Index	2.12

Table1: Descriptive Characteristics of Brand Literature

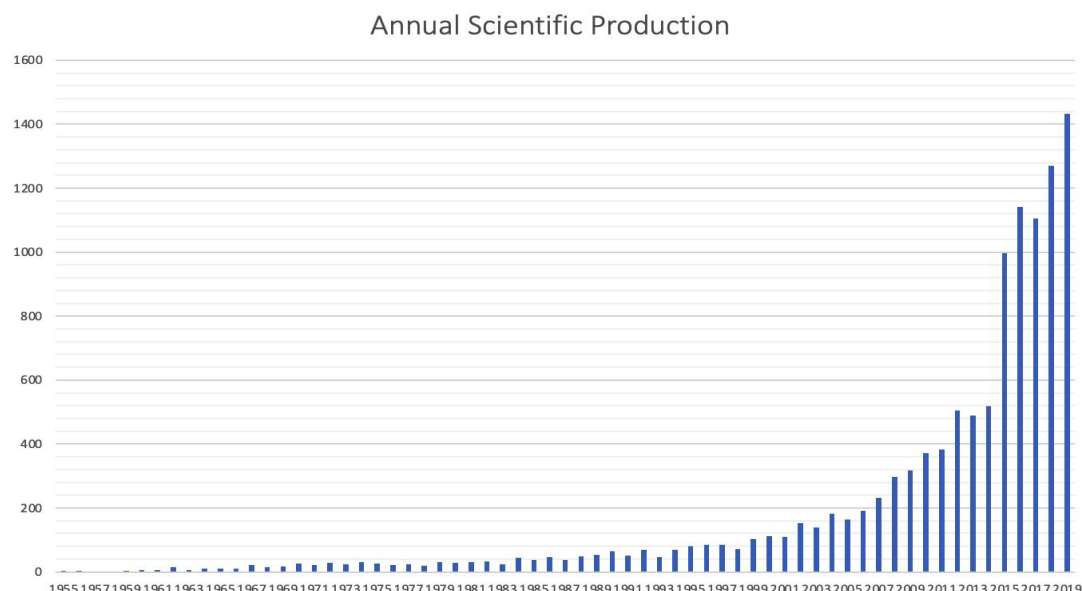


Figure 2: Annual scientific production

Influential Sources and Authors

Core Journals

Table 2 ranks the journals based on h-index and its generations: g-index and m-index, and shows descriptive data about total citation (TC) and net production (NP).

The Hirsch index (H-index) is an author's (or journal's) number of published articles (h) each of which has been cited in other papers at least h time. The m-index is defined as H/n , where H is the H-index and n is the number of years since the first published paper of the scientist(journal). The g-index has been introduced by Egghe in 2006 as an improvement of the h-index in order to measure the global citation performance of a set of articles. If this set is ranked in decreasing order of the number of citations that they received, the g-index is the (unique) largest number such that the top g articles received (together) at least g^2 citations (Aria 2020).

Table 3 ranks the journals based on Bradford's Law, which states that: "if the journals are arranged in descending order of the number of articles they carried on the subject, then successive zone of periodicals containing the same number of articles on the subject form the simple geometric series 1: ns : ns^2 : ns^3 ". Bradford called the first zone, the nucleus of journals particularly

devoted to the given subject. Because of the huge number of identified journals, we use the Bradford's law twice to show 20 journals.

Journals	h_index	g_index	m_index	TC	NP
Journal of Business Research	74	126	1.72093023255814	21749	461
Journal of Marketing Research	89	167	1.56140350877193	29871	300
European Journal of Marketing	48	78	1	8356	247
Journal of Product and Brand Management	22	36	3.66666666666667	2277	210
Journal of Advertising Research	41	66	0.683333333333333	5702	197
Psychology & Marketing	41	63		5239	187
Journal of Brand Management	18	24	3	1428	177
Journal of Consumer Research	67	128	1.425531915	16630	147
Journal of Marketing	70	121	1.09375	24172	121
Journal of Advertising	44	81	1.189189189	7027	118

