ARASTIRMA MAKALESİ / RESEARCH ARTICLE

UNDERSTANDING FEAR OF MISSING OUT PHENOMENA AND SOCIAL MEDIA USING BIBLIOMETRIC ANALYSIS (2013-2023)

GELİŞMELERİ KAÇIRMA KORKUSU FENOMENİNİ VE SOSYAL MEDYAYI BİBLİYOMETRİK ANALİZ KULLANARAK ANLAMAK (2013-2023)

İlkim Ecem EMRE*

Gözde GÜSAN KÖSE**

Abstract

The main purpose of this study is to examine the current status, trend, and direction of research on FOMO behavior on social media with respect to various disciplines. Additionally, this study also aims to identify the variables that influence FOMO behavior (antecedent variables) and the variables that FOMO influences (consequent variables) within the scope of the research examined in this study. In line with the objectives of the study, the scientific literature was identified by bibliometric analysis to specify the main topics, authors, sources, most cited articles, and countries in the literature. The articles published between 2013 and 2023 and indexed in the main collections of the Web of Science (WoS) were analyzed. In order to reveal the general situation in the literature, a total of 271 studies on the topic were analyzed. In addition, the first 25 most cited articles in this collection were analyzed in detail by field of research, keywords, aim, antecedent variables, consequent variables, and results. As a result of the bibliometric analysis, the concept of FOMO has been studied more in the field of psychology. Subsequently, it was observed that this topic was frequently examined within the framework of business and marketing-oriented studies. It is evident that the studies within the collection in the field of marketing evaluate social comparison orientation, social media engagement, social media usage, and the behavior of sharing fake news.

Keywords: FOMO, Fear of Missing out, Social Media, Bibliometrics

How to cite this article/Atıf için: Köse, G. G., & Emre, İ. E. (2025). Understanding fear of missing out phenomena and social media using bibliometric analysis (2013-2023). Öneri Dergisi, 20(63), 197-225. DOI: 10.14783/maruoneri.1586241

Makale Gönderim Tarihi: 15.11.2024 Yayına Kabul Tarihi: 23.12.2024



^{*} Marmara Üniversitesi, Yönetim Bilişim Sistemleri Bölümü, ecem.emre@marmara.edu.tr, ORCID 0000-0001-9507-8967

^{**} Marmara Üniversitesi, İşletme Bölümü, gozde.gusan@marmara.edu.tr, ORCID 0000-0002-8792-9423

Öz

Bu çalışmanın temel amacı, sosyal medyada FOMO (Fear of Missing Out) davranışına yönelik araştırmaların mevcut durumunu, eğilimlerini ve farklı disiplinler bağlamında araştırma yönünü incelemektir. Ayrıca, bu çalışmada, FOMO davranışını etkileyen değişkenler (öncül değişkenler) ve FOMO'nun etkilediği değişkenler (ardıl değişkenler) tespit edilmeye çalışılmıştır. Çalışmanın amaçları doğrultusunda, bilimsel literatür, ana konular, yazarlar, kaynaklar, en çok atıf alan makaleler ve ülkeleri belirlemek amacıyla bibliyometrik analiz yöntemi ile incelenmiştir. 2013-2023 yılları arasında yayımlanmış ve Web of Science (WoS) ana koleksiyonlarında indekslenen makaleler analiz edilmiştir. Literatürdeki genel durumu ortaya koymak amacıyla konuya ilişkin toplam 271 çalışma incelenmiştir. Ayrıca, bu koleksiyondaki en çok atıf alan ilk 25 makale, araştırma alanı, anahtar kelimeler, amaç, öncül değişkenler, ardıl değişkenler ve sonuçlar açısından ayrıntılı olarak analiz edilmiştir. Bibliyometrik analiz sonuçlarına göre, FOMO kavramının en çok psikoloji alanında çalışıldığı tespit edilmiştir. Bunun ardından, bu konunun sıklıkla iş dünyası ve pazarlama odaklı çalışmalar çerçevesinde ele alındığı gözlemlenmiştir. Pazarlama alanındaki çalışmalarda ise sosyal karşılaştırma eğilimi, sosyal medya etkileşimi, sosyal medya kullanımı ve sahte haber paylaşma davranışının değerlendirildiği görülmüştür.

Anahtar Kelimeler: FOMO, Gelişmeleri Kaçırma Korkusu, Sosyal Medya, Bibliometrik Analiz

1. Introduction

As of April 2023, there are 5.18 billion internet users worldwide, representing 64.6 percent of the world's population. Of these, 4.8 billion, or 59.9 percent of the world's population, are social media users (Petrosyan, 2023). Market leader Facebook was the first social network to surpass one billion registered accounts and currently has more than 2.9 billion monthly active users. Instagram follows with 2 billion monthly active users (Petrosyan, 2023). Social media tools today provide an ever-increasing amount of social information and easy access to real-time information about activities, events, and conversations taking place on different social networks. The fact that the number of posts on social networking sites such as Facebook, Instagram, and Snapchat are increasing daily and that this increase is being realized very quickly (DOMO, 2022), may lead individuals to increase their desire to follow each other, to be in constant interaction with others and to be informed of what others are doing. In this respect, the concept of fear of missing out (FOMO), which is defined as a concern arising from the fear of missing out on existing developments and the course of events, has gained importance. Although FOMO is not a concept specific to social media, it has made the concept of surfing and browsing on social media platforms thoroughly experienced and widespread, and its impact has become significant, especially in the field of social media. While it can be argued that these needs provide a way to satisfy some of their incompleteness, social networks can also serve to exacerbate fear of missing out (FOMO) by reminding individuals in real time of the experiences they have missed (Beyens, Frison & Eggermont, 2016); Przybylski et al., 2013). As it is known generally, human beings are social animals with a basic psychosocial need to connect (Ryan & Deci, 2000). When their social connections are absent, people may have maladaptive feelings because they are anxious that others are experiencing rewarding experiences (Wu-Ouyang, 2022). At this point, FOMO becomes a widely recognized topic.

A formal definition of FOMO in Oxford Dictionary (Oxford English Dictionary, 2023) is made as "anxiety that an exciting or interesting event may be happening elsewhere, often aroused by posts seen on a social media website". The term refers to the concern and the feeling of apprehension that others could have rewarding experiences in one's absence and is characterized by a desire to stay continually connected with what others are doing (Balakrishnan, Ng, & Rahim, 2021). FOMO has similar definitions made by the researchers interested in this topic. It is generally defined as the persistent worry that the other people may be feeling and fulfilling experiences while one is absent and it is characterized by the need to always stay in touch with what people are up to (Przybylski et al., 2013). The concept of FOMO, which has its origins in the early 2000s and has appeared in the literature since then, has become a widely used concept to describe a phenomenon observed on social networking sites since 2010 (Gupta & Sharma, 2021) and it is usually linked to the social media engagement of the users (Przybylski et al., 2013). The increase in the use of social media is seen as an important turning point for this concept. It a widely recognized phenomenon can be boosted or decreased by emotional antecedents (Good & Hyman, 2020) which can be defined as the anxiety that social media users feel. As stated by Alabri (2022), although social media provides a platform communication and chances to satisfy the urge for belonging, it also raised that possibility of risk of social comparison concerns. Therefore, the term and the topics get attention of the researchers from psychology as well as marketing.

In fact, the desire to connect socially, to know what others are doing, and to be part of rewarding experiences is a basic (psychological) necessity that individuals have. FOMO, on the other hand, may function as a cognitive variable, increasing people's urges to engage in such behaviours (e.g., checking moments captured and shared on social media), which in turn leads to worrying about not having their smartphones to execute the behaviour, such as keeping up with online networks or instantly communicating with others (Wen et al., 2023). Therefore, as social media is uninterruptedly accessible through portable devices, it makes it easier to connect with acquaintances, share and check friends' status updates and offers us the opportunity to stay in touch regardless of place and time, which has increased the frequency of use of such media (Salehan & Negahban, 2013). Due to the widespread use of social media platforms, which are environments where individuals can compare themselves to others and easily see what they are lacking, FOMO has become a topic of current research, suggesting that it is caused by a lack of satisfaction of psychological needs such as the need for social connection (Riordan vd., 2020). According to Zhang et al. (2020) FOMO is activated by psychological threats to the self-concept which can be both public and/or private self of a person. They have also stated that the term FOMO involves feeling missing out on something personally and/or socially (Zhang, Jiménez & Cicala, 2020). There are many factors that affects the term FOMO. This topic is being investigated from different perspectives. In the study of Alabri (2022), the need to belong emerged as the strongest predictor of FOMO, both directly and indirectly through social media use. Holte & Ferraro (2020) found that boredom proneness mediates the effect of anxiety and

sadness, which as a result influences the appearance of FOMO. Also, they have found that anxiety attachment mediated the influence of boredom proneness and FOMO. Low self-esteem and low self-compassion (e.g., viewing social or personal setbacks as an opportunity for growth, increasing acceptance of one's experiences) as well as high levels of loneliness were associated with high levels of FOMO across age groups, especially for individuals who engaged in relatively greater social media activity (Barry & Wong, 2020). Rozgonjuk et al. (2020) states that higher levels of FOMO were associated with more impact of social media on daily-life and work productivity and their study provides further evidence about FOMO central role in digital technology use-related disorders.

