WORD OF MOUTH RESEARCH IN MARKETING: A BIBLIOMETRIC ANALYSIS (2010-2014)

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ABSTRACT: Word of mouth is gaining momentum as an important way to promote both products and services in a new media environment ruled by social media. Using social media consumers can share information, educate other consumers, and even persuade them about using or not brands, products, and services in a fast, easy, and ubiquitous way. Despite the increasing research on word of mouth,few studies have focused in analyzing word of mouth literature in order to identify key trends, used methodologies and frameworks, and research gaps. This study aims to address this research gap running a bibliometric analysis on a sample of articles published during the last five years (2010-2014) in 5 top marketing journals (*Journal of Marketing, Journal of the Academy of Marketing Science, Journal of Marketing*

Research, European Journal of Marketing, and *Marketing Science*). Main results suggest that all analyzed journals are interested in the topic and have published a similar amount of articles on this subject during the last five years. Nevertheless,some important differences arise with *Journal of Marketing* increasing the number of published articles over the analyzed period while *Marketing Science* and *Journal of Marketing Research* show the opposite pattern. Results also suggest a higher number of studies focused on products rather than services pointing out a research gap on word of mouth and services. Main research frameworks are related to brands, social influence, and user-generated-content. Our analysis shows a great heterogeneity in the size of samples used –from consumers to students– andanalysis tools –from vectorautoregressive (VAR) models to agent-based models–.

KEYWORDS: Word of Mouth, Electronic Word of Mouth, WOM, EWOM, Bibliometric Analysis

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Introduction and objectives

Word of mouth (WOM) has long been considered a major influence on what people know, feel, and do (Buttle, 1998) and the most influential source of information for consumers (Katz &Lazersfeld, 1955). With the advent of the age of digitally-mediated communications and consumer empowerment (Denegri-Knott, Zwick, & Schroeder, 2006) WOM represents a trending topic in marketing research and a promising tool for practitioners. As a matter of fact companies are allocating larger portions of their marketing budgets especially to generate and manage electronic WOM or eWOM (Moorman, 2014) in a social media-ruled society.eWOMrefers to `Internet-mediated written communications between current or potential consumers´ (You, Vadakkepatt, & Joshi, 2015, p. 19) and represents an important way through which consumers can educate each other aboutproducts and services, recommend these products and services, and try to influence other consumers´ behavior with no time and space limitations.eWOMdiffers from traditional WOM in many aspects: the new interpersonal influence is a many-to-many communication process in which the source is unknown and the non-commercial focus may not be certain, the contact is electronic, not face to face, and the volume of information is higher than obtained through traditional processes (Smith et al., 2005; Chatterjee, 2001; Gershoff et al., 2001). An updated view of eWOM proposed by Vargo and Lusch (2004) consists in co-producing communications (Kozinets et al., 2010).Among the main drivers of WOM increasing influence in marketing communications it have been pointed out the decline of consumer trust in traditional advertising (Verlegh& Moldovan, 2008) and the increasing power of peer influence (Narayan, Rao, & Saunders, 2011). Social motivations and consumer-brand relationships have been identified as main drivers why people engage in WOM. Recent research (Bigné et al., 2015; Hsu & Lin, 2008; Hennig-Thurau, 2004) has identified four major social motivations to eWom exchange: altruism, extraversion, social enhancement, and community identification.Brand relationship is a sort of bond (financial, physical or emotional) that brings the brand seller and buyer together (Schultz & Schultz, 2004).De Matos & Rossi (2008) identified brand-related factors such assatisfaction,loyalty, quality, commitment, trust, and perceived value. So people can spread the word about –and recommend– products and services they are satisfied or loyal to (positive word of mouth) but they can also share negative comments about the products and services they are dissatisfied with (Chen & Laurie, 2013). This is a reason why WOM can represent both a benefit but also a hazard for brands and companies which cannot ignore WOM effects whether WOM actions have been initiated by brands and companies or by consumers.As a new research area in marketing

