A Bibliometric Analysis and Visualization of Influencer Marketing

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Abstract. This study focuses on influencer marketing areas and especially in the field of social media influencer marketing. Specifying research direction and priorities are of the utmost importance for both companies and professionals to conduct effective marketing and other business endeavors. This report used CiteSpace and VOSviewer as bibliometric analysis tools to get a comprehensive view of influencer marketing technology and understand the current research gaps. The Web of Science core collection database was used as the primary source for data collection. The data were collected from 1,080 articles published from 1986 to 2022, which covers the most influential and productive authors, institutions, countries, and journals. The results indicated that future research should concentrate on consumer interaction, digital marketing in the pandemic period, consumer socialization and children food marketing. As a result, this article aided researchers and practitioners in gaining a thorough grasp of the current state and developments in influencer marketing research.

Keywords: bibliometric analysis; influencer marketing; word-of-mouth; CiteSpace; VOSviewer

1. Introduction

Social media has altered the channels and techniques used by businesses to communicate with their clients in the digital era, including consumer demand research, customer involvement, word-of-mouth marketing, international communication, and influencer marketing. Creating value in collaboration with clients has progressively become the central tenet of modern marketing. The renovation of the communication system in marketing practice has spawned a large number of subversive traditional marketing logic, making influencer marketing on social media a new field of concern for researchers.

The word "bibliographic technique" refers to a quantitative analysis of papers, books, or other publications. The bibliometric analysis has been used recently in several professional domains to display the state, components, development, and developing trends of knowledge. This can assist interested scholars who lack expertise in those fields to gain a full understanding (Kamran et al., 2020). A significant quantity of academic research, which may be seen from a micro to macro viewpoint, can be presented via bibliometrics (Raan & Anthony, 2005). The performance of many fields may be clearly shown based on bibliometric methodologies. As a result, this study will undertake a thorough and organized analysis of influencer marketing research using the maps produced by CiteSpace and VOSviewer. Typically, CiteSpace is a useful tool for academics to identify network relationships, study focuses, and research trends. The literature may be shown in depth using VOSviewer, including popular study areas.

With the rapid growth of the internet and social media, Influencer Marketing has gained a lot of attention as an emerging marketing strategy. Influencer Marketing works with influential social media users (influencers) in order to spread the word about brands and products, engage target audiences and drive sales growth. Over the past few years, Influencer Marketing has become an important marketing tool for many brands and companies, with much attention being paid to its advertising and marketing impact (Costea, A., 2022).

However, despite the success of Influencer Marketing in business practice, there has been relatively little systematic research and exploration of it in academia. Research on Influencer Marketing has mainly focused on the fields of business management, communications and marketing, and lacks a comprehensive perspective and analysis. Therefore, a comprehensive assessment and exploration of research in the field of Influencer Marketing can provide both academics and practitioners with a deeper understanding and guidance on its application.

To fill this research gap, this study aims to systematically assess and present the current status, trends and contributions of Influencer Marketing research through bibliometric analysis and visualisation techniques. Bibliometric analysis is a quantitative method that reveals hotspots and trends in the research field through statistics on the number of publications, citation relationships and author collaborations. Visualisation techniques, on the other hand, help researchers and practitioners to understand the structure and characteristics of Influencer Marketing more intuitively by visualising complex data and relationships in the form of charts, network diagrams and heat maps (HURDUZEU et al., 2022).

This literature is structured by data collection, methodology, findings and future research recommendations. Overall, in contrast to conventional techniques of literature reviews, this article will clearly and comprehensively demonstrate hot study issues and rising trends of influencer marketing research.

By systematically gathering, describing, and analyzing research papers on influencer marketing, this study will offer a helpful guideline for academics and industry professionals who has research attention on influencer marketing and find collaboration opportunities with other academics. The predictions derived from the bibliometric study may also offer suggestions for future studies on influencer marketing. The following research questions are important to consider accomplishing this goal.

RQ1: What are the general publication trends and topic areas in terms of publishing output?

RQ2: What are the most significant cited journals that constitute the knowledge field of influencer marketing research?

RQ3: What are the most referenced articles in influencer marketing research in terms of number of citations?

RQ4: What are the hotspots and emerging trends discussed in influencer marketing papers?

Through the bibliometric analysis and visual presentation of the field of Influencer Marketing, this study aims to reveal the research hotspots, academic trends and major contributions in the field. At the same time, by comparing the gaps in existing research and practice, this study will also propose future research directions and development recommendations for the further development and application of Influencer Marketing.

Through this study, we expect to provide academics and practitioners with a comprehensive knowledge and in-depth understanding of Influencer Marketing. At the same time, the methodology and analytical framework of this study can also serve as a reference for bibliometric analysis and visualisation studies in other research areas. Ultimately, we hope that this study will advance the academic research and practical application of Influencer Marketing, and provide new ideas and insights for the development and innovation of related fields.

2. Data acquisition and methods

2.1. Data acquisition

Data collection is one of the key steps in the research process, and for this study, the selection of an appropriate academic database is an important factor in ensuring access to high quality literature. For this study, we chose Web of Science (WoS) as the primary data source. As a world-famous academic database, Web of Science (WoS) contains the documents with high academic influence and authority. Therefore, this research selected WoS database as reference resource which includes three sub databases of Science Citation Index Expanded (SCI-E), Social Sciences Citation Index (SSCI) and Arts&Humanities Citations Index (A&HCI). Exported records from WoS included comprehensive and detailed data like "full records and cited references exported to text files" on publication year, country, author, journal, and institution (Nunen et al., 2018). Keywords, abstracts, authors, and titles were served as search types to explore the correlation theories and study in this field. Totally, there were 1,080 valid references extracted from WoS.

