The Trends of Marketing Literature during the COVID-19 Pandemic: A Review with Bibliometric Analysis

DOI: 10.26466/opus.788120

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Abstract
The purpose of this study is to determine the studies in the marketing literature during the period of the COVID-19 pandemic and to establish a theoretical background for future studies in the marketing literature. A total of 280 studies in 76 Web of Science (WoS) and 204 Scopus databases, covering the COVID-19 pandemic period between January and July 2020, were conducted with “2019-nCoV”, “COVID-19” and “Coronavirus Disease 2019” as found using keywords such as “marketing” and “consumer behaviour” and as analysed via a bibliometric analysis method using the quantitative research method and the VOSviewer 1.6.15 software program. It was found that in the co-authorship analysis, the USA and China are the countries with the largest contributions to the literature, and in the co-authorship cluster analysis, nine countries including Belgium and Cameroon are in the first cluster, most cited authors, co-citation analysis was basically divided into four groups, where their main theme was “marketing communication, hedonic motivation, telemedicine, tourism, panic buying, advertising, consumer demand, consumer behaviour, consumer contracts, crisis management, food prices, sustainability” in the analysis of joint assets.

Keywords: Marketing, Consumer Behaviours, Bibliometric Analysis, COVID-19.
COVID-19 Pandemi Döneminde Pazarlama Literatüründeki Eğilimler: Bibliyometrik Analizle Bir İnceleme

Öz


Introduction

Coronavirus 2019 (COVID-19), caused by the SARS-Cov-2 virus, which is referred to as severe acute respiratory syndrome, caused an unprecedented global epidemic in terms of the speed and scope with which it spread (Daniels et al., 2020), devastating both human health and the health system (De Caro et al., 2020). The World Health Organization, worried about its rate of spread, announced that it was considered a pandemic on March 11, 2020, following these developments (WHO, 2020a). In addition to the impact of the COVID-19 pandemic on human health, it has also had a devastating impact on the world economy, such as the massive reduction in economic activities, consumer spending, number of open businesses and employment levels (Bartik et al., 2020). Many businesses have had to close due to social distance practices and demand changes (Fairlie, 2020). Due to curfews, quarantine practices, travel restrictions, businesses that produce other than primarily needed products and services (health services, first responders, food and agriculture sector, etc.), most businesses have suspended their activities during the pandemic (Gostin and Wiley, 2020). Therefore, although global production and manufacturing output data shows a 9% decrease compared to this time last year, it is predicted that the value of global commodity trade will decrease by approximately 27% (CCSA, 2020).

The behaviour of businesses and consumers affected by the worldwide economic consequences of the COVID-19 pandemic has changed significantly. Due to the many restrictions currently in place, the sales and marketing activities of businesses have been affected and consumer demand decreased dramatically. In addition, although stocking and looting of compulsory consumer goods started as an unpleasant manifestation of panic behaviour, there has been an increase in the purchases of cleaning products and recycling products have started to accumulate more (Donthu and Gustafsson, 2020). These developments have resulted in empty shelves, significant food waste, and the closure of businesses, a significant decrease in employment, logistics interruptions, with imbalances in supply and demand significantly affecting production, distribution and stock levels (Ewing-Chow, 2020). In consumer goods in particular, this has caused customers to
worry about the epidemic and delay their spending. For this reason, consumers have turned to online shopping as a point of preference (Craven et al., 2020).

In this period when the world is struggling with the epidemic in order to protect human health and stimulate economic activities, removing trade restrictions and maintaining established supply chains, and keeping global markets open to products and services will increase accessibility to medical and food products (WTO, 2020). For this, the general populace, businesses, institutions, and governments taking joint action should ensure the continuity of basic services (WHO, 2020b). At this point, according to the companies that produce physical products and services, businesses that produce information products and services have increased their activities (Seetharaman, 2020), and all business models including operational processes need to be redesigned (Di Vaio et al., 2020), and that a sustainable supply chains will maintain business volumes and relations with customers. This makes it necessary to take into account that it strengthens (Lores, 2020).