communications and marketing strategy WOM is receiving a greater attention by academics. As an example,theEuropean Journal of Marketing devoted a special issue to WOM in 2013 (Volume 47, Issue 7) and the International Journal of Advertising has launch a call for papers for a special issue on the subject in 2016. Although the extant research has helped us to develop a good understanding of a number of the issues pertaining to WOM, several research and managerial questions remain. Furthermore, no attempt has been made to consolidate and synthesize this stream of research (King et al., 2014).The application of tracking academic publications to identify trends of knowledgedevelopment has been recognized by Van Doren and Heit(1973). Within this framework, a few attempts have been done using literature review, content analysis and other bibliometric approaches to track the evolution and nature of WOM research (Yang et al., 2012; King, 2014).

This study main goal is to provide up-to-date information in WOM research published in 5 top marketing journals (*Journal of Marketing, Journal of the Academy of Marketing Science, Journal of Marketing Research, European Journal of Marketing*, and *Marketing Science*). The specific goals are as follows. First, despite de growing interest of WOM, no recent attempt has been issued about the recent evolution of papers addressing this issue. Our first research question (RQ1) is to analyze WOM research volume, using the number of published papers and its evolution over the years as proxy variables. This must show an increasing or eventually decreasing interest by top marketing journals as a valuable tip for future research on that topic. Second, the range of topics covered under WOM is certainly wide, including WOM, eWOM and different specific topics such as online reviews and others. A large dispersion of topics might show a non-unified domain, different fields of use, and a range of connections with other subfields of research. Therefore, our second research question (RQ2) is to analyze the keywords used in published papers as a mean of both, intra-relationships (i.e. homogeneity within WOM) and interrelationships (i.e. connections with other domains). Third, amethodological approachanalysis may visualize the type of method which has been used and, therefore, a potential call for new and diverse research methodologies can be derived. Our third research question(RQ3) is to analyze the main methodological approaches and data analysis techniques used in WOM research. We attempt to cover such goals across the main top journals and over time.Sample type and sample size analysis might help to better understand suitable samples used in WOM research. Our fourth research question (RQ4) addresses this issue. Table 1 summarizes our RQs.

Table 1. Research Questions.

RQ1:	Has the number of papers published in WOM research in top 5 marketing journals increased or decreased during the last 5 years?
RQ2:	Which are the most commonly used keywords in WOM research?
RQ3a:	Which is the main methodological approach (quantitative, qualitative, mixed-method research) and research design (i.e., experimental designs) used in WOM research?
RQ3b:	Which are the main data analysis techniques used in WOM research?
RQ4:	Which are the most commonly sample type and sample size used in WOM research?

This research will contribute to existing WOM research in the following ways. First, WOM constitute both a classical topic in the offline domain and a recent one in online environments. A proper look on its recent evolution in terms of number of papers published and its evolution lead to a better understanding of its academic relevance. Second, rigor can be derived from analyzing the different methodologies of study. Beyond relevance and rigor, we also aim to contribute to existing knowledge through delineating potential extensions to related fields of

research. To sum up this piece of research may favor a roadmap for further research on WOM.