Table2: Top Ten Journals According to Source Impact

Journals	Zone	Journals	Zone
Journal of Business Research	Zone1 1	Journal of Consumer Psychology	Zone1 2
Journal of Marketing Research	Zone1 1	Journal of Retailing and Consumer Services	Zone1 2
European Journal of Marketing	Zone1 1	International Journal of Research in Marketing	Zone1 2
Journal of Product and Brand Management	Zone1 1	Industrial Marketing Management	Zone1 2
Journal of Advertising Research	Zone1 1	International Journal of Advertising	Zone1 2
Psychology & Marketing	Zone1 2	Marketing Science	Zone1 3
Journal of Brand Management	Zone1 2	International Journal of Market Research	Zone1 3
Journal of Consumer Research	Zone1 2	International Marketing Review	Zone1 3

Journal of Marketing	Zone1 2	Marketing Letters	Zone1 3
Journal of Advertising	Zone1 2	Journal of The Academy of Marketing Science	Zone1 3

Table 3: 20 Journals According to Bradford's Law

Main Authors

There are 20 authors, who have a more significant impact in brand literature, listed in table 4, ranked by h-index, g-index and m-index.

Authors	h_index	g_index	m_index	TC	NP
Romaniuk J	13	21	0.619	484	31
Gupta S	18	30	0.621	1463	30
Keller KL	20	28	0.588	4077	28
De Chernatony L	19	26	0.864	1781	26
Lee S	12	26	0.571	1410	26
Kim J	12	25	0.75	711	25
King C	17	25	0.739	1194	25
Merrilees B	15	25	0.938	881	25
Siegel M	13	20	0.52	444	25
Dejong W	11	17	1.1	317	24
Jernigan DH	12	17	1.2	328	24
Diamantopoulos A	15	22	0.938	906	22
Nguyen B	12	19	2	375	22
Melewar TC	13	20	0.867	438	21
Park CW	15	20	0.395	4527	20
De Pelsmacker P	10	19	0.588	373	19
John DR	12	19	0.429	1520	19
Rahman Z	13	19	2.167	477	19
Woodside AG	13	19	0.277	700	19
Christodoulides G	14	18	0.824	1142	18

Table4: Top 20 Authors According to Authors' Impact

Core Literature

In this article, we will use two types of analysis: Co-citation network (Small, 1973) and Historiographic mapping (Grafield, 2004) to show the core literatures in brand research.

Co-citation Network

Co-citation analysis studies the cited documents, which is helpful in detecting a shift in paradigms and schools of thought and is performed for mapping older papers while examining the related articles (Aria and Cuccurullo 2017).

As we can see from the table 5, there are three clusters after Biblioshiny conducted the co-citation network analysis process.

In the first cluster, “Conceptualizing, measuring, and managing customer-based brand equity” written by Keller K.L. in 1993 has the highest betweenness centrality, which means lots of people cited this paper. And this paper doesn’t appear in the historical network because it is a review type paper. And the most important contribution Keller made was Customer-Based Brand Equity (CBBE), which was defined as the differential effect of brand knowledge on consumer response to the marketing of the brand. Except that, Keller proposed the definition of brand knowledge, which was conceptualized according to an associative network memory model in terms of two components, brand awareness and brand image. And he also gave a framework to measure it, which made the theory possible to be used in practice. In this cluster, Keller’s famous monograph Strategic Brand Management was also included, and even more, it appeared twice (one published in 1998, the other in 2003). Afterwards, this monograph was called “Brand Bible” by readers. In 2003, Keller individually published an article “Brand synthesis: The multidimensionality of brand knowledge” introduced brand knowledge, and in particular, interpreted brand leveraging (linking brands to other entities). In 2006,

Aaker D.A., a well-known master in the academic research of brand. His monograph Managing Brand Equity has a huge impact in this area. As is known to all, another two books named “building strong brand” and “”

In the second cluster, we found a quite number of articles are related to “variable” and “measurement”. It is a very significant point, which shows the fundamental tool related to psychology in this field.

In the third cluster, researchers are not satisfied with the pure economical perspective to study brand. They used a lot of concepts from social sciences, such as personality, relationship, community, self-constructed, which expanded the research ranges of brand. And appreciate it that they make brand research go into a broader world, where we can do a lot of jobs in an intersection angle.