Using WoS, we can access bibliographic records with detailed information, including year of publication, country, author, journal and institution. We can extract useful data from these records and carry out further analysis and research. In addition, WoS provides the ability to export to text files, allowing us to access the complete records and references cited, providing a more comprehensive data base for our research.

During the data collection process, we focused on keywords, abstracts, authors and titles as search types to ensure that we obtained theories and studies relevant to our research area. Through careful screening and evaluation, we eventually extracted 1,080 valid references from the WoS database, which will provide important support and reference for our study.

The data collection is the foundation of this study and we will conduct subsequent bibliometric analysis and visualisation studies based on these collected data. Through in-depth analysis of these data, we will reveal the research hotspots, academic trends and major contributions in the field of Influencer Marketing, providing a strong basis and support for our research.

2.2. Methods

Specifically, this bibliometric analysis mainly used CiteSpace and VOSviewer to conduct descriptive statistics and citation analysis. CiteSpace is a widely used tool created by Dr. Chen C. which is written based on java program. It can be conducted to do visualization research with visual maps including

authors, journals, counties, institutions, keyword clustering and reference citation bursts (Chen, 2006). VOSviewer as a visualization tool created by Eck and Waltman (2010) is usually adopted to deal with keyword co-occurrence network analysis (Eck & Waltman, 2010). Taking "Influencer Marketing" as keyword, selecting the year range "all year" from 1986 to 2022, choosing document type as "article" "letter", choosing language as "English", there are 1,080 references related were finally obtained for subsequent analysis (searching time is 5 June 2022). Fig. 1. depicts the phases of searching phrases and method in this study.
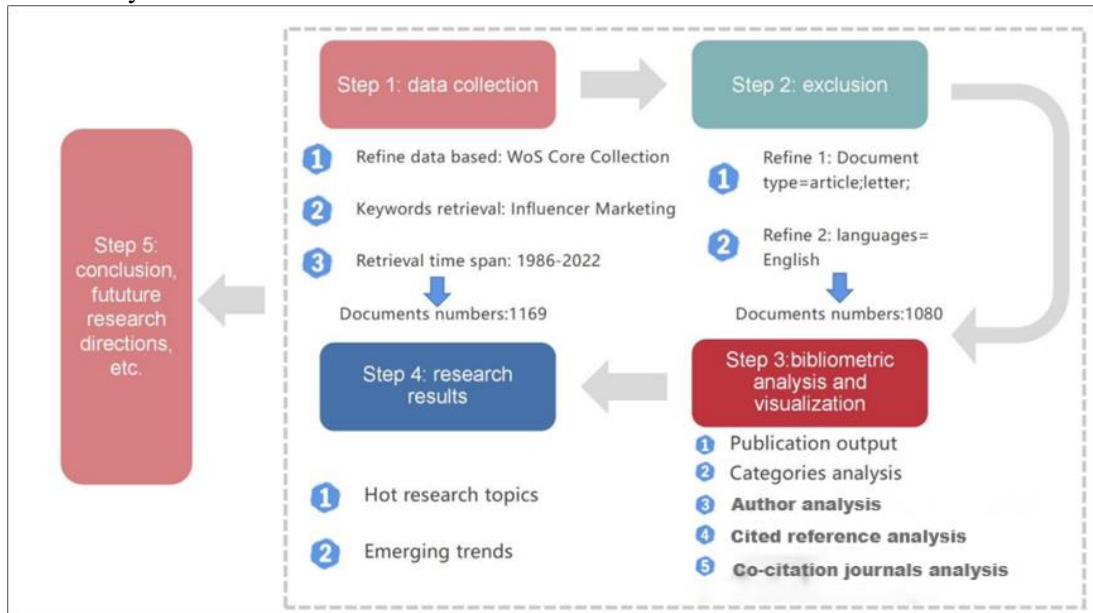

Fig.1: Steps of bibliometric analysis of influencer marketing.

3. Results

3.1. Analysis of publication outputs

The reason why the annual trend of publication activity was conducted is that the period of initial formation, development, maturity, and decline of influencer marketing research could be well explored. Fig. 2 is obtained by counting the number of publications per year. It can be found that, overall, the number of articles published sustained growth from 1986 to 2021, which means scholars pay more and more attention to the research, application, and effects of influencer marketing. Through the analysis of literature, combined with the development of social media and the continuous updating of brand marketing strategies, the evolution of influencer marketing research could be generally divided into three stages. The first stage is from 1986 to 2008, during that the total number of articles published was rare and grew slowly which was less than 50. It reflected that influencer marketing was in its infancy. In this period, influencer marketing was limited to considering the sales personnel working in offline physical brands and retail markets as influencers. Scholars usually focused on the purchase suggestion from retail salesperson to consumers as well as some explicit and invisible roles between influencers and influence adopters (McGrath&Otnes, 1995). At the same time, the concept of word-of-mouth (WOM) appeared in the research field of scholars especially in the field of experiential goods markets like film and opera markets. Abratt proposed that market experts or professionals became the choice to be a market influencer of retailers in word-of-mouth marketing in 1995(Abratt et al.,1995).