Method

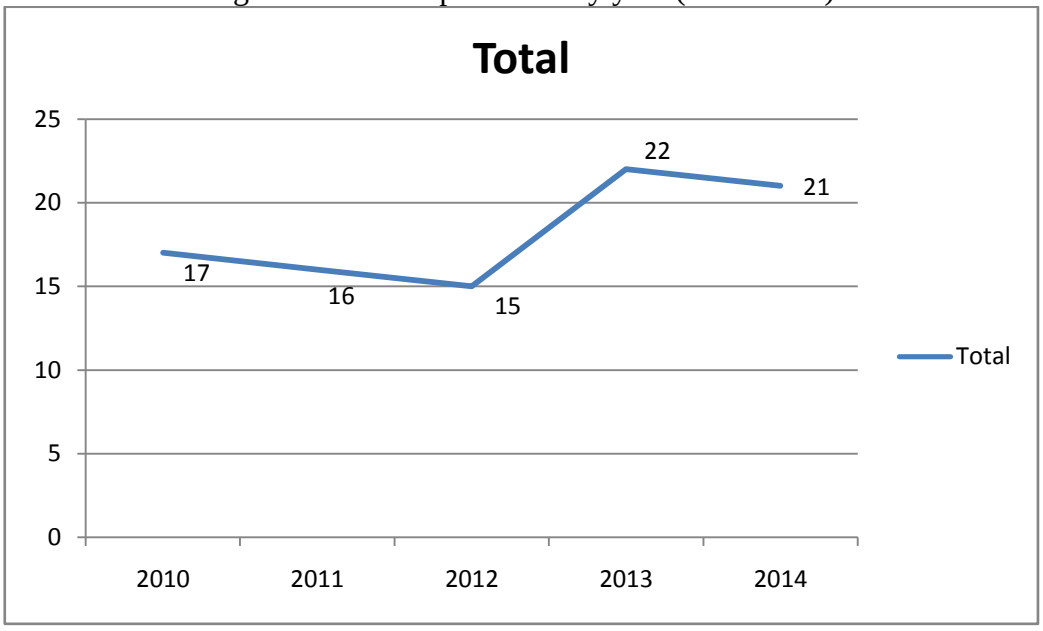
Bibliometric analysis is a research technique using quantitative and statistical analyses to describe distribution patterns of research articles with a given topic and a given time period (Yang et al., 2012).Data was collected from Web of Science (SCI-EXPANDED, SSCI, and A&HCI), with no language limitation. Chronological limit was set for the last five years covering years2010-2014. Search was limited to articles published in top 5 marketing journals: *Journal of Marketing*, *Journal of the Academy of Marketing Science*, *Journal of Marketing Research*, *European Journal of Marketing*, and *Marketing Science*.

The search strategy was developed using the following keywords: "WORD OF MOUTH", "WORD-OF-MOUTH", WOM, EWOM, "ELECTRONIC WORD OF MOUTH", and "ELECTRONIC WORD-OF-MOUTH". The search was conducted, and all results retrieved, in one single day: June29th 2015.The search allowed us toretrieve a total of 214documents. All results were manually depurated (author name, institution, journal, etc.) in order to avoid misspelling in author´s names and surnames, and to normalize keywords, methodology, and data analysis techniques. All documents were checked by the researchers (who read titles and abstracts) in order to avoid duplicates and to verify that all documents matched the criteria to be included for analysis. After this revision a final sample of 91 documents was used for analysis.