These developments include the changes that occur in markets due to physical or online means (Donthu and Gustafsson, 2020), problems in the balance of supply and demand, changes in consumer and business behaviour, and making multi-channel distribution efforts in the supply chain important (Craven et al., 2020). Changes in consumer behaviour during the pandemic period, and market and marketing problems have led to the examination of different marketing processes in the marketing literature. At this point, in this study, the main research themes in the marketing literature and the development of the marketing literature during the pandemic period will be examined via the bibliometric analysis method. In addition, although there are COVID-19 studies based on bibliometric methods, no specific evaluation has been found in the marketing literature. It is thought that determining future research orientations by evaluating the studies on COVID-19 in the marketing literature will contribute to the relevant article.

Research Background

In order for new information to emerge in a research field and to conduct studies that will help the expansion of this field, the existing knowledge
needs to be examined (Bornmann and Mutz, 2015, p.2216). One of the methods that enables the examination of past knowledge in any field of science is bibliometric research. Bibliometry is used to handle the examination and evaluation of scientific development in many scientific fields (Broadus, 1997, p.373; Donthu et al., 2020, p.1). A systematic examination of the development of the field of science over time within the scope of bibliometric research can reveal the existing problems in this field and help one to understand and approach the elimination of these problems (Çiçek and Kozak, 2012, p.735-736). Bibliometric methods help to identify the leading trends and main themes in the field of science studied in order to provide an overview of the academic research (Vogel and Güttel, 2013, p.429). of a scientific field or journal (Martínez-López et al., 2018, p. 441). Bibliometric methods in scientific research include tourism (Hall, 2011), education (Heradio et al., 2016), health (Soteriades and Falagas, 2006; Glynn et al., 2010; Li et al., 2012; Chen et al., 2018), management (Ferreira et al., 2016), marketing (Martínez-López et al., 2018), and indeed various other disciplines. In addition to these disciplines, there has been a rapid increase in COVID-19 studies since its emergence (Kambhampati et al., 2020) and bibliometric methods have been used in COVID-19 studies that were handled within the frameworks of different disciplines (Hossain, 2020; Chahrour et al., 2020; Lou et al., 2020; Darsono et al., 2020; Verma and Gustafsson, 2020; Dehghanbanadaki et al., 2020; Kambhampati et al., 2020; Sa’ed and Al-Jabi, 2020; Hamidah et al., 2020; Hu et al., 2020; Yang et al., 2020; El Mohadab et al., 2020; Radanliev et al., 2020; Vasantha and Patil, 2020; De Felice and Polimeni, 2020; Zhou and Chen, 2020; Herrera-Viedma et al., 2020; Yu et al., 2020).

Bibliometric analysis is an approach to examining the evolution of research areas specific to a given discipline, based on its social, intellectual and conceptual structure (Verma and Gustafsson, 2020, p.254). The use of statistical and mathematical methods, also referred to as statistical bibliometry, in bibliometry research is useful in analysing indicators such as author networks, geographical distribution, and word frequency in a particular field of science, and obtaining results that contribute to the development of that field (Liao et al., 2018, p.2). Bibliometric analysis can be performed using many indicators such as journals, research topics, authors, articles, and institutions (Narin, 1976; Cronin, 2001, p.4). Studies based on bibliometric analysis in the marketing literature also examine specific research topics.
within the scope of studies (Samiee and Chabowski, 2012; Seyedghorban et al., 2016; Çelik and Canoğlu, 2019; Singh & Dhir, 2019; Aliyev et al., 2019; Zeren and Nagihan, 2020; Fırat and Durmaz, 2020), journals (Tellis et al., 1999; Theoharakis and Hirst, 2002; Dabirian et al., 2016; Gürbüz and Bozkurt, 2016; Valenzuela et al., 2017; Mulet-Forteza et al., 2018) and author profiles (Hoffman and Holbrook, 1993). However, a study that evaluates the effects of COVID-19 in the marketing literature via a bibliometric approach has not yet been published in the current literature. Therefore, in this study, the current marketing literature on COVID-19 was examined through bibliometric analysis. In the study, the attempt was made to determine the main research trajectories and trends in the marketing literature during the COVID-19 period. At this point, in the study, suggestions were developed to guide future research by examining the current research regarding COVID-19 in the marketing literature and determining the associated main and sub-research themes.