The second stage was from 2009 to 2017, during which the annual publishing volume of influencer marketing articles gradually increased, the average number of articles published each year is 26, indicating that influencer marketing received increasing attention. Because of the unsatisfactory effect of traditional advertising, the diversification of competitors' marketing strategies, and the rapid development of social media platforms, influencing customer preferences and purchase intentions

through online networks and WOM became an increasingly significant part of every marketer's job, and brands began to publicize products through social media platforms at a lower cost and in a more professional means (Kumar & Rohan, 2013). The term of online social networks (OSN) was first used in research of Kim S. and Han S (Kim & Han, 2009). Therefore, the effects on influencer marketing on consumers' brand loyalty, brand trust and purchase intention through social media received a lot of attention.

The third stage is from 2018 to 2022, the annual publishing papers of influencer marketing proliferated. Accordingly, many papers on the effect of this field were published at this stage, with an average annual number more than 160. With the popularization of the concept of WOM, the relevant research had entered a stage of steady growth. At this stage, the research started with the development of brand business practice and the innovation of influencer marketing methods. Since constantly improving the theoretical framework of influencer marketing, it further enriched the role of consumer behavior participation, value expression, social platform types, advertising sponsorship disclosure and other cognition in influencer marketing through empirical research. In general, influencer marketing research shows an upward trend now. The development of a research field usually goes through four stages: early development stage, exponential growth stage, research consolidation stage, and gradual reduction stage (Price, 1963). According to fig. 2, the number of published literatures in this field increases year by year in a climbing manner. From the steady growth in the first and second stage to the explosive growth in the third stage, it can be judged that this field is in the stage of exponential growth.
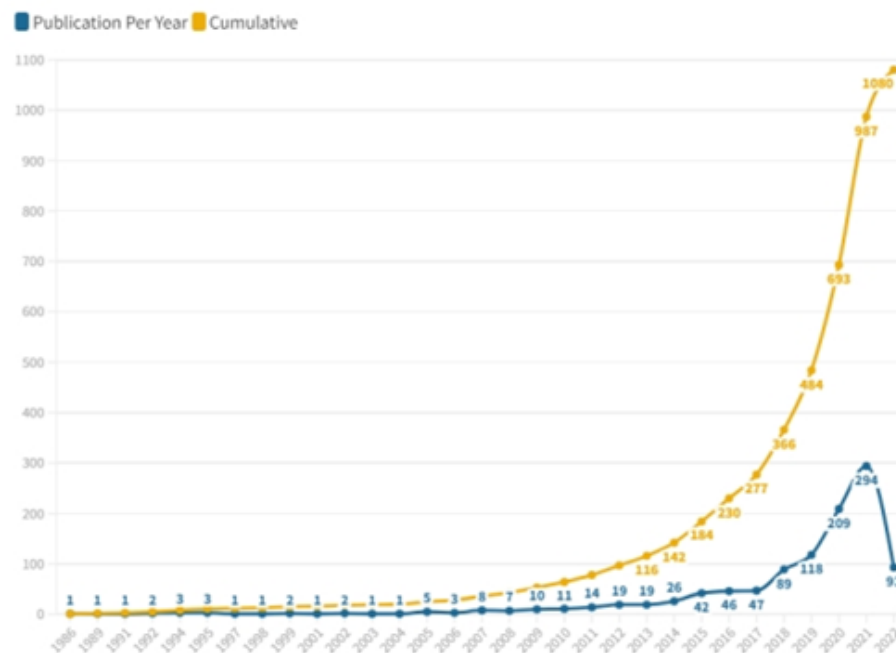
Fig.2: The annual publication output of influencer marketing research.

3.2. Analysis of categories

The purpose of analyzing references' categories is to explore the trend in development of research on a specific subject (Hamidi & Ramavandi, 2020). Influencer marketing literature in WoS comprised approximately 122 subject categories. The top 5 subject categories were shown in Table 1, including business (458 articles), management (137 articles), communication (117 articles), computer science information systems (90 articles) and computer science theory method (57 articles). The distribution of subject categories suggested that in issues in business were highly prioritize in research. This also shows that most of the research on influencer marketing still belongs to the business strategy of the brand to improve brand benefits and brand equity (Mircea et al., 2023). After 2020, research in computer science

gradually emerged though, the research on marketing strategy and customer communication was still a hotspot. An analysis of the distribution of subject categories leads us to the following conclusions: business issues are at the forefront of influencer marketing research, indicating that most research focuses on the application of influencer marketing as a brand business strategy aimed at improving brand effectiveness and brand equity. In addition, research in computer science is emerging, indicating the importance of computer science and technology for influencer marketing research in the digital age. However, marketing strategy and customer communication remain hot areas of research, indicating the continued value of research in understanding and mastering effective marketing strategies and communicating effectively with customers in influencer marketing. The category analysis of the references allows us to better understand the focus areas and research directions in Influencer Marketing research. This provides an entry point for an in-depth study of Influencer Marketing and provides a valuable reference and guide for future research.

Table 1: Top 5 subject categories based on publications.