Results

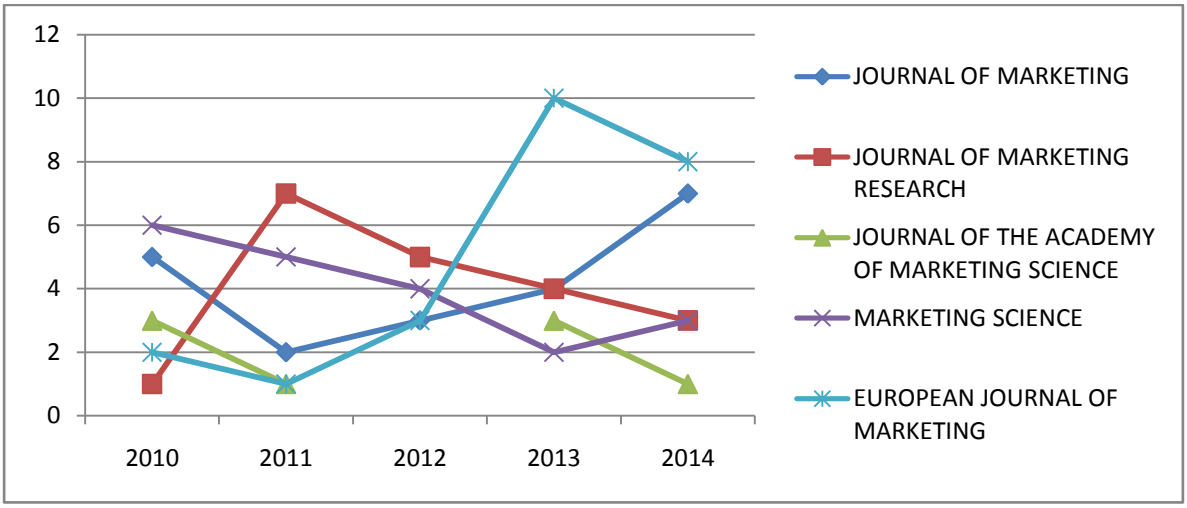
RQ1 addresses the increasing or decreasing number of papers published in WOM research in top 5 marketing journals during the last 5 years. In order to shed light to our first research question a year by year analysis was run on our sample. Year by year analysis reveals an increasing production in WOM researchduring the last two years (2013, n=22; and 2014 n=21) if compares to the three previous years (2010 n=17, 2011 n=16, and 2012, n=15). Figure 1 shows articles published by year.

Figure 1. Articles published by year (2010-2014).



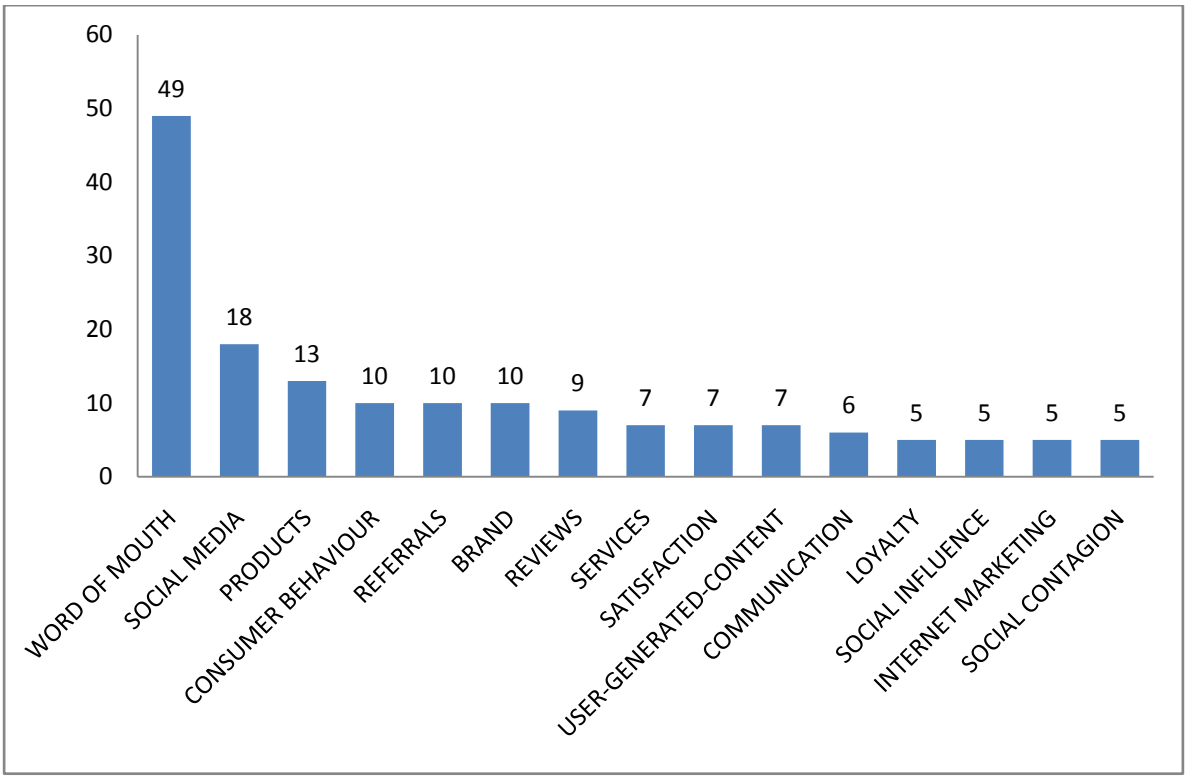
Journals analysis reveals a similar amount of articles published by the 5 analyzed journals (*Journal of Marketing*, n=21;*Journal of Marketing Research*, n=20; *European Journal of Marketing*, n=23; and *Marketing Science* n=19) with the exception of *Journal of the Academy of Marketing Science* (n=8) that published a fewer number of articlesin the analyzed period than the rest of journals.The *Journal of Marketing*and the *European Journal of Marketing*have increased the number of articles published on the subject since 2011 while *Journal of Marketing Research* and *Marketing Science* show a decreasing pattern in articles published on the subject during the same period.Figure 2 shows articles published by yearand journal.