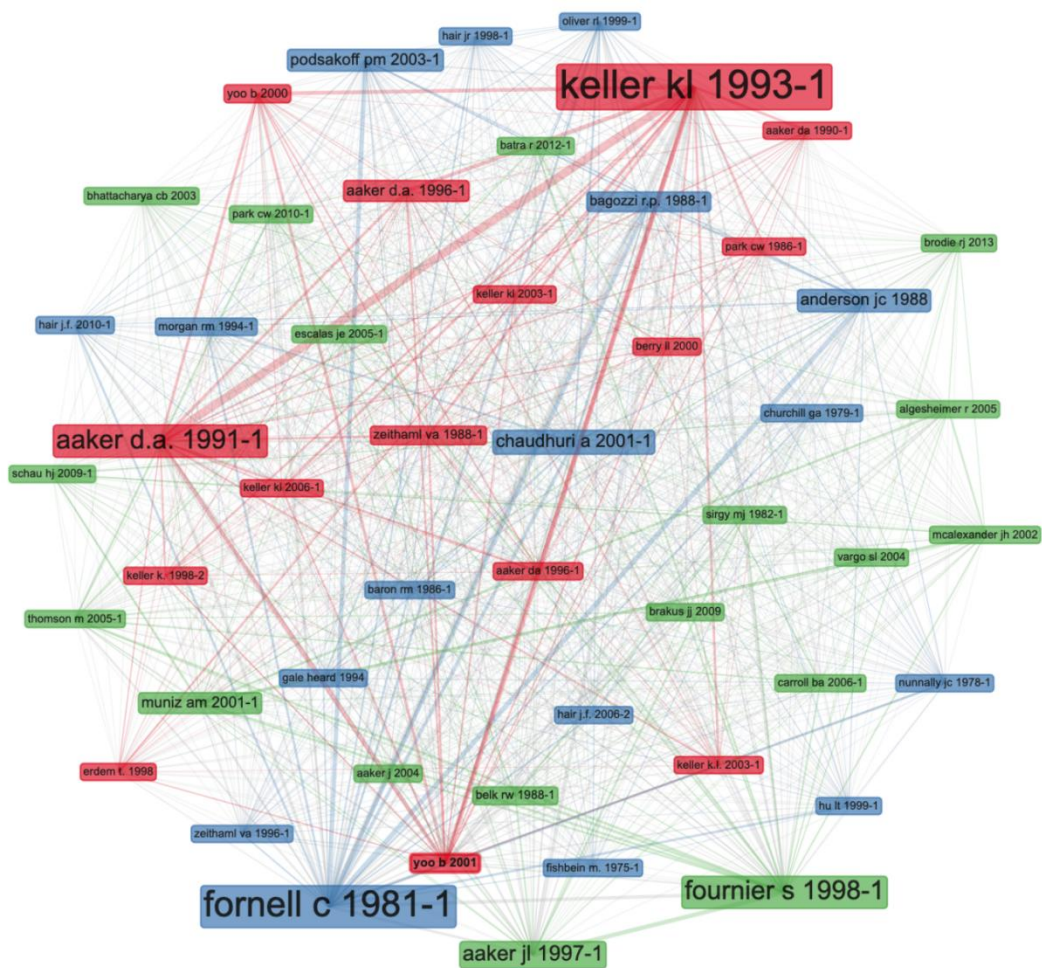


Figure 3: Co-citation Network

Author	Year	Article	Betweenness	Closeness	PageRank	Cluster
Keller KL	1993	Conceptualizing, measuring, and managing customer-based brand equity []	0.276760603	0.020408163	0.058788543	1
Aaker DA	1991	Managing brand equity [M] []	0.062490651	0.020408163	0.039156263	1
Zeithaml VA	1988	Consumer perceptions of price, quality, and value - a means-end model and synthesis of evidence []	0.036397551	0.020408163	0.021565308	1
Yoo B	2000	Developing and	0.036279	0.020408	0.022806	1

	01	validating a multidimensional consumer-based brand equity scale []	308	163	366	
Aaker DA	19 96	Measuring brand equity across products and markets []	0.024817 182	0.020408 163	0.019862 528	1
Aaker DA	19 96	Building strong brand [M] []	0.020462 745	0.020408 163	0.021259 063	1
Yoo B	20 00	An examination of selected marketing mix elements and brand equity []	0.017569 062	0.020408 163	0.022141 261	1
Keller KL	20 03	Brand synthesis: The multidimensional ity of brand knowledge []	0.010276 384	0.020408 163	0.013187 829	1
Berry LL	20 00	Cultivating service brand equity []	0.009535 201	0.020408 163	0.014237 11	1
Keller KL	20 06	Brands and branding: Research findings and future priorities []	0.006434 993	0.020408 163	0.016151 667	1
Aaker DA	19 90	Consumer evaluations of brand extensions []	0.005529 782	0.020408 163	0.014138 72	1
Keller KL	20 03	Strategic brand management [M] []	0.004994 79	0.020408 163	0.014397 315	1
Park CW	19 86	Strategic brand concept-image management []	0.004029 76	0.020408 163	0.013149 439	1
Erdem T	19 98	An empirical analysis of umbrella branding []	0	0.02	0.012130 064	1
Keller KL	19	Strategic brand	0	0.02	0.013036	1