**Research Methodology**

Different techniques such as citation analysis, co-citation analysis, based on authors, institutions, countries and disciplines can be used in bibliometric research, such as impact analysis focusing on the productivity of authors, institutions and countries, and analysis based on scientific studies (such as books, papers, articles and patents) (Koehler, 2001, p.120). In the marketing literature, many different analysis techniques such as citation analysis (Shilbury, 2011; Fetscherin and Heinrich, 2015), co-citation analysis (Leung et al., 2017), co-author analysis (Hoffman and Holbrook, 1993), and bibliometric matching analysis (Most et al., 2017) are used in bibliometric research. Citation analysis is a bibliometric method based on citations as a unit of analysis. In citation analysis, the most cited studies allow the determination of the basic concepts, theoretical foundations and emerging critical issues that guide a given discipline (Kim and McMillan, 2008, p.100). Co-citation analysis (Small, 1973, p.266) is a bibliometric technique that shows how many times other publications are cited together in the reference list to create similarity measures between two documents (author or journal). When joint citations are analysed over a period of time in a particular field of science, they can provide a very accurate indication of the structure and evolution
of that scientific field (Galvagno, 2017, p.10). Bibliometric matching analysis, on the other hand, is a citation-based analysis technique similar to cocitation and citation analysis, but it is based on the assumption that there is a link between studies that do not directly cite each other but share a similar bibliographic reference (Kessler, 1963; Egghe and Rousseau, 2002).

Unlike citation-based analysis techniques, a technique frequently used in bibliometric studies is co-authorship analysis. Although there is no link between the authors citing each other in the citation analysis, the co-authorship analysis is based on the direct link between the two authors. It is claimed that co-authoring analysis contributes more to the development of the writing compared to other analysis techniques, since it provides an interdisciplinary information flow by emphasizing interactions and collaborations in scientific studies (Huang and Chang, 2011, p.370). Joint word or joint entity analysis is another technique that is considered to lie within the scope of bibliometric techniques. This technique is based on the frequency of combining more than one concept in the literature included in the scope of the bibliometric research (Verma and Gustafsson, 2020, p.255). However, another technique used in bibliometric research in recent years is the bibliometric mapping technique. The bibliometric mapping technique helps with the visualization of bibliometric data, as well as being a method that helps to cluster and classify data (Van Eck and Waltman, 2010; Waltman et al., 2010).

In this study, a bibliometric analysis based on quantitative research method was used. In bibliometric analyses, co-authorship analysis consisting of bibliometric literature and scientometric analysis, citation analysis, co-citation analysis, joint entity analysis and a bibliometric mapping technique were used. In this regard, the VOSviewer 1.6.15 software program (Van Eck and Waltman, 2010) was preferred because it allows visualization of bibliometric data, use of clustering and mapping techniques, co-authorship, joint asset analysis and analysis of a large amount of data. For the purposes of the research, the existing literature on COVID-19 was examined in the marketing literature. All studies (articles, papers, book reviews, etc.) in the Scopus and Web of Science (WoS) databases have been included in the scope of the research to provide a high-quality peer-reviewed journal range. Studies on COVID-19 in the databases were scanned together with the key-
words "2019-nCoV", "COVID-19" and "Coronavirus Disease 2019" and keywords such as "marketing" and "consumer behaviour" that form the basis of the marketing literature. In this context, 76 studies in the WoS database published in the seven-month period between January 2020 and July 2020 and 204 studies in the Scopus database were examined. A total of 280 studies were evaluated by eliminating the same studies published in both databases.

Research Findings

In the marketing literature, the co-authorship analysis of COVID-19 studies has been evaluated on the basis of countries, and the co-authorship analysis of the studies by country is shown in Figure 1.