Figure 2. Articles published by year and journal.



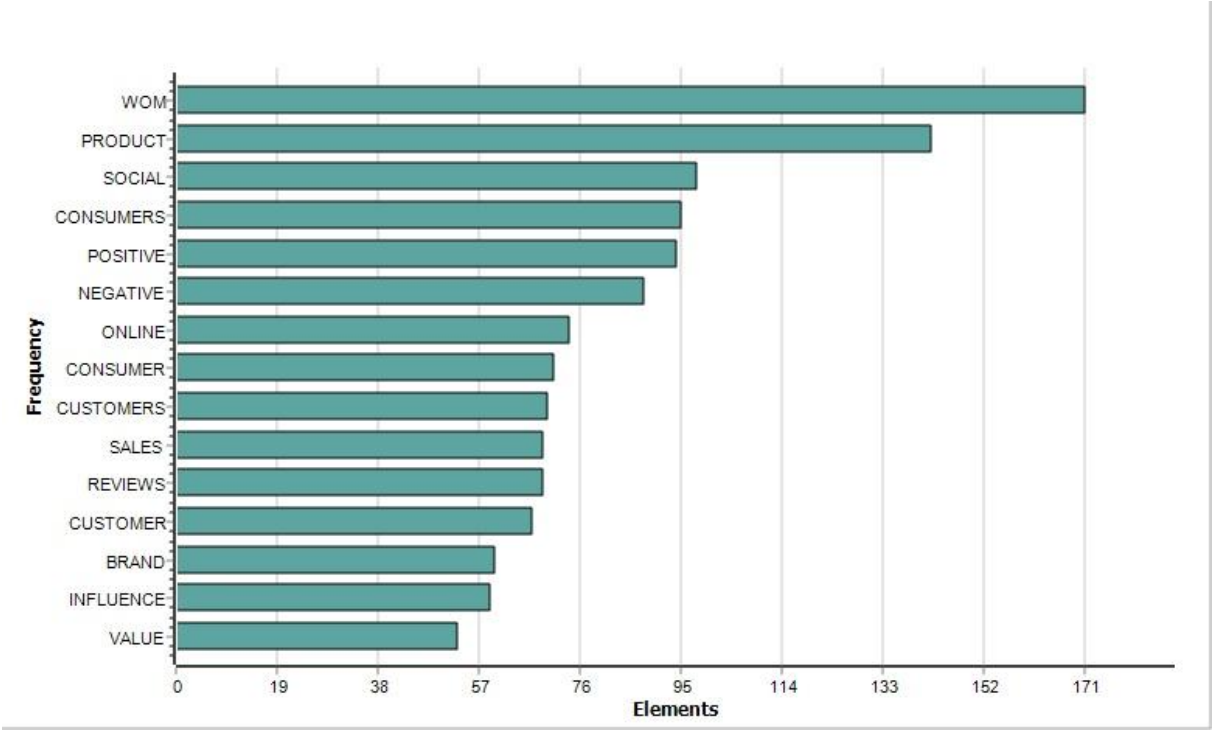
In order to accomplish our second research objective a keywords analysis was run. Keywords analysis reveals 254 different keywords ranging from adoption, advertising, and agent-based models to visual research, Web 2.0, and word of mouth.Word of mouth is the most used keyword in the articles (number of times used, n=49) accounting for 19.29% of all keywords used in the articles; social media/social networks accountsfor 7.1% of all keywords (n=18), followed by product/new products (n= 13; 5.11%); consumer/customer behaviour (n= 10; 3.94%); referrals (10; 3.94%); and brand-related keywords –i.e, brand tracking, brand performance– (10; 3.94%).All keywords used 5 or more times are depicted in Figure 3. Keywords analysis show a superiority of product-related keywords over services-related keywords suggesting that word of mouth research has been more focused on products rather than services highlighting a research opportunity in this area. Keywords analysis also show a lack of emotion-related keywords with just 1 keyword (emotion) related to this research area. There is also an unbalanced effort regarding the research of WOM valence (positive/negative/neutral) with just a few studies focused on the effects of negative WOM.Figure 3 shows the most used keywords in the analyzed articles.