Subject category	Number of papers	Peak year
Business	458	2021
management	137	2020
communication	117	2021
Computer science information systems	90	2021
Computer science theory method	57	2020

3.3. Analysis of author collaboration network

The research author plays an important role in reflecting research capabilities and evaluating the progress of an academic field. Based on the 1,080 publications contributed by 2,823 authors, The authors' collaboration network in the influencer marketing field was clearly outlined in Fig. 3 (parameter settings: year(s) per slice: 1; node type: author; pruning: pruning the merged network; top N per slice: 200; top N%: 50%). It was noted that many authors tended to collaborate with others, which can be shown from the density of cooperative network map(density=0.0014). According to their publications, Hudders L. (11 articles) dominated the list of publications. Other authors with outstanding publication performance were Lee J. (9 articles), Lee S. (8 articles), Kim H. (7 articles), and so on. These authors had contributed to promoting research on influencer marketing in business, advertisement, and management with their unremitting efforts. For instance, Jans and Hudders L. (2020) conducted a series of empirical studies and proposed a research framework among brands sponsorship disclosing, influencers and young consumers, and put forward how the brand sponsorship disclosure could have a good impact on brands and young consumers (Jans & Hudders, 2020). Lee S. (2020) investigated how credibility related to influencer and brand affects consumers' perception toward the influencer promotional post (Lee & Kim, 2020). Kim H. (2021) concentrated on the level of social presence and the function of para-social interaction as a moderator in influencer marketing. (Kim, 2021).
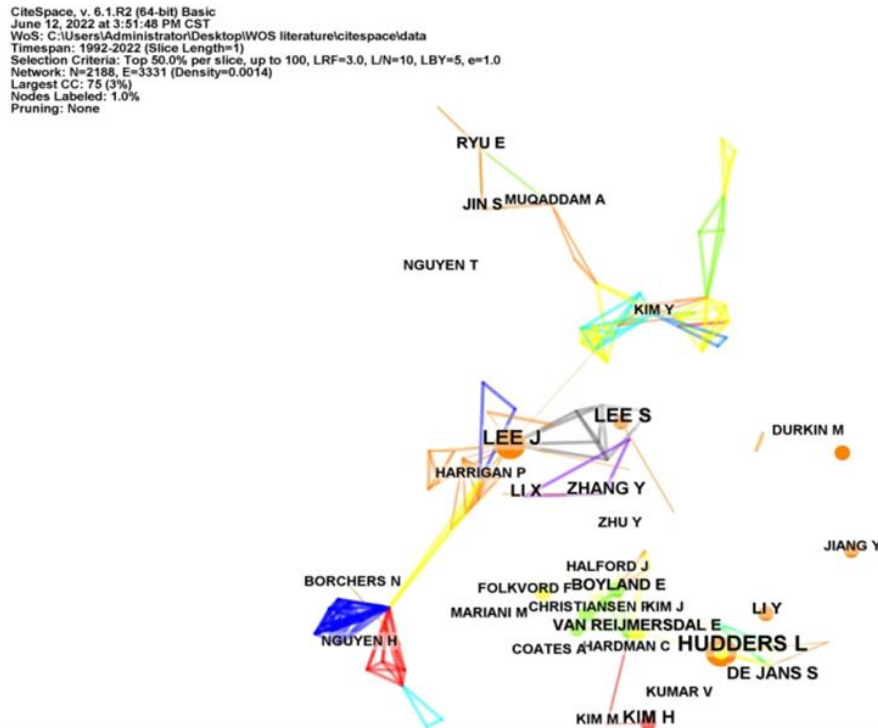
CiteSpace, v. 6.1.R2 (64-bit) Basic
June 12, 2022 at 3:51:48 PM CST
WoS: C:\Users\Administrator\Desktop\WOS literature\citespace\data
Timespan: 1992-2022 (Slice Length=1)
Selection Criteria: Top 50.0% per slice, up to 100, LRF=3.0, L/N=10, LBY=5, e=1.0
Network: N=2188, E=3331 (Density=0.0014)
Largest CC: 75 (3%)
Nodes Labeled: 1.0%
Pruning: None

RYU E

JIN S MUQADDAM A

NGUYEN T

KIM Y

LEE S

DURKIN M

LEE J

HARRIGAN P

LI X   ZHANG Y

ZHU Y

JIANG Y

HALFORD J

BORCHERS N

FOLKVORD F BOYLAND E

MARIANI M CHRISTIANSEN R KIM J

LI Y

VAN REIJMERSDAL E

NGUYEN H

COATES A HARDMAN C   HUDDERS L

DE JANS S

KUMAR V

KIM M KIM H

Fig.3: The visualization map of authors collaboration network in influencer marketing.

3.4. Analysis of co-citation journals

Through statistics, it is found that 1,080 references collected in this study had been published in 577 journals. As shown in Table 2, Journal of business research and International journal of advertising were the most productive journals with 23 papers (accounting for 2.12%). It was worth noting that the Journal of business research also had the highest citation frequency (425 citations) in total, while the International journal of advertising had 290 total citations. It revealed that the Journal of business research had far greater value than any other journals and played a key role in influencer marketing research. Meanwhile, here is a phenomenon worth studying that the European journal of marketing only had published 11 articles, but the centrality was highest which was 0.1. It shows that most of the key papers in the field of influencer marketing cited this journal. After classifying the top 10 journals by subject, it was founding that business and management attracted more attention. At same time, psychology science followed closely. This also highlighted researchers increasingly recognized the role of consumer psychology including consumer interaction and consumer insights. According to the analysis of co-citation journals, the distribution of cited quality journals was clearly represented in the field of influencer marketing. Since 1986, the Marketing research, the Journal of marketing and the Journal of business research stood out for their high productivity and influence. Even today, they are still the most influential journals because there was no journal could surpass them in the following decades.

Table 2: Top 10 productive journals in Influencer Marketing research:1986-2020.