Despite the negative connotations of the FOMO's impacts, businesses are able to capitalize on this anxiety (Reisenwitz & Fowler, 2023). FOMO has been linked to bad outcomes in psychology because of overuse of social media; nonetheless, research on FOMO in the field of consumer behavior science has shown that it can also have positive effects in the marketing domain (Alfina, Hartini & Mardhiyah, 2023). This idea leads us to the marketing perspective of this topic which is related with consumer behavior. Hodkinson (2019) has developed a conceptual model of responses to a FOMO appeal and also emphasized that FOMO appeals on consumers could investigated in terms of ethics, positive impacts and negative impacts of FOMO from the marketing perspective. As stated, FOMO can also have an influence on consumers' experience-related attitudes (Good & Hyman, 2020). Social media contents affect FOMO and purchase decisions either directly or indirectly (Ilyas vd., 2022). Also, it is found that social media content can increase FOMO, leading to increased purchasing decisions, which in turn can provide satisfaction for consumers. According to Xi vd. (2022), consumer preferences for posting about identity-relevant products can be also positively influenced by FOMO and also people with high self-esteem and low self-esteem cope with FOMO in different ways. They have stated that, FOMO could be a predictor of social media posting behavior. Bright & Logan (2018) indicates that FOMO is directly related to social media fatigue which is at the same time the strongest predictor of it. As consumers become more and more dependent on digital media to engage with brands (and also with their friends and family), they can experience FOMO whereas getting this information constantly can also cause fatigue. The former can be which can be confusing for the advertisers.

As it is a current concept that affects the lives of social media users, it is of crucial importance to examine the research on FOMO. The main purpose of this study is to examine the current status, trend, and direction of research on FOMO behavior on social media in different disciplines. Along with this purpose, it also aims to determine the variables (antecedent variables) that have an effect on FOMO behavior and the variables (consequent variables) that FOMO has an effect on. The research questions formulated in this context are as follows:

RQ1: In which disciplines has FOMO behavior in social media use been most commonly addressed?

RQ2: Which journals have accumulated the most significant visibility and impact in the field of FOMO concerning social media usage as indexed in the Web of Science? Specifically, which are the most cited journals?

RQ3: Which authors, have obtained the highest visibility and impact in the field of FOMO concerning social media usage as indexed in the Web of Science? Who are the most cited authors? And also, which countries and organizations, have obtained the mostly contribute in the field of FOMO concerning social media usage as indexed in the Web of Science?

RQ4: Which themes have obtained the highest visibility and impact in the field of FOMO and social media in the Web of Science? What are the most cited papers? With which antecedent and consequent variables was the FOMO variable most frequently used?

RQ5: What are the current and emerging trends in FOMO studies?

Measurement and mapping of existing research through bibliometric citation analysis are conducted. The outcomes contribute to the field of FOMO and social media. For the purpose of establishing a bibliometric output for the field, and identifying potential directions for future research, we have three research objectives in mind which include to (1) Identify the most prominent stakeholders (authors, journals, countries, affiliations and articles) of the field. (2) Identify core themes and intellectual structure of the field (3) Identify core research gaps and present potential directions for future research.

2. Methods

This study employed a bibliometric methodology to review studies on FOMO in social media usage research. The bibliometric approach is basically a quantitative tool to evaluate the performance and scientific value of books on a particular topic (Donthu vd., 2021). As a subset of systematic literature reviews, bibliometric reviews need to develop, implement, and publish a rigorous and transparent review process (Paul vd., 2021).

The present study employed the Web of Science (WOS) database as the primary methodological approach for the retrieval of journal articles in the context of this bibliometric analysis. WOS is widely acknowledged as WOS is widely regarded as the most authoritative database for scientific articles of the highest quality. The data was collected on June 22, 2023. The limitations and keywords of the review were determined by the authors. FOMO, fear of missing out and social media concepts were chosen as keywords. It is aimed to examine the studies in which the concepts of FOMO or fear of missing out are combined with the concept of social media. In the search made accordingly, the studies in which these keywords were used in the fields of topic, title, author keywords, keyword plus, abstract were filtered. 292 studies obtained from this search were filtered again and only the studies which are articles were required to be examined. The studies which are meeting abstract and defined as proceeding paper as document type were filtered out. Therefore, the study was carried out with the dataset containing 271 studies obtained as a result. The data collection and filtering process is shown in Figure 1 in the form of the PRISMA statement asserted by Page et al. (2021). The PRISMA (Preferred Reporting Items for Systematic Review and Meta-analysis) review procedure was utilized to

collect articles from WOS. The PRISMA review procedure is divided into three stages: identification, screening, and inclusion and exclusion criteria.

To help focus the study's scope, the following string was used where research topics are the main area searched: (FOMO OR "fear of missing out") AND "social media" (Topic) OR (FOMO OR "fear of missing out") AND "social media" (Title) OR (FOMO OR "fear of missing out") AND "social media" (Author Keywords) OR (FOMO OR "fear of missing out") AND "social media" (Keyword Plus *) OR (FOMO OR "fear of missing out") AND "social media" (Abstract) and Meeting Abstract or Proceeding Paper (Exclude – Document Types)

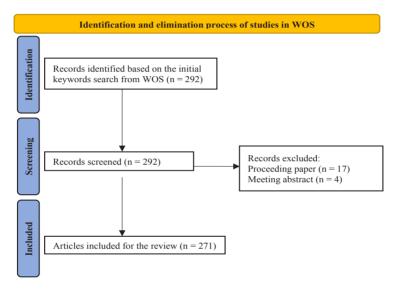


Figure 1. Data collection and filtering process

To analyse the obtained dataset, a *bibliometrics* package developed by Aria & Cuccurullo (2017) and an R-based web interface were used. The research objectives are set out below:

- RO1: Mapping of the bibliometric profile of the collection
- RO2: Mapping of the general overview of the sources
- RO3: Identifying the most prolific authors, along with the top contributing countries and organizations
- RO4: Identifying the most frequently cited documents
- RO5: Identifying the current and emerging trends in FOMO research

An approach similar to that of Arora & Mehta (2023) has been adopted for presenting the findings. Accordingly, the relevant findings are presented for each research question.

3. Results

Research Objective 1

• RO1: Mapping the bibliometric profile of the collection

Table 1 provides a general overview of the reviewed collection on FOMO and social media. The collection reviewed in this study includes studies from 2013 to 2023. The time span is therefore 10 years. Keywords (author's keywords) related to the topics of their studies are provided by the authors, but WOS also assigns keywords (keyword plus) to each study. According to the document types, as mentioned in the methods sections, only articles were included in the collection for bibliometric analysis. The information in this table will be the subject of further discussion in the sections below.

Table 1. Main information

Description	Results	
MAIN INFORMATION ABOUT DATA		
Timespan	2013:2023	
Sources (Journals, Books, etc)	150	
Documents	271	
Annual Growth Rate %	44.97	
Document Average Age	2.18	
Average citations per doc	28.07	
References	11326	
DOCUMENT CONTENTS		
Keywords Plus (ID)	584	
Author's Keywords (DE)	789	
AUTHORS		
Authors	740	
Authors of single-authored docs	21	
AUTHORS COLLABORATION		
Single-authored docs	24	
Co-Authors per Doc	3.18	
International co-authorships %	27.68	
DOCUMENT TYPES		
article	227	
article; book chapter	1	
article; early access	27	
review	16	

As a result of the review, a total of 271 studies published between 2013 and 2023 were examined. Looking at the distribution of the obtained studies (top 10) according to the fields identified by the WOS (Table 2), it was found that approximately 25% of the studies were conducted in the field of multidisciplinary psychology, 11% in the field of economics and 11% in the field of psychiatry.

Table 2. Distribution of the studies according to their categories (top 10

Web of Science Categories	Record Count	% of 271
Psychology Multidisciplinary	68	25.092
Business	32	11.808
Psychiatry	30	11.070
Communication	23	8.487
Psychology Experimental	22	8.118
Public Environmental Occupational Health	18	6.642
Psychology Social	16	5.904
Environmental Sciences	13	4.797
Psychology Clinical	13	4.797
Education Educational Research	11	4.059

Figure 2 depicts annual scientific production. The number of scientific publications has grown during the last ten years. After 2022, there is a reduction, however this is due to the fact that publications in 2023 are still being released.