Figure 3. Most used keywords in articles (≥5).



To further explore the strength and weight of these keywords a word frequency analysis on the abstracts was run using text mining software WordStat 7.0.11. Frequency analysis confirms the relevance of keywords such as WOM (n= 171, total=0,96%), product/s (n= 141, total=1,08%), social (n= 98, total=0,55%), consumer-consumers/customer-customers (n= 303, total=1,70%), reviews (n= 69, total=0,39%), brand (n= 60, total=0,34%), and referral (n= 41, total=0,23%). More interesting word frequency analysis revealsthe relevance of positive(n= 94, total=0,53%) and negative (n= 88, total=0,49%) suggesting a much more balanced focus on the positive and negative effects of WOM than keywords analysis revealed. Word frequency analysis also revealed a heavy use of the word online (n= 74, total=0,42%) clearly reflecting the nature of today´s marketing communications environment in general and WOM in particular. It is also remarkable the frequency of such words as sales (n= 69, total=0,39%),and value (n= 53, total=0,30%). Figure 4 shows most frequently words used in the abstracts (top 15).

Figure 4.Word frequency analysis results (top 15).



RQ3a and RQ3b address the main methodological approach (quantitative, qualitative, mixed-method research), research design (i.e., experimental designs), and data analysis techniquesused in WOM research. Regarding methodology, our analysis reveals a majority of quantitative studies (n=87) with just 2 studies using a qualitativemethodology, and 2 studies using a mixed-methods researchapproach. Most of the studies use a statistical design (n=81, 88%) with just 5 studies using a non-statistical (qualitative or conceptual/theory) approach. Table 1 summarizes the type of research design used in the analyzed sample of articles. Most of the statistical designs use ANOVA analysis (n=48) with 6 studies using SEM (Structural Equation Modelling) analysis, and 4 studies using PLS (Partial Least Square) analysis. Other statistical analysis include a wide range of correlations, regressions, agent-based simulations and game-theoretic modeling, DHLM (dynamic hierarchical linear model), Vectorautoregressive (VAR) models, Bayesian dynamic linear model, Bayesian Tobit model, Hazard Models, equation models, Markov chain Monte Carlo (MCMC), and functional data analysis (FDA).