No.	Journal	Publications	% of papers	Total citation	Centrality
1	Journal of business research	23	2.12%	425	0.07
2	International journal of advertising	23	2.12%	290	0.03
3	Journal of retailing and	20	1.84%	212	0.04

	consumer service				
4	Journal of retailing in interactive marketing	16	1.47%	257	0.03
5	Sustainability	16	1.47%	57	0.00
6	International journal of environment research and public health	15	1.38%	33	0.00
7	Journal of marketing management	15	1.38%	168	0.01
8	Psychology marketing	13	1.19%	281	0.03
9	Journal of advertising	12	1.10%	277	0.02
10	European journal of marketing	11	1.01%	207	0.1
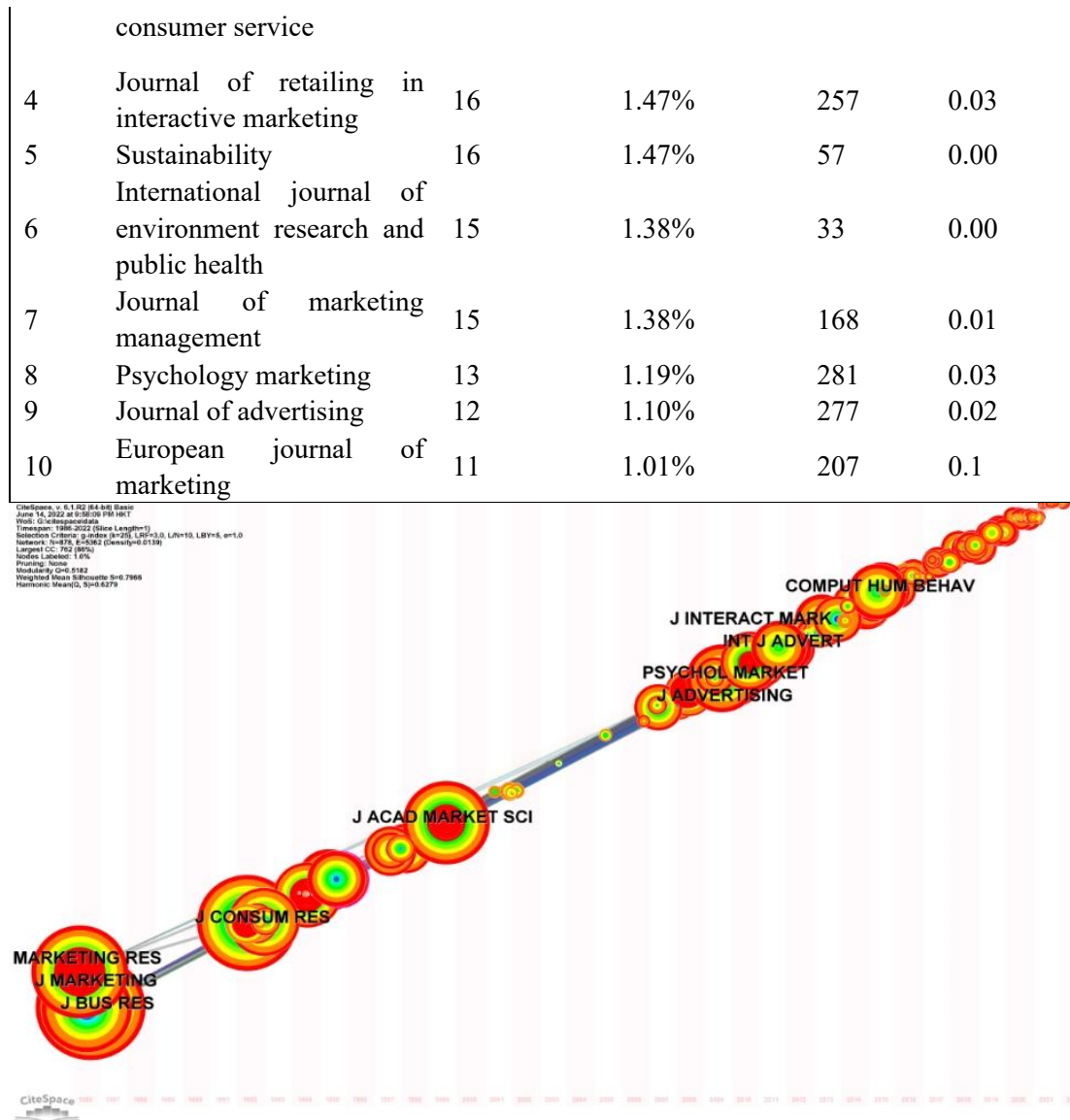
Fig.4: The time zone view of the co-citation journal network:1986-2022.

3.5. Analysis of cited reference and co-citation reference

The cited literature can be used to measure the influence of the literature. Table 3 lists the 10 most cited articles in the field of influencer marketing research. Compared with other articles, article published by Kumar V. (2010) was the most frequently cited article (628) which was one of the most influential articles. According to Table 3, firms were rapidly abandoning traditional celebrity endorsers in favor of social media influencers in their marketing efforts. Comparing with traditional celebrities, using influencers in marketing activities has higher value, because similarity, identity and trust are very important in it. How influencers affect the relationship between brands and consumers, customer prices have become the research topics of researchers.

To further understand the knowledge base and structural characteristics of the influencer marketing research field, this study uses VOSviewer to conduct co citation analysis on the data and create a literature co citation relationship map. Co-citation analysis refers to the process of mining the co citation relationship of a citation network. A total of 1,080 documents were collected in this study, and a total of 9909 citing articles were introduced into VOSviewer. To get a clear map of distribution, the citation frequency threshold was set to 20, and there were 125 references were selected for the final co citation

analysis. The co-citation map contains the following three key elements: nodes, links, and colors. Nodes represent references, authors, publication years, journals and so on. The size of each node symbolizes the number of times it has been quoted by other articles. Meanwhile, all nodes are connected by links due to common reference. The co-citation frequency determines the thickness of the links. Different colors can distinguish different literature knowledge groups which could help researchers to measure the similarity or difference of literature.