![Co-authorship Network Of COVID-19 Literature In The Marketing Area](image)

When Figure 1 is evaluated within the scope of co-authorship analysis according to countries, it can be said that the USA, the People’s Republic of China, South Africa, Malaysia, England and Canada are the countries that have contributed the most to the development of the literature by collaborating with other countries in the marketing literature regarding COVID-19.
Table 1. Co-authorship Networks’ Clusters Of COVID-19 Literature In The Marketing Area

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When the co-authorship analysis clusters were examined, it was seen that Belgium, Cameroon, the Ivory Coast, Democratic Republic of the Congo, Ghana, Nigeria, Rwanda, Senegal and some South African countries were included in the first cluster. In this context, it can be stated that Belgium is European country that has developed the most cooperation with African countries. However, when the second cluster is evaluated, it can be said that Germany is the country that has developed the most cooperation and co-authorship with the People’s Republic of China, where COVID-19 emerged. In addition, it can be stated that the USA has cooperated with many countries and is amongst those that has contributed the most to the literature after the People’s Republic of China. In the marketing literature, author-based citation analyses regarding the studies on COVID-19 have been examined, with the results of the citation analysis for authors shown in Figure 2.
When the networks of the most cited authors in COVID-19 studies in the marketing literature are examined, the studies of researchers such as Moazzami et al. (2020), Bennett et al. (2020), Abena et al. (2020) and Rubinger et al. (2020) come to the fore. At this point, studies in the medical literature are frequently used to provide knowledge about COVID-19 in the marketing literature. In addition, Jribi et al. (2020), who studied consumers’ food waste behaviour and consumer awareness during the COVID-19 pandemic stands out as the most cited study in the marketing literature. Within the scope of the study, in order to examine the citation analysis in more detail, co-citation analysis was performed and the co-citation analysis network of COVID-19 studies in the marketing literature is shown in Figure 3.
When the co-citation analysis of COVID-19 studies is evaluated in the marketing literature it is seen that they are divided into four groups: (Chinazzi et al., 2020; van Doremalen et al., 2013) environmental factors and studies on sustainability (red cluster); (Chen et al., 2020), studies in health and mental health (yellow cluster); (Gössling et al., 2020), studies conducted in the field of tourism (blue cluster); (Kennett-Hensel et al., 2012) and work based on studies into consumer behaviour (green cluster). In the marketing literature, in addition to the co-citation analysis in the studies of COVID-19, the bibliometric matching analysis, which is another citation-based analysis, was performed in a country-based manner in the study and the network map formed as a result of the analysis is shown in Figure 4.
As a result of the bibliographic matching analysis, it was determined that Far Eastern Countries such as the People’s Republic of China, Japan and Singapore tend to work with each other more; in addition, European Countries such as England and Italy interact, and African Countries interact more.
with European countries, but especially the USA. Although countries in many continents such as Europe, Asia and Africa have made efforts to contribute to the literature, it can be stated that the USA and the People’s Republic of China have a dominant place in the literature. In order to determine the main themes that come to the fore in the marketing literature, a joint asset analysis was performed, and the network map formed as a result of the analysis is shown in Figure 5.

![Figure 5: Co-occurrence Network Of The COVID-19 Literature In The Marketing Area](image)

In the marketing literature, it has been observed that the main themes that come to the forefront in the studies into COVID-19 within the scope of common asset analysis are marketing communication, hedonic motivation, telemedicine, tourism, panic buying, advertising, consumer demand, consumer behaviour, consumer contracts, crisis management, food prices, and sustainability. In this context, it can be stated that COVID-19 has an effect
on the purchasing behaviour of consumers and that consumers have turned to food consumption due to the pandemic and performed panic buying. Therefore, it is seen in the literature that COVID-19 has had particularly strong effects on consumer purchasing behaviour. However, as COVID-19 causes changes in consumer demands, it can be said that green marketing and social marketing concepts such as green purchasing behaviour have become important in the marketing literature within the scope of sustainability.