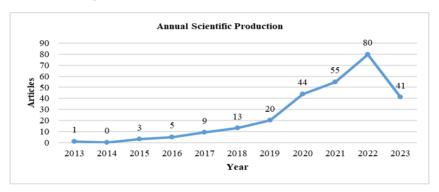


Figure 2. Annual scientific production

Figure 3 depicts the average number of citations each year. The average number of citations has perceptibly dropped during the last ten years.

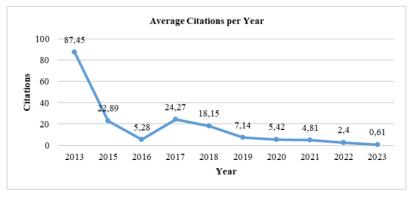


Figure 3. Average citations per year

Looking at the affiliations where the studies were produced, the most relevant affiliations are shown in Table 3. Nottingham Trent University ranks first.

Table 3. Most relevant affiliations (top 10)

Affiliations	Articles
NOTTINGHAM TRENT UNIV	27
UNIV FLORENCE	18
NORTH WEST UNIV	14
UNIV AGDER	14
UNIV DUISBURG ESSEN	11
WASHINGTON STATE UNIV	11
UNIV TOLEDO	10
ESKISEHIR OSMANGAZI UNIV	8
GANNAN MED UNIV	8
JILIN UNIV	7

Most productive countries and most cited countries are given in Table 4. According to the findings, USA and China are the most productive countries considering the numbers of publications. Turkey comes in third place with 80 documents in this collection. According to the number of citations, the most cited countries are the United Kingdom and the United States. In this situation, though, Turkey ranks last among the top ten countries.

Table 4. Most productive countries and most cited countries (top 10)

Most productive cou	ntries	Most cited countries	Most cited countries			
Country	Number of documents	Country	Number of citations	Average article citations		
USA	183	UNITED KINGDOM	2044	102,2		
CHINA	149	USA	1825	34,4		
TURKEY	80	ITALY	491	32,7		
UK	72	CHINA	472	12,1		
ITALY	52	SPAIN	360	60		
GERMANY	41	GERMANY	356	29,7		
INDIA	37	VIETNAM	332	110,7		
FINLAND	28	FINLAND	322	107,3		
NORWAY	24	ISRAEL	236	33,7		
SOUTH AFRICA	24	TURKEY	231	9,6		

The most common keywords used in the documents in this collection are shown in Table 5. Keywords used by the authors and assigned as keywords plus by WOS were examined. The identification of keywords is essential to determine the trends. The most common keywords used in the collection is fear and fear of missing out.

Table 5. Most frequents keywords (top 10)

Keywords Plus		Author's keywords		
Terms	Frequency	Terms	Frequency	
fear	63	fear of missing out	103	
Facebook	54	social media	76	
anxiety	50	FOMO	61	
consequences	50	addiction	21	
adolescents	49	fear of missing out (FOMO)	20	
depression	46	social media addiction	20	
networking	42	covid-19	16	
addiction	37	social media fatigue	16	
online	32	adolescents	15	
FOMO	28	well-being	14	

Research Objective 2

• RO2: Mapping of the general overview of the sources

The most relevant sources and the most frequently cited local sources are listed in Table 6.

Table 6. Most relevant sources and most local cited sources (top-10)

	Most local cited sources	
Number of documents	Sources	Number of local citations
20	COMPUTERS IN HUMAN BEHAVIOR	2069
12	CYBERPSYCHOLOGY BEHAVIOR AND SOCIAL NETWORKING	375
12	PERSONALITY AND INDIVIDUAL DIFFERENCES	359
9	ADDICTIVE BEHAVIORS	324
9	JOURNAL OF BEHAVIORAL ADDICTIONS	255
7	INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	220
5	JOURNAL OF ADOLESCENCE	213
5	JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY	197
4	CURRENT PSYCHOLOGY	175
4	PLOS ONE	163
	9 7 5 4	Number of documents Sources 20 COMPUTERS IN HUMAN BEHAVIOR 12 CYBERPSYCHOLOGY BEHAVIOR AND SOCIAL NETWORKING 12 PERSONALITY AND INDIVIDUAL DIFFERENCES 9 ADDICTIVE BEHAVIORS 9 JOURNAL OF BEHAVIORAL ADDICTIONS 7 INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH 5 JOURNAL OF ADOLESCENCE 5 JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 4 CURRENT PSYCHOLOGY

20 of the 271 studies in the collection were first published in the journal COMPUTERS IN HU-MAN BEHAVIOR. This journal is the most locally referenced journal, with 271 papers citing it (this

collection). In summary, the total number of citations from 20 studies published in this journal is 2069. In general, journals are evaluated in terms of both quality and quantity. Publishing a large number of studies in a journal is a positive situation, but it is desirable for the interaction and visibility of the journal to be as high as possible in terms of impact factor. For this reason, authors can compare journals in terms of both quantity and quality when selecting a journal.

In terms of quality, interaction and visibility, authors can choose the journals that are considered to be core sources for a particular research area. The core sources identified using Bradford's law are shown in Table 7 and Figure 4. 11 sources are in Zone 1, which indicates the core sources in the collection. These studies are the core of the collection and are dedicated to a specific topic (Alabi, 1979). 50 sources are in Zone 2 and 89 sources are in Zone 3. Zone 2 is considered to be moderately productive and Zone 3 is considered to be a low productive zone (Wardikar & Gudadhe, 2013).

Bradford's Law provides a structure for analyzing the distribution of work in a field and estimating productivity in that field. According to this law, studies in a given field can be divided into three parts. The journals in the first zone are the most cited core journals and are fewer in number, the journals in the second zone are the journals with average citations and are more numerous, and the journals in the third zone are the journals with fewer citations but are more numerous.

The journals in the first zone are the most cited core journals and the less numbered journals, the journals in the second zone are those with a higher number of citations, and the journals in the third zone are the less cited but more numbered journals.

Table 7. Core sources by Bradford's Law

Sources	Rank	Frequency	Cumulative Frequency	Zone
COMPUTERS IN HUMAN BEHAVIOR	1	20	20	Zone 1
CURRENT PSYCHOLOGY	2	12	32	Zone 1
INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	3	12	44	Zone 1
CYBERPSYCHOLOGY BEHAVIOR AND SOCIAL NETWORKING	4	9	53	Zone 1
FRONTIERS IN PSYCHIATRY	5	9	62	Zone 1
ADDICTIVE BEHAVIORS	6	7	69	Zone 1
INTERNATIONAL JOURNAL OF HUMAN-COMPUTER INTERACTION	7	5	74	Zone 1
PSYCHOLOGICAL REPORTS	8	5	79	Zone 1
FRONTIERS IN PSYCHOLOGY	9	4	83	Zone 1
NEW MEDIA & SOCIETY	10	4	87	Zone 1
PSYCHOLOGY & MARKETING	11	4	91	Zone 1
Total 11 sources				Zone 1
Total 50 sources				Zone 2
Total 89 sources				Zone 3
Total number of sources				150

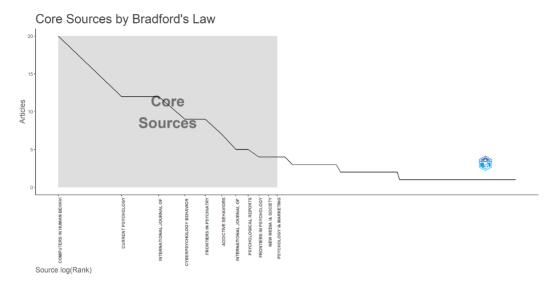


Figure 4. Core sources according to Bradford's Law

Research Objective 3

• RO3: Identifying the most prolific authors, along with the top contributing countries and organizations

The most relevant authors with the largest number of works and the most locally cited authors in this collection are listed in Table 8. DHIR A is the most prolific author in this collection. However, DEHAAN V, MURAYAMA K and PRZYBYLSKI AK are the authors who receive the most citations from studies in this collection. Additionally, looking at the countries of the corresponding authors, the top three are the USA, China and Turkey.

Most relevant authors	Most local cited authors	
Table 8. Most relevant authors and mo	ost local cited authors (top-10)	
•	,	

Most relevant authors		Most local cited authors	3
Authors	Number of articles	Authors	Number of local citations
DHIR A	10	DEHAAN V	236
GRIFFITHS MD	9	MURAYAMA K	236
KAUR P	6	PRZYBYLSKI AK	236
TANDON A	6	ALT D	123
BARRY CT	5	DHIR A	72
CASALE S	5	CASALE S	68
LIL	5	FIORAVANTI G	64
MANTYMAKI M	5	MANTYMAKI M	52
MEI S	5	TANDON A	52
NIU Z	5	BIBBY PA	49

The local impact of the authors, measured by the h-index, g-index, m-index and total number of citations, is shown in Table 9. DHIR A. is, among others, the most recognizable author, taking into account these indices and the total number of citations. The indices given in the table are calculated according to the documents in this collection, and the current index information based on all the authors' works is shown separately in the table. The authors' current profiles are based on their Scopus and ORCID profiles, where available.