Fig. 5 showed the co-citation relationship within 1,080 articles. Each node in the figure represents the representative literature and authors in each knowledge clusters. Through analyzing, the co-citation relationship map was divided into three different knowledge clusters respectively: Concept and innovation of influencer marketing strategy (green and red); Cultivation of brand, influencers, and consumer relationship (blue and yellow); Consumer participation research (purple).

(1)   Cluster green and red: Concept and innovation of influencer marketing strategy. It mainly improves the concept of influencer marketing and the comparison between influencer marketing effect and traditional advertising and traditional celebrity endorsement effect.

(2)   Cluster blue and yellow: Cultivation of brand, influencers, and consumer relationship. Focusing on the cultivation of consumer relations, this unit discusses how to establish, develop, and maintain a successful consumer-enterprise/brand relationship through influencer marketing.

(3)   Cluster purple: Consumer participation research. Derived from the research on relationship between consumer and brand, this cluster reveals the virtual participation and interaction behavior of consumers (para-social, synchronous interaction and co-creation, etc.) in the online world under the digital revolution.

Table 3: The 10 most cited articles in the field of influencer marketing research.

No.	References	Journal	Year	Citations	Author
1	Undervalued or Overvalued Customers: Capturing Total Customer Engagement Value	Journal Of Service Research	2010	628	Kumar, V
2	How critical are critical reviews? The box office effects of film critics, star power, and budgets	Journal Of Marketing	2003	451	Basuroy, S
3	Film critics: Influencers or predictors?	Journal Of Marketing	1997	409	Eliashberg, J
4	Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude	International Journal Of Advertising	2017	362	De Veirman, M
5	Seeding Strategies for Viral Marketing: An Empirical Comparison	Journal Of Marketing	2011	315	Hinz, O

| 6 | Self-branding, 'micro-celebrity' and the rise of Social Media Influencers | Celebrity Studies | 2017 | 314 | Khamis, S |
7	Network Effects and Personal Influences: The Diffusion of an Online Social Network	Journal Of Marketing Research	2011	271	Katona, Z
8	Identification of influencers - Measuring influence in customer networks	Decision Support Systems	2008	215	Kiss, C
9	Celebrity vs. Influencer endorsements in advertising: the role of identification, credibility, and Product-Endorser fit	International Journal Of Advertising	2020	188	Schouhen, AP
10	The Effect Of Influence Type And Performance Outcomes On Attitude Toward The Influencer	Journal Of Marketing Research	1992	180	Scheer, LK
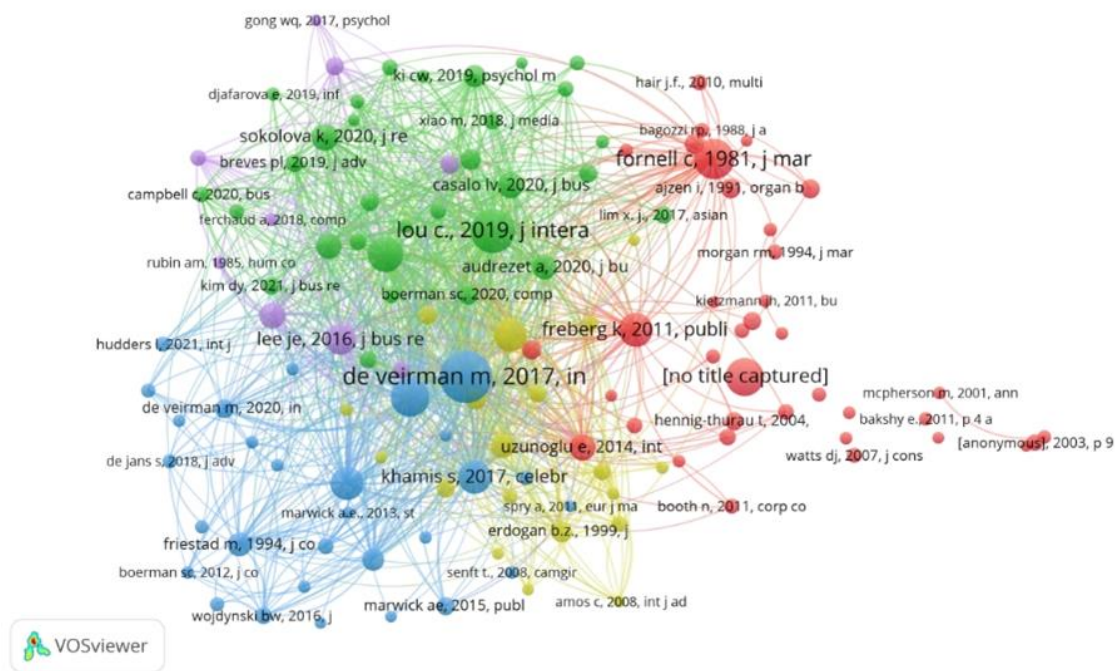
Fig.5: Map of co-citation relationship relating influencer marketing.