	98	management [M] []			851	
Fornell C	19 81	Evaluating Structural Equation Models with Unobservable Variables and Measurement Error []	0.440342 66	0.020408 163	0.058161 381	2
Podsakof f PM	20 03	Common method biases in behavioral research: A critical review of the literature and recommended remedies []	0.101281 324	0.020408 163	0.024379 519	2
Chaudhu ri A	20 01	The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty []	0.076197 875	0.020408 163	0.030887 758	2
Anderson JC	19 88	Structural equation modeling in practice - a review and recommended 2-step approach []	0.070031 03	0.020408 163	0.028101 198	2
Bagozzi RP	19 88	On the evaluation of structural equation models []	0.059429 802	0.020408 163	0.025059 744	2
Oliver RL	19 99	Whence consumer loyalty? []	0.039694 373	0.020408 163	0.021877 808	2
Morgan RM	19 94	The commitment-trus	0.037653 342	0.020408 163	0.019692 268	2

		t theory of relationship marketing []				
hair	20 10	Multivariate data []	0.028479 615	0.020408 163	0.016456 967	2
baron	19 86	The moderator mediator variable distinction in social psychological-re search - conceptual, strategic, and statistical considerations []	0.023182 017	0.020408 163	0.017510 091	2
Nunnally JC	19 78	Psychometric theory	0.022358 403	0.020408 163	0.018114 237	2
Hu LT	19 99	Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives []	0.017038 193	0.020408 163	0.015290 788	2
Churchill GA	19 79	A paradigm for developing better measures of marketing constructs []	0.014071 733	0.020408 163	0.014142 956	2
Hair JF	20 06	Multivariate data [M] []	0.013354 48	0.020408 163	0.011979 62	2
Hair JF	19 98	Multivariate data [M] []	0.011526 234	0.020408 163	0.013560 559	2
Zeithaml VA	19 96	The behavioral consequences of service quality []	0.010509 72	0.020408 163	0.013493 845	2
Gale Heard	19 94	Customer loyalty: Toward an integrated conceptual framework []	0.005898 35	0.020408 163	0.014798 128	2

Fishbein M	1975	Belief attitude inte [M] []	0.001569329	0.020408163	0.009705119	2
Fournier S	1998	Consumers and their brands: Developing relationship theory in consumer research []	0.145149242	0.020408163	0.041006772	3
Muniz AM	2001	Brand community []	0.093311789	0.020408163	0.023241879	3
Aaker JL	1997	Dimensions of brand personality []	0.058979046	0.020408163	0.030227135	3
Mcalexander JH	2002	Building brand community []	0.036669656	0.020408163	0.018335528	3
Brakus JJ	2009	Brand experience: what is it? How is it measured? Does it affect loyalty? []	0.023101814	0.020408163	0.019032646	3
Algesheimer R	2005	The social influence of brand community: Evidence from European car clubs []	0.021832323	0.020408163	0.017252606	3
Vargo SL	2004	Evolving to a new dominant logic for marketing []	0.021633968	0.020408163	0.010906452	3
Schau HJ	2009	How brand community practices create value []	0.018992351	0.020408163	0.013382867	3
Thomson M	2005	The ties that bind: Measuring the strength of consumers' emotional attachments to brands []	0.015206157	0.020408163	0.0206865	3