Table 9. Authors' local impact

Author	h_index	g_index	m_index	Total Citations	Scopus and ORCID (if available) Profiles
					https://www.scopus.com/authid/detail.
					uri?authorId=547.908.20000
DHIR A	8	10	1,33	792	https://orcid.org/0000-0002-6006-6058
					https://www.scopus.com/authid/detail.
					uri?authorId=720.154.9643
GRIFFITHS MD	7	9	1	564	https://orcid.org/0000-0001-8880-6524
					https://www.scopus.com/authid/detail.
					uri?authorId=571.975.02409
KAUR P	6	6	1	707	https://orcid.org/0000-0002-8309-8888
					https://www.scopus.com/authid/detail.
CASALE S	5	5	0,83	197	uri?authorId=363.386.97600
					https://www.scopus.com/authid/detail.
LI L	5	5	1,25	76	uri?authorId=568.732.72200
					https://www.scopus.com/authid/detail.
					uri?authorId=247.252.50200
MANTYMAKI M	5	5	1,25	193	https://orcid.org/0000-0002-1981-566X
					https://www.scopus.com/authid/detail.
MEI S	5	5	1,25	76	uri?authorId=150.272.72200
					https://www.scopus.com/authid/detail.
NIU Z	5	5	1,25	76	uri?authorId=572.170.13983
					https://www.scopus.com/authid/detail.
TANDON A	5	6	1,25	193	uri?authorId=566.694.04700
					https://www.scopus.com/authid/detail.
					uri?authorId=363.390.44800
FIORAVANTI G	4	4	0,66	146	https://orcid.org/0000-0003-4871-2755

Research Objective 4

RO4: Identifying the most cited documents

Table 10 created as a result of the literature review summarizes the studies on FOMO in the context of social media in the international literature. The studies in the table are arranged in order by the highest number of citations. It can be observed that most of the studies included in the research were conducted in the field of psychology, and were followed by communication, economics, and education. The antecedent and consequent variables in these studies were also removed and the whole collection was analyzed in this way.

Table 10. Most local cited documents (top 25)

Do	cument	DOI	Research Field	Keywords	Aim of the Study	Variables	Results
1	(Przybylski vd., 2013) Local Citations: 236 Global Citations: 962	10.1016/j.chb.2013.02.014	Psychology	Fear of missing out, FOMO, Human motivation, Individual differences, social networking, Scale development	Scale development on FOMO Examining how fear of missing out is related to demographics, individual differences, and social media engagement Examining the impact of demographic, motivational, and well-being factors on FOMO and behavioral and emotional correlates of FOMO.	Antecedent Variables: Individual differences Consequent Variables: Social media engagement	As a result of the research conducted with the help of the developed scale, it was observed that young people, especially young men, had higher levels of FOMO. Those with high FOMO tended to use Facebook more immediately after waking up, before going to sleep, and during meals and had ambivalent feelings about using social media. Finally, it was concluded that those with high fear of missing out were more likely to be tempted to write and check text messages and e-mails while driving. Furthermore, individual differences and social media engagement were determined to strongly correlate with FOMO.
2	(Alt, 2015) Local Citations: 78 Global Citations: 198	10.1016/j.chb.2015.02.057	Psychology	Fear of missing out, social media engagement, Self- determination theory, Academic motivation, Higher education	Examining the relationship between FOMO, social media engagement, and three motivational constructs: Intrinsic, extrinsic and amotivation for learning	Antecedent Variables: Academic motivations, student characteristics Consequent Variables: Social media engagement	The findings suggest that FoMO is a likely mediator in the positive relationship between social media engagement and two motivational dimensions: extrinsic motivation and amotivation for learning.
3	(Stead & Bibby, 2017) Local Citations: 49 Global Citations: 108	10.1016/j.chb.2017.08.016	Psychology	Personality, Fear of missing out, Problematic internet use, Subjective well being	Examining the impact of an individual's personality, their internet use and fear of 'missing out' on subjective well-being overall and in terms of emotional, physical, and personal relationship well-being.	Antecedent Variables: Personality Consequent Variables: Subjective well-being, Problematic internet use	FoMO and problematic internet use were both found to have negative correlations with emotional well-being and the quality of personal relationships, although no such relationship was observed with physical well-being. In general, personality traits had a direct impact on subjective well-being, while FoMO and problematic internet use exerted additional negative effects beyond the influence of personality. Male participants reported significantly higher levels of emotional stability compared to females but scored lower on agreeableness. Interestingly, in contrast to prior studies, female participants demonstrated significantly higher scores than males on both the problematic internet use (PIU) and FoMO scales.

4	(Lai vd., 2016) Local Citations: 39 Global Citations: 77	10.1016/j.chb.2016.03.072	Clinical Psychology	Fear of missing out, social media, Neural, correlate social pain, attachment	Investigating the neurobiological correlates of fear of missing out in response to the social exclusion and social inclusion cue.	EEG activity was acquired during a visual task showing exclusion and inclusion social images. Event Related Potentials (ERP) and sLoreta analyses were performed. For this reason, consequent and antecedent variables are not included.	The main finding of the present study was that the FOMO score only showed a positive correlation with the response to social inclusion. The results confirm that fear of missing out is associated with greater sensitivity to social inclusion experiences than to social exclusion and with the need to belong.
5	Reer, Tang & Quandt (2019) Local Citations: 34 Global Citations: 95	10.1177/146.144.4818823719	Communication and marketing	Fear of missing out, social comparison orientation, social media, well-being	Examining the mediating role of FOMO and social comparison orientation in the relationship between loneliness, anxiety, and depression as an indicator of decreases in well-being and social media engagement	Antecedent Variables: Social comparison orientation, psychosocial well-being Consequent Variables: Social media engagement	The results demonstrated that loneliness, depression and anxiety were positively associated with increases in social media engagement. FOMO and social comparison orientation jointly mediate the relationship between well-being and SME, i.e. decreases in well-being are associated with increases in FOMO and social comparison orientation, which in turn positively predict social media engagement.
6	(Fox & Moreland, 2015) Local Citations: 31 Global Citations: 369	10.1016/j.chb.2014.11.083	Psychology	Social networking sites, social comparison, Jealousy, Relationship conflict, Privacy management, Facebook addiction	Examining the dark side of social networking sites regarding Facebook stressors.	Antecedent Variables: Facebook stressors: managing inappropriate or annoying content, being tethered, lack of privacy and control, social comparison and jealousy, and relationship tension and conflict.	Research results demonstrate that although Facebook users often experience negative emotions, they feel pressured to access the site frequently for fear of missing out and to keep up with the demands of relationship maintenance.

7	Casale, Rugai & Fioravanti (2018) Local Citations: 30 Global Citations: 76	10.1016/j.addbeh.2018.05.020	Psychology	Metacognitions, Fear of missing out, Fear of negative evaluation, Self- presentational skills, social media addiction	Examining the contribution of the fear of missing out (FOMO) in explaining problematic use of social media and moreover taking into account the fear of being negatively evaluated and the perception of low self-presentational skills; Examining the mediating role of positive metacognitions about social media use in the relationship between FOMO and problematic use of social media.	Antecedent Variables: Positive metacognitions Consequent Variables: Problematic social networking sites use	FOMO and self-presentation skills were both directly and indirectly related to problematic social media use through the mediation of positive metacognitions. Among males, FOMO had both a direct and indirect effect on problematic social media use, mediated by positive metacognitions. Furthermore, the study confirmed the role of FOMO in relation to problematic social media use and highlighted for the first time the mediating role of positive metacognitions in this relationship.
8	(Alt, 2018) Local Citations: 28 Global Citations: 62	10.1007/s12144.016.9496-1	Psychology	Higher education, social media engagement, Fear of missing out, Adjustment to college, Structural equation modeling	Examining the mediating role of fear of missing out (FOMO) linking maladjustment to college life to social media engagement	Antecedent Variables: Maladjustment and adjustment Consequent Variables: Social media engagement	Research results showed that students who experienced general negative emotions about going to college were more inclined toward using social media tools. However, when this link was mediated by FOMO, the significant direct and very low connection between maladjustment to college and social media engagement was no longer valid. These findings illustrate the robust mediating role of FOMO in explaining social media engagement. According to the reviewed studies, individual, family, and peer factors, types of social media platforms, and patterns of use are the antecedent variables that have an impact on FOMO. When the studies are examined in terms of outcome variables, social media use (compulsive use, communication disorders, social media engagement, continuous use, etc.) and individual well-being (anxiety, depression, stress, life satisfaction, and maladaptive cognitive actions are determined as the outcomes of FOMO).