**Conclusion**

The aim of this study is to determine the main research trends that have come to the forefront in the marketing literature due to the effect of COVID-19 via bibliometric analysis and a scientific mapping approach. In the study, those studies published in the marketing literature during the pandemic were examined via the bibliometric analysis method. In the marketing literature, 280 publications published in the WoS and Scopus databases related to COVID-19 were examined within the scope of the research. Bibliometric analyses, citation analysis, co-citation analysis, bibliographic matching and joint entity analysis were performed. As part of the co-authorship analysis, it was also seen to have a major impact on the literature of the People’s Republic of China, where the pandemic was first seen, and the USA, one of the most affected countries, has also increased pandemic-related studies. In this regard, it can be stated that the USA and People’s Republic of China have had a significant impact on the marketing literature in studies into COVID-19. However, considering the results of the bibliographic coupling analysis, it can be seen that the USA and the People’s Republic of China have a dominant role in the marketing literature. Within the scope of the co-citation analysis, tourism, sustainability, consumer behaviour and the health sector come to the fore as the main research themes in the literature relating to the four main themes. Joint asset analysis, which presents a more detailed analysis of the main research themes, showed that the words marketing communication, hedonic motivation, telemedicine, tourism, panic buying, advertising, consumer demand, consumer behaviour, consumer contracts, crisis management, food prices, and sustainability have had an effect on the
literature. In this regard, it can be stated that these concepts, which are considered sub-themes in the marketing literature, have caused changes in consumer behaviour during the pandemic, panic buying behaviour develops in particular for food products and affects consumer demands as well as the lockdown which is a result of the pandemic, directing consumers towards hedonic motivation. When the marketing studies for Covid-19 were evaluated, it was concluded that COVID-19 became more visible in the marketing literature and was examined in particular in terms of marketing communication and consumer behaviour.

The effects of COVID-19 in the marketing literature show that writing has evolved in different ways. First of all, the impact of the pandemic on community life in various ways has led to an increase in the studies on different consumption habits that emerged on the basis of pandemics in the marketing literature. In general, the results of this study help determine the main research themes in the marketing literature of COVID-19 and contribute to the increase in knowledge in the literature and the development of future research orientations. According to the results of the study, it is thought that the examination of both applied and theoretical studies on green consumer behaviour in the post-COVID-19 period in order to ensure environmental sustainability in future research orientations will contribute to the literature. In addition, while the effects of COVID-19 are still continuing to be seen worldwide, and indeed that a possible second wave is expected by scientists, opportunities continue for the development of new theories in the marketing literature within the scope of various theoretical, conceptual, and experimental research. For this reason, it is clear that the results of this study, which evaluates the current literature, has laid the groundwork for the development of new theory and paradigms. Considering the effects caused by the pandemic process all over the world, it should be noted that marketing practitioners perceive this epidemic as a crisis and should take a proactive approach towards possible epidemic-like crisis periods. Considering the themes such as panic buying, advertising, marketing communication that emerged as a result of the study, it can be suggested that the practitioners should turn to different communication and promotion channels.
This study, which examines the existing studies in the marketing literature during the COVID-19 pandemic, offers a subjective perspective. Therefore, the study has certain limitations. It was first examined in this study on the basis of studies published in the WoS and Scopus databases. For this reason, since studies published in databases such as Google Scholar, EBSCO, and PubMed are not included within the scope of the research, it is recommended future work in this area ensures that studies published in other databases are included within the scope of the study. Secondly, although the journals in the analysed databases offer fast review opportunities in order to increase the knowledge during the pandemic, considering the increase in publication times and the number of publications related to the pandemic every day, this study can be reconstructed at some future point in time and add a new dimension to the results of the study. Finally, considering that the pandemic is still continuing, and will continue to do so, a more detailed examination of the marketing literature after the pandemic has ended will provide a more accurate perspective from which to examine the development and evolution of the article.

Kaynakça / References


Kaynakça Bilgisi / Citation Information