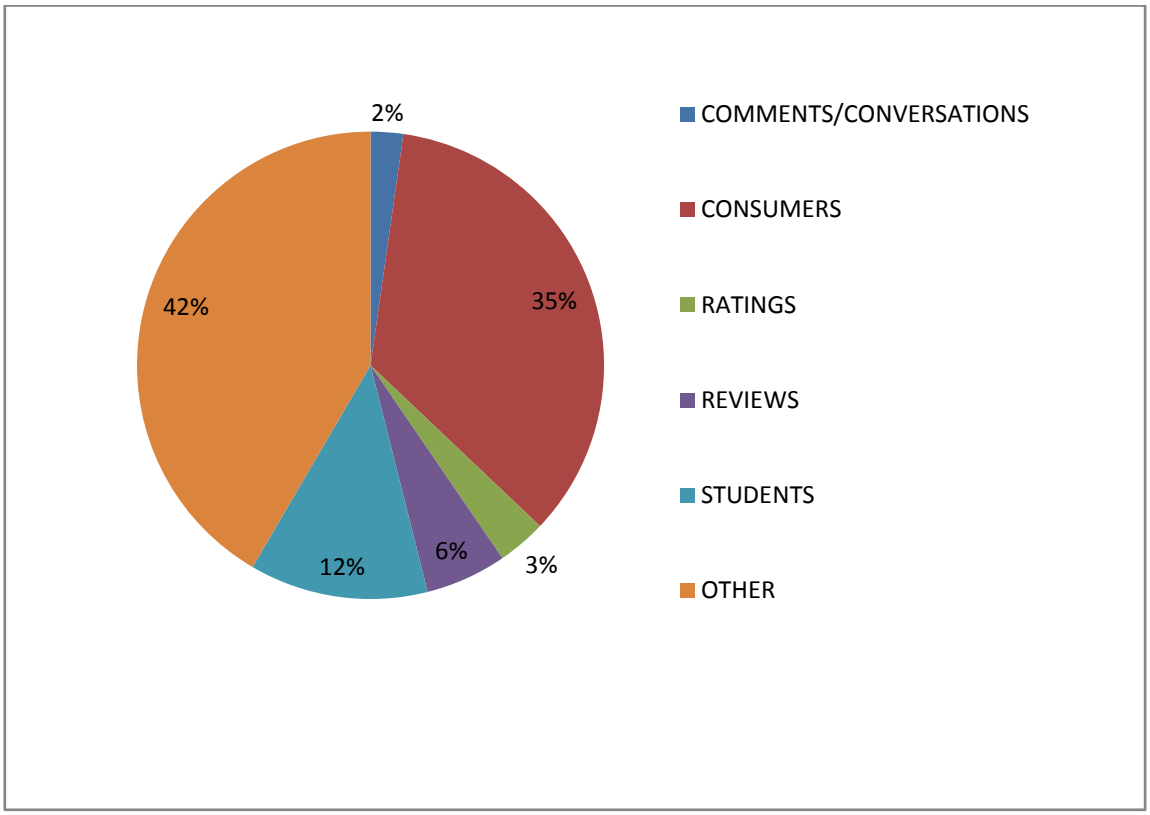
Table 1. Type of research design.

Design	Number of Articles	Percentage
CONCEPTUAL/THEORY	2	2%
NON-STATISTICAL	3	4%
QUASI-EXPERIMENTAL	2	2%
STATISTICAL	81	88%
TRUE EXPERIMENTAL	3	4%

Finally, RQ4goal was to analyze the most commonly sample type and sample size used in WOM research. Sample analysis reveals a huge heterogeneity in sample type and sample size: from 394 students to 200,000 customers or 59,2310 Facebook and Youtube comments. Most of the articles used consumers/customers/clients (n=31, 35%) and students samples (n=11,

12%). The average size of student samples is 169 (ranging from 60 to 509). The average size of consumer samples is 24,109 (ranging from 60 to 250,000). Other sample type includes online comments/online conversations, ratings, reviews, movies, products (i.e, digital cameras), brand celebrities or books.Figure 5 depicts a graphical representation of the percentage of sample type in the analyzed articles.

Figure 5.Percentage of sample type in the analyzed articles.