9	(Tandon vd., 2021) Local Citations: 27 Global Citations: 58	10.1108/INTR-11-2019-0455	Business and Psychology	Fear of missing out, FOMO, The dark side of social media, Systematic literature review, Thematic analysis	For holistic understanding in terms of conceptualization and operationalization about FOMO, an exhaustive systematic literature review (SLR) on FOMO is intended.	Studies on FOMO were examined as this is a literature review	According to the reviewed studies, individual, family, and peer factors, types of social media platforms, and patterns of use are the antecedent variables that have an impact on FOMO. When the studies are examined in terms of outcome variables, social media use (compulsive use, communication disorders, social media engagement, continuous use, etc.) and individual well-being (anxiety, depression, stress, life satisfaction, and maladaptive cognitive actions are determined as the outcomes of FOMO).
10	(Tomczyk & Selmanagic- Lizde, 2018) Local Citations: 25 Global Citations: 46	10.1016/j.childyouth.2018.03.048	Education	Internet addiction, IAT, FOMO Fear of Missing Out, Youth's Problematic Internet Use, PIU, Bosnia and Herzegovina	Examining the scale of problematic use of Internet (PIU) within the context of symptoms and mechanisms of FOMO (Fear of Missing Out).	Antecedent Variables: Social Media Intensity, Summary of Social Media Use, Social Media Usage Urges, the Bergen Facebook Addiction	The research found that around 20% of young respondents (average age of 13) showed multiple symptoms of FOMO, while a further 30% were at risk of becoming addicted to the internet. The remaining 50% of students are not at risk of IAT. However, it has been observed that FOMO is minimized by some forms of leisure activity and is not gender dependent.
11	(Fabris vd., 2020) Local Citations: 25 Global Citations: 82	10.1016/j.addbeh.2020.106364	Psychology	Stress Neglect, Emotional symptoms, Adolescence, Social media addiction	Examining the possible mediating factors between FOMO and emotional symptoms. Examining the relationship between FOMO and emotional symptoms in a sample of 472 Italian adolescents aged 11–19.	Antecedent Variables: Neglected by online peers, negative reactions by online peers, social media addiction, emotional symptoms	The findings indicate that FoMO serves as both a direct and indirect predictor of emotional symptoms. Furthermore, FoMO is linked to heightened stress sensitivity related to feelings of neglect and negative interactions with online peers, as well as social media addiction. Notably, stress sensitivity due to neglect—though not negative reactions from online peers—mediates the connection between FoMO and social media addiction. Social media addiction, in turn, acts as a mediator in the relationship between FoMO and emotional symptoms.

12	(Hunt vd., 2018) Local Citations: 24 Global Citations: 256	10.1521/jscp.2018.37.10.751	Clinical Psychology	Social media, social networking sites, Facebook; Snapchat, Instagram, well- being, depression, loneliness	Examining the impact on well-being of limiting (but not eliminating) the use of multiple SNS platforms over an extended period of time.	Antecedent Variables: Subjective Well-Being, Social media usage	The results of the experimental study showed that the limited use group showed significant reductions in loneliness and depression over three weeks compared to the control group. Both groups showed significant reductions in anxiety and fear of missing out compared to baseline.
13	Hetz, Dawson & Cullen (2015) Local Citations: 23 Global Citations: 51	10.1080/15391.523.2015.1080585	Education	Fear of Missing Out (FOMO), preservice teachers, social media, study abroad	Examining how social media affects the study abroad experience, and in particular, whether students studying abroad experience FOMO.	Antecedent Variables: Social Media Intensity, Social media use while studying abroad and back home	Based on survey results and focus group data collected from students studying abroad, participants used social media primarily for purposeful communication among themselves, in addition to connecting at home. Although the construct of FOMO was present in the study, it took on a different role, with participants attempting to create FOMO in others rather than experiencing it themselves.
14	Fuster, Chamarro & Oberst (2017) Local Citations: 21 Global Citations: 44	10.51698/aloma.2017.35.1.22-30	Psychology	Fear of missing out (FOMO), social media engagement, online social networking, mobile phone addiction, latent profile analysis (LPA)	Identify different profiles of users of social networking sites based on reported FOMO levels, participation in social networking sites, and cell phone addiction	Consequent Variables: social media engagement, social network intensity, social network access via the mobile phone	The results of the research showed that FOMO could be interpreted as a driving force behind users' engagement in a greater number of social networks, access to social networks via mobile phones, and addictive behaviour related to mobile phones.
15	(Bright & Logan, 2018) Local Citations: 21 Global Citations: 59	10.1108/IntR-03-2017-0112	Marketing	Social networks, Advertising, Media fatigue, Attitudes, Privacy, Information processing	Examining how advertising factors such as attitude and intrusiveness impact social media fatigue as well as two consumer behavior factors, fear of missing out (FOMO) and privacy.	Consequent Variables: social media fatigue	The results suggest that FOMO has the greatest impact on social media fatigue, rather than advertising factors as predicted. In addition, privacy concerns continue to plague consumers and should be monitored by advertisers.

16	(Rozgonjuk vd., 2020) Local Citations: 21 Global Citations: 71	10.1016/j.addbeh.2020.106487	Psychology	Facebook, WhatsApp, Instagram, Snapchat, Productivity Fear, of Missing Out	Examining the association between FOMO and social media use's impact on daily-life and productivity at work. Determining whether WhatsApp, Facebook, Instagram, and Snapchat Use Disorders mediate that relationship.	Antecedent Variables: severity of all social networks use disorders	The research analyses showed that the severity of all social network use disorders was positively correlated with FOMO and social media's negative impact on daily life and productivity at work. Furthermore, controlling for age and gender, mediation analyses showed that of all platforms, only Snapchat Use Disorder did not mediate the association between FOMO and social media's negative impact on daily life and productivity at work.
17	(Talwar vd., 2019) Local Citations: 20 Global Citations: 197	10.1016/j.jretconser.2019.05.026	Marketing, Communication and Psychology	Cross-sectional study Fear of missing out (FOMO) Self- disclosure social comparison Social media fatigue and trust	Examining the associations of the dark side of social media use and fake news sharing behavior among social media users.	Consequent Variables: Fake news sharing and authentication	The results of the study suggest that online trust, self-disclosure, fear of missing out (FOMO) and social media fatigue are positively associated with (intentional) sharing of fake news. In contrast, social comparison has a negative association. The findings also suggest that online trust is negatively associated with authenticating news before sharing.
18	Elhai, Yang & Montag (2021) Local Citations: 20 Global Citations: 58	10.1590/1516-4446-2020-0870	Psychology	Addictive behavior, anxiety, social anxiety, depression, smartphone	This paper is to define and discuss the FOMO construct and its theoretical underpinnings, as well as reviewing the recent empirical literature on relationships between FOMO and levels of online social engagement, problematic internet use (PIU), negative affectivity, and sociodemographic characteristics.	Studies on FOMO were examined as this is a literature review	As a result of the literature review, FOMO has been examined and validated globally using several self-report psychological scales and physiological monitoring. Support for FOMO was found in relation to higher frequency of SNS use, higher levels of problematic SNS and smartphone use, higher levels of anxiety, depression and negative affectivity, and lower levels of perceived quality of life. Preliminary evidence suggests that FOMO is more strongly associated with younger age and female gender.

19	(Tandon vd., 2020) Local Citations: 19 Global Citations: 58	10.1016/j.chb.2020.106487	Psychology	FOMO, social media, Sleep hygiene, Problematic sleep, Well-being	Investigating the associations of FOMO, psychological wellbeing (anxiety, depression), compulsive social media use (CSMU), and sleep hygiene (habits that promote/inhibit sleep) with problematic sleep experienced by adults in both academic and employment settings.	Consequent Variables: Compulsive use of social media (CSMU), sleep hygiene, problematic sleep due to social media	The results showed that psychological well-being influences CSMU, which, together with sleep habits, influences the association between FOMO and problematic sleep. There were significant differences in the strength of the association between CSMU and FOMO between the two cohorts. Interestingly, FOMO is more strongly associated with CSMU among working professionals.
20	(Alt, 2017) Local Citations: 17 Global Citations: 30	10.1007/s12528.017.9149-x	Psychology	Social media engagement, Fear of missing out, Mixed-method study, Diverse classroom	Examining the relative impact of FOMO on students' social media engagement for personal reasons during lectures. Examining the moderating effect of culture (minority vs. nonminority students) on the connection between FOMO and social media engagement.	Antecedent Variables: Cultural group Consequent Variables: Social media engagement (SEM)	The results showed a positive moderate relationship between the FOMO and SME variables. The bootstrapped result showed a significant indirect effect between minority students and SME through increased levels of FOMO. Another finding showed that mainly non-minority students who experienced FOMO admitted to using social media in class, regardless of the teaching method used.
21	(Casale & Fioravanti, 2020) Local Citations: 15 Global Citations: 28	10.1016/j.addbeh.2019.106179	Psychology	Fear of missing out, Factor structure, Invariance, Psychometric properties	Determining whether the FOMO scale could be a psychometrically-sound measure in an Italian context.	Antecedent and consequent variables are not included as this is a scale development study.	The existing scale was analysed and its validity and reliability were tested on a sample of university students living in Italy.
22	Conlin, Billings, & Auverset (2016) Local Citations: 13 Global Citations: 42	10.15581/003.29.4.151-164	Marketing and Communication	Fear of Missing Out, uses and gratifications, mega events, binge-watching	Investigating the role that FOMO plays in TV viewing habits, particularly bingewatching and the consumption of one-time mega events.	Consequent Variables: choose to watch TV, social media use as it relates to TV, watch some one-time TV programs	The results indicated that FOMO predicts the pace at which people watch TV, their use of social media in relation to TV, and whether they are likely to watch some one-time TV programmers – such as sporting events like the Super Bowl.