Batra R	20 12	Brand love []	0.013170 567	0.020408 163	0.015300 606	3
Carroll BA	20 06	Some antecedents and outcomes of brand love []	0.011557 424	0.020408 163	0.016094 33	3
Bhattach arya CB	20 03	Consumer-comp any identification: A framework for understanding consumers' relationships with companies []	0.010693 223	0.020408 163	0.014716 68	3
Aaker JL	20 04	When good brands do bad []	0.010127 041	0.020408 163	0.013235 036	3
Park CW	20 10	Brand Attachment and Brand Attitude Strength: Conceptual and Empirical Differentiation of Two Critical Brand Equity Drivers []	0.010116 645	0.020408 163	0.016867 992	3
Belk RW	19 88	Possessions and the Extended Self []	0.009442 707	0.020408 163	0.019412 405	3
Sirgy MJ	19 82	Self-Concept in Consumer Behavior: A Critical Review []	0.006277 315	0.020408 163	0.016062 508	3
Escalas JE	20 05	Self-Construal, Reference Groups, and Brand Meaning []	0.005542 24	0.020408 163	0.013581 262	3
Brodie RJ	20 13	Consumer engagement in a virtual brand community: An exploratory analysis []	0	0.019607 843	0.011436 483	3

Table 5: Articles by Co-citation Network Analysis

Historical Direct Citation Network

The hisNetwork and histPlot functions in the bibliometrix package were used to generate a historical direct citation network and visually analyze the network. The raw data was analyzed by LCS historical direct citation network and visually analyze the network. The raw data was analyzed by (local citation score) and GCS (global citation score) indicators. LCS refers to the number of citations of LCS (local citation score) and GCS (global citation score) indicators (Xie et al 2020). The higher the LCS, the more important the paper is in the field of brand research. GCS science in this paper refers to the total number of citations of papers in the Web of Science database, but the cited papers are not necessarily those in the field of brand research. Each historical path identifies a research topic and its core authors and documents. Each node represents a document cited by other documents and each edge represents a direct citation. Nodes and edges are plotted an oriented graph where the horizontal axis represents the publication year (Aria 2020).

As we can see from the figure 4, there are five research paths.

Firstly, the green one begins from Mitchell AA, whose article named Are product attribute beliefs the only mediator of advertising effects on brand attitude mainly demonstrated

Historical Direct Citation Network

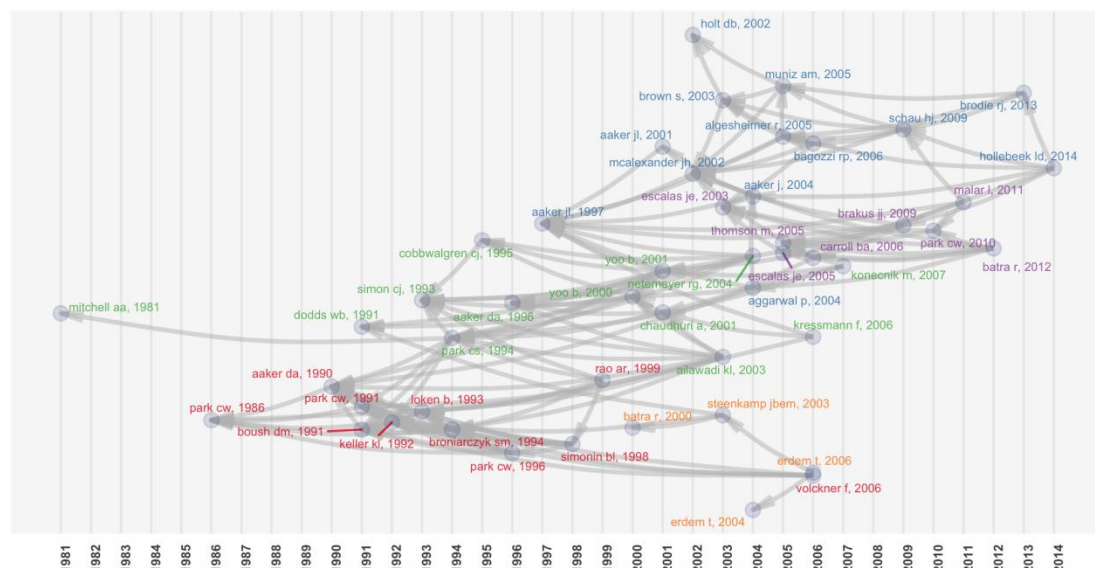


Figure 4: Historical direct citation network of top-cited papers in the field of brand research