4. Discussion

4.1. Research hotspot analysis

By visualizing the co-occurrence frequency and relevance of keywords, we can mine and describe the hot spots and development structure in the field of influencer marketing research. The keyword co-occurrence analysis is carried out by using VOSviewer. To get a clear focus distribution, the citation frequency of this study was set as 20, 190 hot spots and the keyword co-occurrence map was obtained.

Based on the analysis of the three keyword clusters, the current hotspots of social media marketing research mainly focus on the following three aspects: improvement of influencer marketing conception and expansion of influencer marketing model including function and effect analysis of influencer marketing; the role of influencer marketing between brand and consumer including brand partner; the impact of influencer marketing on consumer behavior and psychology including consumer interaction.

By visually analysing the co-occurrence frequency and relevance of keywords, we can reveal the hot spots and the structure of development in the field of online marketing research. We conducted a co-occurrence analysis of keywords using the VOSviewer tool and set the cited frequency to 20 to get a clear distribution of focus. After analysing three keyword clusters, we found that the current hotspots in social media marketing research are focused on three main areas:

Firstly, there is the refinement of the concept of netmarketing and the expansion of the netmarketing model. This research hotspot focuses on how to further develop and refine the theoretical framework and concepts of netroots marketing and explore different models of netroots marketing. This includes an analysis of the functions and effects of netflix marketing, such as influencer impact, increased brand awareness and improved market performance.

The second research hotspot is influencer marketing between brands and consumers. This area focuses on the partnership between brands and influencers, and how brand influence and appeal can be enhanced through influencer promotion and publicity. Researchers explore the role of influencer marketing in brand image building, brand partner selection and brand loyalty, and look for more effective models of brand-influencer collaboration.

A third research hotspot is the impact of influencer marketing on consumer behaviour and psychology. In this area, researchers focus on the impact of influencer marketing on consumer behaviour and consumer psychology. They examine the patterns of interaction between consumers and influencers, consumers' motivations and behaviours in engaging in influencer marketing activities, and explore consumers' psychological responses in terms of their attitudes, trust and reactions to influencer recommendations.

Through an in-depth exploration of these research hotspots, we can better understand the latest trends and key issues in the field of online marketing. These research hotspots can not only provide valuable research directions for academics, but also provide guidance and insights for practitioners to help them achieve better results and business value in the field of netflix marketing. We encourage researchers and practitioners to conduct more empirical studies and practical explorations in these hotspots in order to promote the continuous development and innovation in the field of Netflix marketing.

4.2. Emerging trend

The results showed that emerging research should concentrate on consumer interaction, digital marketing in the pandemic period, sponsorship exposure and children food marketing.

The label of cluster #1 was influence maximization with orange color which means this kind of topic research is relatively new. This cluster covering cluster #3 and #5, focused on exploring the marketing strategy to maximize the impact of influencers. That is, to maximize brand benefits. This cluster integrates topics including consumer behavior, consumer value, brand equity, social media, enterprise performance and marketing innovation which will become new research trend in the future. Apart from this, clusters with yellow color like #7 pandemic, #2 food marketing, #0 social network analysis and #4 consumer socialization also deserved to be studied in the context of the spread of the globalization, COVID-19, web 2.0 and 3.0, as well as generation Y and Z.

Based on our findings, we can identify a number of emerging research trends that will have a significant impact on the development of the influencer marketing field. Here are our findings and recommendations.

Firstly, consumer interaction is an emerging area of research. With the rapid development of social

media and digital technologies, consumer-influencer interactions are becoming more frequent and closer. Researchers can explore consumers' motivations, behaviours and influence in engaging with influencer marketing campaigns, and the impact of such interactions on brand effectiveness.

Secondly, digital marketing during a pandemic is another important area of research. the COVID-19 pandemic had a huge impact on marketing activities worldwide, and influencer marketing is no exception. Researchers can study the strategies and effectiveness of influencer marketing during a pandemic to adapt to changing market conditions and consumer behaviour.

Thirdly, sponsorship exposure is a promising area of research. Increasingly, brands are choosing to increase exposure by partnering with influencers to sponsor campaigns. Researchers can explore the impact of sponsorship exposure on brand awareness, brand image and market performance, as well as the role and effectiveness of influencers in sponsorship campaigns.

In addition, children's food marketing is an area of research interest. With the large consumer base of children and the increased demand for food, it has become crucial to understand the role and influence of influencers in the children's food market. Researchers can explore how influencer marketing can be used to promote healthy eating and consumer education.

In addition, Research Cluster #1 addresses the concept of influencer maximisation, suggesting that research into how to maximise the influence of influencers is a relatively new area. This cluster incorporates multiple themes such as consumer behaviour, consumer value, brand equity, social media, business performance and marketing innovation. This will be a new trend for future research to further explore influencer maximisation strategies and approaches in influencer marketing.

Finally, we recommend more in-depth research in the areas of globalised communications, COVID-19, Web 2.0 and 3.0, and Generation Y and Z. These areas are closely related to influencer marketing and are important for understanding and responding to the changing market environment and consumer behaviour.