23	(Liu & Ma, 2020) Local Citations: 13 Global Citations: 36	10.1007/s12144.018.0075-5	Psychology	Social networking sites, social networking sites addiction, FOMO, Problematic smartphone use	Examining the mediating roles of fear of missing out and problematic smartphone use in the relationship between support through online social networking sites and addiction to such sites in a Chinese context.	Antecedent Variables: Social Networking sites support Consequent Variables: problematic smartphone use, Social Networking sites addiction	The results showed that fear of missing out and problematic smartphone use mediated the relationship between support from online social networking sites and addiction to such sites, both in series and in parallel.
24	(Can & Satici, 2019) Local Citations: 12 Global Citations: 22	10.1186/841155.019.0117-4	Psychology	Fearing of missing out, social media, Psychometric properties, Scale adaptation	Examining psychometric properties of the Turkish version of the fear of missing out scale (FOMOs) Investigating the concurrent validity of the scale and examining the correlations between the Bergen Facebook Addiction Scale (BFAS), the Satisfaction with Life Scale (SWL), the time spent by participants in social media	Antecedent Variables: Bergen Facebook Addiction (BFAS) and Satisfaction with Life (SWLS)	Confirmatory factor analysis and reliability analysis revealed that the unidimensional structure of the Turkish version of the FOMOs was verified. Other research results showed that the Turkish version of the FOMOs had a small positive correlation with the BFAS, but a small negative correlation with the SWLS. On the other hand, the relationship between the FOMO scores and time spent in social media in minutes was also positive, although at a low level.
25	(Rogers & Barber, 2019) Local Citations: 12 Global Citations: 21	10.1016/j.chb.2018.12.016	Psychology	Fear of missing out, Telepressure, Technology use, Sleep hygiene, Sleep intervention	Examining the potential buffering effects of a sleep and technology educational intervention on relations among FOMO and telepressure and sleep hygiene, social media use, and sleep-disruptive technology use (i.e., technology use before and during sleep).	Consequent Variables: Information and communication technologies (ICT) use before sleep ICT uses during sleep Social media use Poor sleep hygiene	The results of the research showed that FOMO and telepressure were both associated with social media engagement. However, their findings showed that only telepressure was associated with engagement in technology use during sleep, whereas FOMO was not associated with technology use before or during sleep. Another study found that FOMO was associated with poor sleep hygiene, but the association between telepressure and poor sleep hygiene was not significant before the intervention.

Research Objective 5

• RO5: Identifying the current and emerging trends in FOMO research

Table 5 shows the most frequently used words in the collection. The word cloud of these words is given in Figure 5.



Figure 5. Most frequent words (top 50)

It is important for researchers to be able to identify current and emerging trends in a research domain. Figure 6 illustrates the thematic map of the collection. According to this map, the themes are divided into four different categories as niche themes, motor themes, emerging or declining themes and basic themes. Niche themes are themes that emphasize specific topics. Themes are defined by Khare & Jain (2022) as follows: Niche themes have high density but low centrality. Motor themes, created in the field, are crucial for structuring the research topic. Basic themes are highly relevant but less developed within a field. Emerging and declining themes are the unique or original themes that can be considered both emerging and declining owing to their originality. In addition, emerging or declining themes are defined as low in both density and relevance.

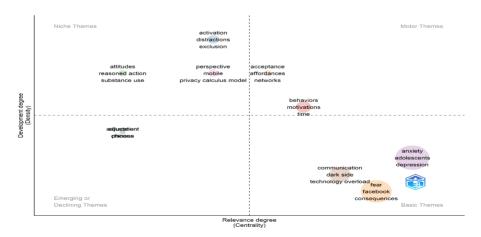


Figure 6. Thematic map

4. Discussion & Conclusion

The studies in the WOS database were filtered according to the keywords identified in the study, and 271 studies were examined, including the collection keywords. Although the first studies on FOMO and social media, which is a multidisciplinary concept, were conducted in 2013, it was observed that the studies gained momentum from 2016 onwards.

In the literature review of the study, the journals with the highest number of publications by number of articles were examined and it was found that the journals were mainly in the field of psychology. These are followed by journals in the fields of business, communication, and education. As a result of the bibliometric analysis, it is recommended that researchers who are going to carry out future studies on this topic look at the authors who publish the most and the journals in which these journals are published, as it is possible to identify the authors who work the most in these two areas. Looking at the results of the 10 most productive countries in the literature review, the most productive countries in terms of FOMO and social media-oriented studies are the USA, China, and Turkey. Furthermore, in terms of the countries with the highest number of citations, the US ranks first, while Turkey is in 10th place.

Once the first 25 most cited studies in the collection are analyzed, it can be seen that the concept of FOMO has been studied more in the field of psychology. Although the most cited study belongs to Przybylski et al. (2013), it can be seen that the FOMO scale developed in this study is the basis for other studies. It has been observed that the studies conducted in the field of psychology on social media use are often related to motivation to use, social media engagement, personality, problematic use of social networking sites, maladjustment, and adjustment, subjective well-being, etc. Although university students often constitute the sample in the studies, the social media engagement of students with different characters and academic motivations in this age group has been examined. It is seen that social comparison orientation, social media engagement, social media use, and fake news-sharing behavior are assessed in the studies conducted in the field of marketing within the collection. The fact that the most cited studies are from the field of psychology and that the FOMO effect that can arise from the use of social media has not been addressed much from a marketing perspective, indicates a gap in the literature. It is recommended that studies on this topic be conducted within the marketing discipline. Furthermore, contradictory results are also found in studies that examine gender differences. Certain studies have focused on the relationship between FOMO and young individuals as a consequence of the young sample (Błachnio & Przepiórka, 2018; Blackwell vd., 2017; De Doncker & Mc-Lean, 2022; Elhai vd., 2018; Hylkilä vd., 2023). On the other hand, the relationship between FOMO and gender has not been clearly established. Although the literature generally suggests that women experience FOMO more (Beyens vd., 2016). Rozgonjuk et al. (2021) found no significant difference between genders in terms of FOMO experience. Some studies have found that young men have higher levels of FOMO (Przybylski vd., 2013; Stead & Bibby, 2017). Such differences and unaddressed findings indicate that FOMO research should be explored in the future.

Another aim of the study is to examine the antecedent variables that affect FOMO and the consequent variables that are caused by FOMO. As a result of the research conducted for this purpose, it was found that people with different demographic characteristics such as female & male, young & old and individual differences, family and friends factors, different personality traits (agreeableness, conscientiousness, extraversion, openness, and stress tolerance), psychosocial well-being, positive metacognitions, social media intensity, social media use urge, emotional symptoms, and compulsive social media use variables were considered as antecedent variables that have an effect on FOMO. Social media engagement is the variable most often considered in studies as an outcome of FOMO. Subjective well-being, problematic internet use, problematic social networking use, social media intensity, sleep hygiene, problematic smartphone use and life satisfaction variables are also included in the studies as consequent variables. A review of the studies shows that they are mostly descriptive in nature. In addition to EEG and ERP studies in the field of psychology, it is suggested that experimental studies in the field of marketing will contribute to the enrichment of the literature.

Finally, when analyzing the developing trends in the field of FOMO, it was found that communication, the dark side of social networking sites, anxiety, depression, and Facebook as a social media platform were the most discussed topics. In order to differentiate in future studies and contribute to the literature, it is recommended to conduct studies on attitudes towards the use of social media accounts, reasoned action, substance use, activation, privacy calculus, distraction, exclusion, etc. Researchers from different fields such as human-computer interaction, marketing, and psychology can conduct multidisciplinary studies.