Author	Paper	Year	Lcs	Gcs	Cluster
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Mitchell AA	Are product attribute beliefs the only mediator of advertising effects on brand attitude []	1981	144	977	1
Dodds WB	Effects of price, brand, and store information on buyers' product evaluations []	1991	218	2107	1
Simon CJ	The measurement and determinants of brand equity - a financial approach []	1993	185	494	1
Park CS	A survey-based method for measuring and understanding brand equity and its extendibility []	1994	172	368	1
Cobbwalgren CJ	Brand equity, brand preference, and purchase intent []	1995	197	454	1
Aaker DA	Measuring brand equity across products and markets []	1996	407	993	1
Yoo B	An examination of selected marketing mix elements and brand equity []	2000	420	1061	1
Yoo B	Developing and validating a multidimensional consumer-based brand equity scale []	2001	424	971	1
Chaudhuri A	The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty []	2001	599	1970	1
Ailawadi KI	Revenue premium as an outcome measure of brand equity []	2003	174	374	1
Netemeyer RG	Developing and validating measures of facets of customer-based brand equity []	2004	190	444	1
Kressmann F	Direct and indirect effects of self-image congruence on brand loyalty []	2006	123	357	1
Konecnik M	Customer-based brand equity for a destination []	2007	127	328	1
Park CW	Strategic brand concept-image management [6]	1986	319	842	2
Aaker DA	Consumer evaluations of brand extensions [7]	1990	519	1273	2
Boush DM	A process-tracing study of	1991	213	422	2

	brand extension evaluation []				
Park CW	Evaluation of brand extensions - the role of product feature similarity and brand concept consistency []	1991	274	587	2
Keller KL	The effects of sequential introduction of brand extensions []	1992	236	560	2
Loken B	Diluting brand beliefs - when do brand extensions have a negative impact []	1993	200	388	2
Broniarczyk SM	The importance of the brand in brand extension []	1994	223	465	2
Park CW	Composite branding alliances: an investigation of extension and feedback effects []	1996	136	306	2
Simonin BL	Is a company known by the company it keeps? Assessing the spillover effects of brand alliances on consumer brand attitudes []	1998	200	553	2
Rao AR	Signaling unobservable product quality through a brand ally []	1999	142	423	2
Volckner F	Drivers of brand extension success []	2006	127	287	2
Aaker JL	Dimensions of brand personality []	1997	829	2353	3
Aaker JL	Consumption symbols as carriers of culture: a study of japanese and spanish brand personality constructs []	2001	168	412	3
Holt Db	Why do brands cause trouble? A dialectical theory of consumer culture and branding []	2002	193	874	3
McAlexander JH	Building brand community []	2002	333	1133	3
Brown S	Teaching old brands new tricks: retro branding and the revival of brand meaning []	2003	169	540	3
Aggarwal P	The effects of brand relationship norms on consumer attitudes and behavior []	2004	122	386	3
Aaker J	When good brands do bad []	2004	240	610	3
Muniz Am	Religiosity in the abandoned	2005	132	490	3

	apple newton brand community []				
Algesheimer R	The social influence of brand community: evidence from european car clubs []	2005	314	1013	3
Bagozzi RP	Antecedents and purchase consequences of customer participation in small group brand communities []	2006	151	535	3
Schau HJ	How brand community practices create value []	2009	261	1006	3
Brodie RJ	Consumer engagement in a virtual brand community: an exploratory analysis []	2013	212	863	3
Hollebeek LD	Consumer brand engagement in social media: conceptualization, sale development and validation []	2014	158	650	3
Batra R	Effects of brand local and nonlocal origin on consumer attitudes in developing countries []	2000	150	553	4
Steenkamp JBEM	How perceived brand globalness creates brand value []	2003	163	473	4
Erdem T	Brand credibility, brand consideration, and choice []	2004	122	394	4
Erdem T	Brands as signals: a cross-country validation study []	2006	137	370	4
Escalas JE	You are what they eat: the influence of reference groups on consumers' connections to brands []	2003	208	636	5
Escalas JE	Narrative processing: building consumer connections to brands []	2004	135	433	5
Escalas JE	Self-construal, reference groups, and brand meaning []	2005	253	722	5
Thomson M	The ties that bind: measuring the strength of consumers' emotional attachments to brands []	2005	348	894	5
Carroll BA	Some antecedents and outcomes of brand love []	2006	256	610	5

Brakus JJ	Brand experience: what is it? How is it measured? Does it affect loyalty? []	2009	375	1211	5
Park CW	Brand attachment and brand attitude strength: conceptual and empirical differentiation of two critical brand equity drivers []	2010	285	693	5
Malar L	Emotional brand attachment and brand personality: the relative importance of the actual and the ideal self []	2011	184	422	5
Batra R	Brand love []	2012	254	548	5

uses the actual content of the documents to construct a similarity measure; the others connect documents indirectly through citations (Aria and Cuccurullo 2017).