In summary, through this research, we have revealed current emerging research trends in the field of influencer marketing. These trends will provide important directions and guidance for future research and promote the development and innovation of the influencer marketing field. We hope that our findings will provide valuable insights for academics and practitioners, and inspire more research exploration and practical applications.
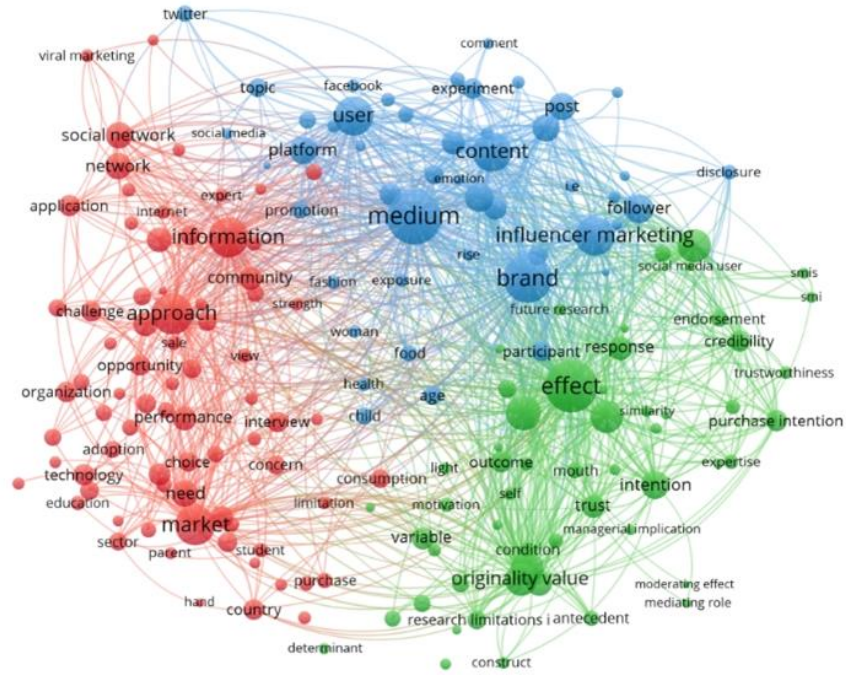
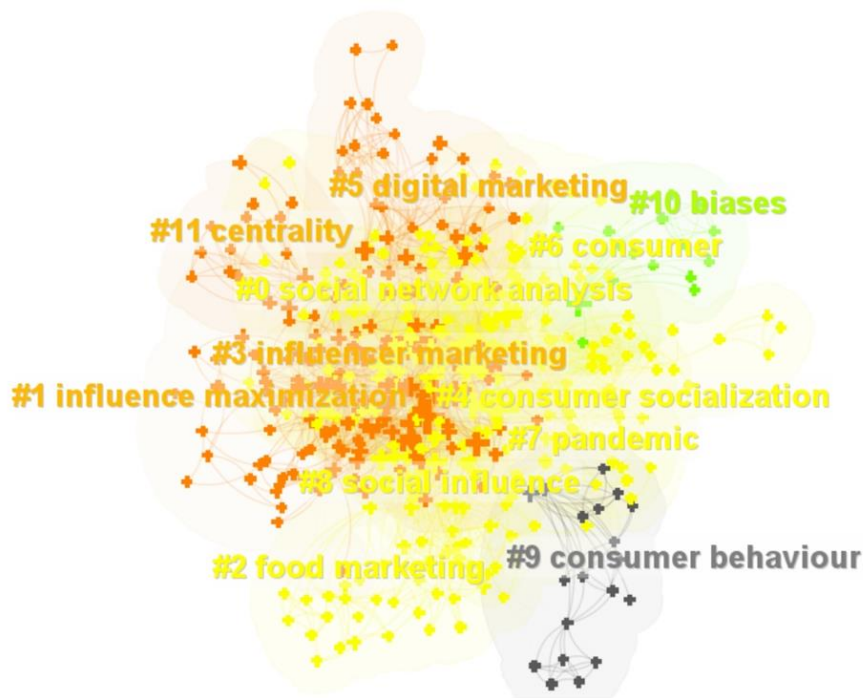Fig.6: Map of keywords co-occurrence relating influencer marketing.

Fig.7: The clustering map of the influencer marketing keywords.

5. Conclusion and future research directions

This study provides a visual and methodical evaluation of current influencer marketing themes. This bibliometric research analyzed 1,080 valid papers on influencer marketing from core collection of WoS from 1986 to 2022. Since 2018, the number of publications in influencer marketing has expanded

dramatically. Influencer marketing research is vast and covers a wide range of topics, including company strategy, brand to brand benefits, and brand equity. Meanwhile, research on marketing strategy and customer communication was still a hotspot. Hudders L., Lee S., and Kim H. laid the foundation for the development of influencer marketing from brand sponsorship disclosing, influencer credibility and para-social interaction aspects. From research hotspots and emerging trends, the current hot spots of social media marketing research mainly focus on influence marketing maximization, customer relationship and brand equity. Consumer behavior, consumer value, brand equity, social media, enterprise performance and marketing innovation which will become new research trend in the future. Moreover, food marketing, social network analysis and consumer socialization also deserved to be studied in the context of the spread of the globalization, COVID-19, web 2.0 and 3.0, as well as generation Y and Z.

This work, however, has numerous shortcomings. To begin, the scope of this study is confined to English publications gathered from WoS. Other international databases, such as PubMed, CNKI, CSSCI, and Scopus, may have been utilized as a result. Secondly, the keyword searched for collecting references in WoS was only "influencer marketing". While, in this area, word-of-mouth, digital marketing, key opinion leaders and social media influencers also could be used to be studied for influencer marketing. Finally, it should be noted that CiteSpace and VOSviewer have limits, since certain data cannot be recognized, despite the fact that these technologies have been employed in numerous bibliometric research investigations. Taking everything into account, it is clear that the analyses' conclusions are stable, reliable, and virtually unaffected by subjective experience.

Acknowledgments

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