While conducting the study, there were some limitations that the authors have faced. The search was carried out in an international database, the WOS. Only studies in the WOS database were included. For a similar study, SCOPUS or other databases could also be searched. The keywords were also limited. Different keywords were chosen according to the preferences of the authors. The scope of the study can be widened in various ways.

The scope of the search can be widened by using different keywords. On the other hand, contrary to this suggestion, the review can be narrowed down in this direction, especially if it is desired to be conducted in a very specific area. For example, if you want to further examine the effects of FOMO in the field of psychology, you can do a more niche review, particularly in that field. In order to ensure that the study has an international structure, the search was carried out in an international database. However, national literature can be reviewed in a similar way to enable researchers to determine the direction of trends in their own countries or, more simply, to understand the current situation. Thus, differences between national and international literature can be identified. The concepts of netlessphobia and nomophobia, which are other research topics that can be addressed in relation to FOMO, can also be included in future studies. The scales used by Eskin Bacaksiz, Tuna & Alan (2022) in their study can be applied to students studying in different fields in such a way that all three concepts may possibly be examined together. In contrary to FOMO, joy of missing out (JOMO) is another concept which could be an interesting topic for futures studies. Different age groups, such

as (Lenhart, 2015) study of teenagers, can be studied in relation to FOMO. The themes in the thematic map can be a source of inspiration for the researcher in order to choose a specific topic.

As a result of the bibliometric analysis and literature review, several suggestions were tried to be made to researchers and social media users who have FOMO syndrome or who attempt to study FOMO. In this way, it is assumed that individuals will be less affected by missing developments by using social media more consciously, especially with a better understanding of the feeling of FOMO arising from social media. It is anticipated that this issue will continue to grow in importance in the future.

References

- Alabi, G. (1979). Bradford's law and its application. *International Library Review*, 11(1), 151–158. https://doi.org/10.1016/0020-7837(79)90044-X
- Alabri, A. (2022). Fear of Missing Out (FOMO): The Effects of the Need to Belong, Perceived Centrality, and Fear of Social Exclusion. *Human Behavior and Emerging Technologies*, 2022, 1–12. https://doi.org/10.1155/2022/4824256
- Alfina, Hartini, S., & Mardhiyah, D. (2023). FOMO related consumer behaviour in marketing context: A systematic literature review. *Cogent Business and Management*, 10(3). https://doi.org/10.1080/233119 75.2023.2250033
- Alt, D. (2015). College students' academic motivation, media engagement and fear of missing out. *Computers in Human Behavior*, 49, 111–119. https://doi.org/10.1016/j.chb.2015.02.057
- Alt, D. (2017). Students' social media engagement and fear of missing out (FoMO) in a diverse classroom. Journal of Computing in Higher Education, 29(2), 388–410. https://doi.org/10.1007/s12528-017-9149-x
- Alt, D. (2018). Students' Wellbeing, Fear of Missing out, and Social Media Engagement for Leisure in Higher Education Learning Environments. *Current Psychology*, 37(1), 128–138. https://doi.org/10.1007/s12144-016-9496-1
- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959–975. https://doi.org/10.1016/j.joi.2017.08.007
- Arora, S., & Mehta, M. (2023). Love it or hate it, but can you ignore social media? A bibliometric analysis of social media addiction. *Computers in Human Behavior*, 147, 107831. https://doi.org/10.1016/j.chb.2023.107831
- Balakrishnan, V., Ng, K. S., & Rahim, H. A. (2021). To share or not to share The underlying motives of sharing fake news amidst the COVID-19 pandemic in Malaysia. *Technology in Society*, 66, 101676. https://doi.org/10.1016/j.techsoc.2021.101676
- Barry, C. T., & Wong, M. Y. (2020). Fear of missing out (FoMO): A generational phenomenon or an individual difference? *Journal of Social and Personal Relationships*, 37(12), 2952–2966. https://doi.org/10.1177/0265407520945394
- Beyens, I., Frison, E., & Eggermont, S. (2016). "I don't want to miss a thing": Adolescents' fear of missing out and its relationship to adolescents' social needs, Facebook use, and Facebook related stress. *Computers in Human Behavior*, 64, 1–8. https://doi.org/10.1016/j.chb.2016.05.083
- Błachnio, A., & Przepiórka, A. (2018). Facebook intrusion, fear of missing out, narcissism, and life satisfaction: A cross-sectional study. *Psychiatry* Research, 259, 514–519. https://doi.org/10.1016/j.psychres.2017.11.012

- Blackwell, D., Leaman, C., Tramposch, R., Osborne, C., & Liss, M. (2017). Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use and addiction. *Personality and Individual Differences*, 116, 69–72. https://doi.org/10.1016/j.paid.2017.04.039
- Bright, L. F., & Logan, K. (2018). Is my fear of missing out (FOMO) causing fatigue? Advertising, social media fatigue, and the implications for consumers and brands. *Internet Research*, 28(5), 1213–1227. https://doi.org/10.1108/IntR-03-2017-0112
- Can, G., & Satici, S. A. (2019). Adaptation of fear of missing out scale (FoMOs): Turkish version validity and reliability study. *Psicologia: Reflexao e Critica*, 32(1), 1–7. https://doi.org/10.1186/s41155-019-0117-4
- Casale, S., & Fioravanti, G. (2020). Factor structure and psychometric properties of the Italian version of the fear of missing out scale in emerging adults and adolescents. *Addictive Behaviors*, 102, 106179. https://doi.org/10.1016/j.addbeh.2019.106179
- Casale, S., Rugai, L., & Fioravanti, G. (2018). Exploring the role of positive metacognitions in explaining the association between the fear of missing out and social media addiction. *Addictive Behaviors*, 85, 83–87. https://doi.org/10.1016/j.addbeh.2018.05.020
- Conlin, L., Billings, A. C., & Auverset, L. (2016). Time-shifting vs. appointment viewing: the role of fear of missing out within TV consumption behaviors. *Communication & Society*, 29(4), 151–164. https://doi.org/10.15581/003.29.4.151 164
- De Doncker, K., & McLean, N. (2022). Social media, sleep difficulties and depressive symptoms: A case study of South African youth in Cape Town. *Technology in Society*, 70, 102038. https://doi.org/10.1016/j. techsoc.2022.102038
- DOMO. (2022). Data Never Sleeps 10.0. Retrieved January 7, 2025 from https://www.domo.com/data-never-sleeps
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. https://doi.org/10.1016/j.jbusres.2021.04.070
- Elhai, J. D., Levine, J. C., Alghraibeh, A. M., Alafnan, A. A., Aldraiweesh, A. A., & Hall, B. J. (2018). Fear of missing out: Testing relationships with negative affectivity, online social engagement, and problematic smartphone use. *Computers in Human Behavior*, 89, 289–298. https://doi.org/10.1016/j.chb.2018.08.020
- Elhai, J. D., Yang, H., & Montag, C. (2021). Fear of missing out (Fomo): Overview, theoretical underpinnings, and literature review on relations with severity of negative affectivity and problematic technology use. Brazilian Journal of Psychiatry, 43(2), 203–209. https://doi.org/10.1590/1516-4446-2020-0870
- Eskin Bacaksiz, F., Tuna, R., & Alan, H. (2022). Nomophobia, netlessphobia, and fear of missing out in nursing students: A cross-sectional study in distance education. *Nurse Education Today*, 118, 105523. https://doi.org/10.1016/j.nedt.2022.105523
- Fabris, M. A., Marengo, D., Longobardi, C., & Settanni, M. (2020). Investigating the links between fear of missing out, social media addiction, and emotional symptoms in adolescence: The role of stress associated with neglect and negative reactions on social media. *Addictive Behaviors*, 106, 106364. https://doi.org/10.1016/j.addbeh.2020.106364
- Fox, J., & Moreland, J. J. (2015). The dark side of social networking sites: An exploration of the relational and psychological stressors associated with Facebook use and affordances. *Computers in Human Behavior*, 45, 168–176. https://doi.org/10.1016/j.chb.2014.11.083