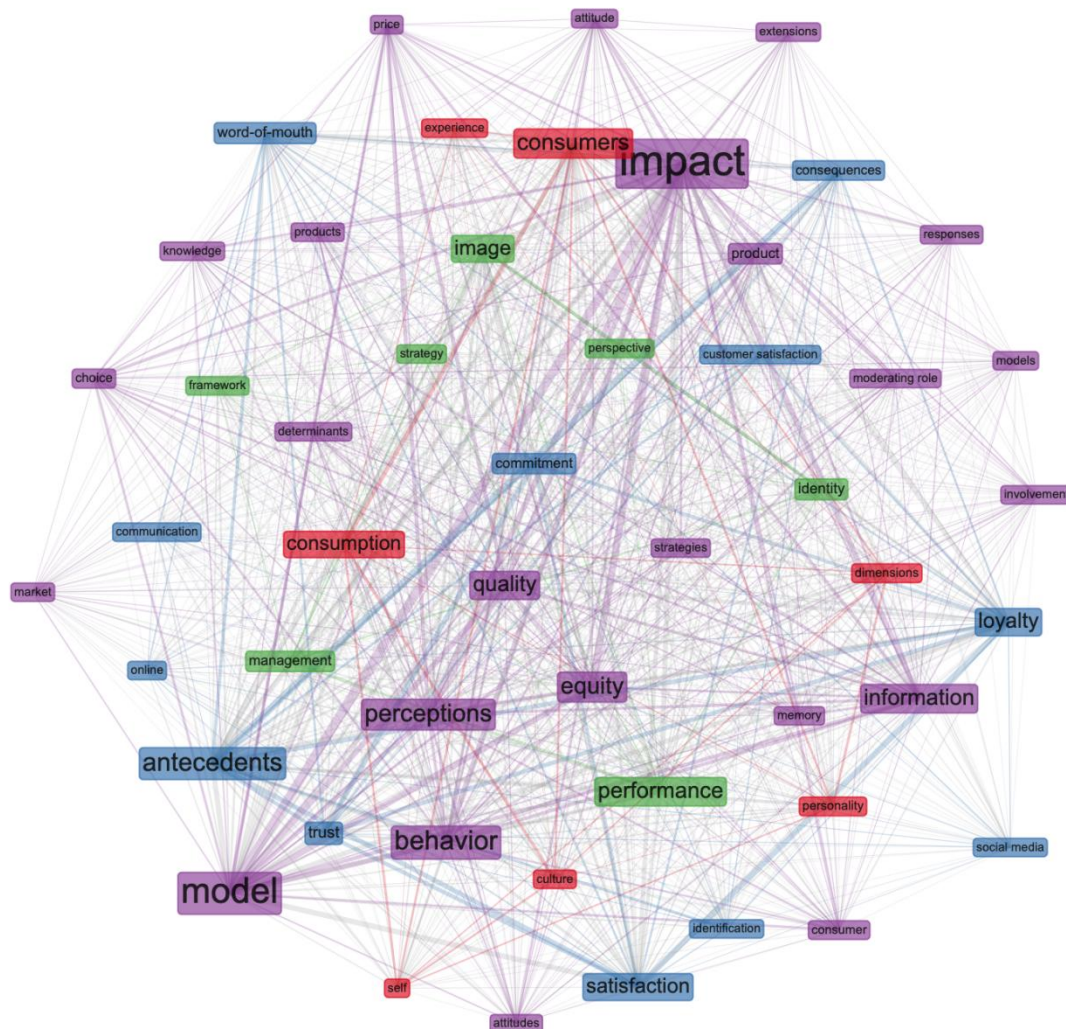


Figure : Keywords Plus Co-occurrence Network

Multiple Correspondence Analysis

Conclusions

Based on this study, we can have a distinct outlook at brand research. For answering the questions defined in the study design, in this part, we will give some conclusions for extant literature and some directions for the future research:

Identify the knowledge base: Main journals and authors; Basic knowledge;
Historical progression
Conceptual structure

Reference:

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