Discussion

WOM academic research interest has increased during the last two years as our journal analysis shows. Nearly half of the analyzed WOM research papers (n=43) have been published during the last two years. No differences have been found regarding source of publication with the exception of the Journal of the Academy of Marketing Science that published a fewer number of articles than the rest of the journals in the analyzed period.Word of mouth is the most used keyword in the analyzed articles followed by social media/social networks highlighting the importance of social media and SNSs (social networking sites) as platform for diffusion of WOM and research interest area. Keywords analysis reveals a prevalence of product-related keywords (in special *new products* but also high-technology products, product failure or product review) over services-related keywords. This might suggest a research gap in WOM research in a services context. Consumer/customer behavior is another important keyword in WOM research (including customer misbehavior, customer satisfaction, customer service management, and customer value). As literature review suggest satisfaction, loyalty, quality, commitment, trust, and perceived value are important drivers of WOM and all those constructs have been identified in the analyzed keywords. Nevertheless other trending topics in marketing research linked to consumer behaviour (i.e, brand engagement, brand experiences or brand love) are not present in the analyzed keywords suggesting future research directions in WOM research related to consumer behaviour. No

cross-cultural studies were found suggesting a research interest area for future studies. Only one keyword was related to emotions –although several papers used a sentiment analysis approach– suggesting a need to increase emotional-related research in WOM.

Regarding methodology analysis most of the studies used a quantitative approach suggesting that more qualitative studies are needed in the area to complement quantitative research results. Only one study used a mixed-method research approach allowing for qualitative/quantitative triangulation of the results. Most of the studies used ANOVA analysis while a wide range of other statistical techniques were identified in the analyzed papers.

Conclusion, Limitations, and Further Research

This paper usesa bibliometric approach to reveal research trends and evolution of WOM and to serve as a roadmap of WOM for both academics and practitioners. This study maps the intellectual structure of WOM research in 5 top marketing journals. Although the literature in this area is rich, the broad range of platforms and various types of WOM, coupled with the myriad of methods used to study them, has led to a fragmentation of the extant literature. This fragmentation poses a risk to the systematic accumulation of knowledge and the integration of the literature's findings. Our results provide fundamental insights on the development of WOMrecent research regarding to: sources, keywords, methodology, and future research lines.This paper makes three contributions to literature. Firstlyoffering a proper understanding of WOM academic relevance. Through keywords analysis, researchers could figure out the knowledge source of WOM articles. Secondly, rigor can be derived from analyzing the different methodologies of study. Thirdly, we provide potential extensions to related fields of research. As the WOM literature continues to evolve, this paper enables a better understanding of how the theory of WOM can be utilized by managers to increase the effectiveness of their communication campaigns. As King et al (2014) points out, only this continued pursuit of insight can we provide better customer value and a meaningful business impact for managers.

While this manuscript builds and expands upon the WOM knowledge base, some limitations should be noted. Any quantitative synthesis is constrained by the nature and scope of the original studies on which it is based and this shortcoming should be born in mind when interpreting findings presented here. First, our search keywords may be incomplete. We have focus on 5 top marketing journals, therefore, many valuable papers may not have been included. Besides, the sample articles were chosen from 2000 to 2014, which might influence the generalization of the study. However, we still trust the study provides a useful briefing for newcomers of the field on the most recent research on WOM. The preceding discussion identified several areas requiring future research. Specifically, researcher attention is relatively low in the domain of eWOMon services and highly focused on eWOM. In order to confirm the suggested research gap in WOM research in a services context, future bibliometric analysis should focus on journals specialized in services marketing. The domain of emotions also requiresa deeper attention due to their influence on consumer behavioural outcomes. The rapidly changing nature of underlying technologies will allow researchers to provide new insights in this area through sentiment analysis or facial analysis. Finally, future studies on this topic (eWOM) should deepen in the conclusions reached in previous studies with a methodology of meta-analysis. It can be concluded that although there is substantial progress in the field of WOM, academic research is still in its infancy and offers fruitful research avenues.

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