- Fuster, H., Chamarro, A., & Oberst, U. (2017). Fear of Missing Out, online social networking and mobile phone addiction: A latent profile approach. *Aloma Revista de Psicologia, Ciències de l'Educació i de l'Esport*, 35(1), 23–30. https://doi.org/10.51698/aloma.2017.35.1.22-30
- Good, M. C., & Hyman, M. R. (2020). 'Fear of missing out': antecedents and influence on purchase likelihood. *Journal of Marketing Theory and Practice*, 28(3), 330–341. https://doi.org/10.1080/10696679.2020.1766
 359
- Gupta, M., & Sharma, A. (2021). Fear of missing out: A brief overview of origin, theoretical underpinnings and relationship with mental health. *World Journal of Clinical Cases*, 9(19), 4881. https://doi.org/10.12998/WJCC.V9.I19.4881
- Hetz, P. R., Dawson, C. L., & Cullen, T. A. (2015). Social Media Use and the Fear of Missing Out (FoMO) While Studying Abroad. *Journal of Research on Technology in Education*, 47(4), 259–272. https://doi.org/10.10 80/15391523.2015.1080585
- Hodkinson, C. (2019). 'Fear of Missing Out' (FOMO) marketing appeals: A conceptual model. *Journal of Marketing Communications*, 25(1), 65–88. https://doi.org/10.1080/13527266.2016.1234504
- Holte, A. J., & Ferraro, F. R. (2020). Anxious, bored, and (maybe) missing out: Evaluation of anxiety attachment, boredom proneness, and fear of missing out (FoMO). *Computers in Human Behavior*, 112, 106465. https://doi.org/10.1016/j.chb.2020.106465
- Hunt, M. G., Marx, R., Lipson, C., & Young, J. (2018). No more FOMO: Limiting social media decreases loneliness and depression. *Journal of Social and Clinical Psychology*, 37(10), 751–768. https://doi.org/10.1521/jscp.2018.37.10.751
- Hylkilä, K., Männikkö, N., Castrén, S., Mustonen, T., Peltonen, A., Konttila, J., Männistö, M., & Kääriäinen, M. (2023). Association between psychosocial well-being and problematic social media use among Finnish young adults: A cross-sectional study. *Telematics and Informatics*, 81(101996). https://doi.org/10.1016/j. tele.2023.101996
- Ilyas, G. B., Rahmi, S., Tamsah, H., & Yusriadi, Y. (2022). Does fear of missing out give satisfaction in purchasing based on social media content? *International Journal of Data and Network Science*, 6(2), 409–418. https://doi.org/10.5267/j.ijdns.2021.12.013
- Khare, A., & Jain, R. (2022). Mapping the conceptual and intellectual structure of the consumer vulnerability field: A bibliometric analysis. *Journal of Business Research*, 150, 567–584. https://doi.org/10.1016/j.jbusres.2022.06.039
- Lai, C., Altavilla, D., Ronconi, A., & Aceto, P. (2016). Fear of missing out (FOMO) is associated with activation of the right middle temporal gyrus during inclusion social cue. *Computers in Human Behavior*, 61, 516–521. https://doi.org/10.1016/j.chb.2016.03.072
- Lenhart, A. (2015, April 9). Teens, Social Media & Technology Overview 2015. Retrieved January 7, 2025 from https://www.pewresearch.org/internet/2015/04/09/teens-social-media-technology-2015/
- Liu, C., & Ma, J. (2020). Social support through online social networking sites and addiction among college students: The mediating roles of fear of missing out and problematic smartphone use. *Current Psychology*, 39(6), 1892–1899. https://doi.org/10.1007/s12144-018-0075-5
- Oxford English Dictionary. (2023). FOMO. Retrieved January 7, 2025 from https://www.oed.com/search/dictionary/?scope=Entries&q=FOMO&tl=true
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement:

- an updated guideline for reporting systematic reviews. BMJ, 372(n71), 1–9. https://doi.org/10.1136/BMLN71
- Paul, J., Merchant, A., Dwivedi, Y. K., & Rose, G. (2021). Writing an impactful review article: What do we know and what do we need to know? Içinde *Journal of Business Research* (C. 133, ss. 337–340). Elsevier. https://doi.org/10.1016/j.jbusres.2021.05.005
- Petrosyan, A. (2023, November 5). Number of internet and social media users worldwide as of April 2023. Statista. Retrieved January 7, 2025 from https://www.statista.com/statistics/617136/digital-population-worldwide/#:~:text=Worldwide%20digital%20population%202023&text=As%20of%20April%20 2023%2C%20there,population%2C%20were%20social%20media%20users.
- Przybylski, A. K., Murayama, K., Dehaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841–1848. https://doi.org/10.1016/j.chb.2013.02.014
- Reer, F., Tang, W. Y., & Quandt, T. (2019). Psychosocial well-being and social media engagement: The mediating roles of social comparison orientation and fear of missing out. *New Media and Society*, 21(7), 1486–1505. https://doi.org/10.1177/1461444818823719
- Reisenwitz, T., & Fowler, J. (2023). Personal and Social Determinants of Fear of Missing Out (FoMO) in Younger Consumers. *Journal of Business Strategies*, 40(1), 21–36. https://doi.org/10.54155/jbs.40.1.21-36
- Riordan, B. C., Cody, L., Flett, J. A. M., Conner, T. S., Hunter, J., & Scarf, D. (2020). The development of a single item FoMO (Fear of Missing Out) scale. *Current Psychology*, 39(4), 1215–1220. https://doi.org/10.1007/s12144-018-9824-8
- Rogers, A. P., & Barber, L. K. (2019). Addressing FoMO and telepressure among university students: Could a technology intervention help with social media use and sleep disruption? *Computers in Human Behavior*, 93, 192–199. https://doi.org/10.1016/j.chb.2018.12.016
- Rozgonjuk, D., Sindermann, C., Elhai, J. D., & Montag, C. (2020). Fear of Missing Out (FoMO) and social media's impact on daily-life and productivity at work: Do WhatsApp, Facebook, Instagram, and Snapchat Use Disorders mediate that association? *Addictive Behaviors*, 110, 106487. https://doi.org/10.1016/j. addbeh.2020.106487
- Rozgonjuk, D., Sindermann, C., Elhai, J. D., & Montag, C. (2021). Individual differences in Fear of Missing Out (FoMO): Age, gender, and the Big Five personality trait domains, facets, and items. *Personality and Individual Differences*, 171, 110546. https://doi.org/10.1016/j.paid.2020.110546
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68
- Salehan, M., & Negahban, A. (2013). Social networking on smartphones: When mobile phones become addictive. *Computers in Human Behavior*, 29(6), 2632–2639. https://doi.org/10.1016/J.CHB.2013.07.003
- Stead, H., & Bibby, P. A. (2017). Personality, fear of missing out and problematic internet use and their relationship to subjective well-being. *Computers in Human Behavior*, 76, 534–540. https://doi.org/10.1016/j. chb.2017.08.016
- Talwar, S., Dhir, A., Kaur, P., Zafar, N., & tasheedy, M. (2019). Why do people share fake news? Associations between the dark side of social media use and fake news sharing behavior. *Journal of Retailing and Consumer Services*, 51, 72–82. https://doi.org/10.1016/j.jretconser.2019.05.026

- Tandon, A., Dhir, A., Almugren, I., AlNemer, G. N., & Mäntymäki, M. (2021). Fear of missing out (FoMO) among social media users: a systematic literature review, synthesis and framework for future research. *Internet Research*, 31(3), 782–821. https://doi.org/10.1108/INTR-11-2019-0455
- Tandon, A., Kaur, P., Dhir, A., & Mäntymäki, M. (2020). Sleepless due to social media? Investigating problematic sleep due to social media and social media sleep hygiene. *Computers in Human Behavior*, 113, 106487. https://doi.org/10.1016/j.chb.2020.106487
- Tomczyk, Ł., & Selmanagic-Lizde, E. (2018). Fear of Missing Out (FOMO) among youth in Bosnia and Herzegovina Scale and selected mechanisms. *Children and Youth Services Review*, 88, 541–549. https://doi.org/10.1016/j.childyouth.2018.03.048
- Wardikar, V. G., & Gudadhe, V. P. (2013). Application of Bradford's law of scattering to the literature of library & information science: A study of doctoral theses citations submitted to the universities of Maharashtra, India. *Library Philosophy and Practice*, 1054. https://digitalcommons.unl.edu/libphilprac
- Wen, J., Huang, Y., Liu, G., & Miao, M. (2023). The nature of nomophobia and its associations with contents of smartphone use and fear of missing out: A network perspective. Telematics and Informatics, 82(102011). https://doi.org/10.1016/j.tele.2023.102011
- Wu-Ouyang, B. (2022). Are smartphones addictive? Examining the cognitive-behavior model of motivation, leisure boredom, extended self, and fear of missing out on possible smartphone addiction. *Telematics and Informatics*, 71, 101834. https://doi.org/10.1016/j.tele.2022.101834
- Xi, Y., Huo, J., Zhao, X., Jiang, Y., & Yang, Q. (2022). The effects of fear of missing out on social media posting preferences. *European Journal of Marketing*, 56(12), 3453–3484. https://doi.org/10.1108/EJM-10-2021-0814
- Zhang, Z., Jiménez, F. R., & Cicala, J. E. (2020). Fear Of Missing Out Scale: A self-concept perspective. *Psychology and Marketing*, 37(11), 1619–1634. https://doi.org/10.1002/mar.21406